THE UNIVERSITY OF NORTH CAROLINA

SCHOOL OF MEDICINE AND MEDICAL ALUMNI ASSOCIATION

WINTER, 1968-69 | VOLUME XVI | NUMBER

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$250.00	$124.50	$142.00	$204.50	$284.50	$352.00
200.00	100.50	114.50	164.50	228.50	282.50
150.00	76.50	87.00	124.50	172.50	213.00
100.00	52.50	59.50	84.50	116.50	143.50

Plan L–65

Maximum Accident Benefits Lifetime — Maximum Sickness Benefits To age 65

SEMI-ANNUAL RATES

Weekly Benefits	Under 30	30 - 39	40 - 49	50 - 59	60 - 69
$250.00	$154.50	$177.00	$242.00	$324.50	$352.00
200.00	124.50	142.50	194.50	260.50	282.50
150.00	94.50	108.00	147.00	196.50	213.00
100.00	64.50	73.50	99.50	132.50	143.50

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THE UNIVERSITY OF NORTH CAROLINA

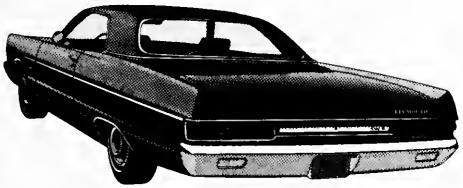
SCHOOL OF MEDICINE AND MEDICAL ALUMNI ASSOCIATION

Bulletin

WINTER, 1968-69 VOLUME XVI NUMBER 1

IN THIS ISSUE

New Yorker 4-Dr. Hardtop.



Fury III 2-door Hardtop

YATES MOTOR CO., INC.
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CHAPEL HILL, NORTH CAROLINA 27514

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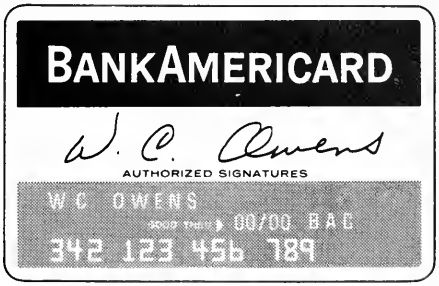
OISEN REALTY



DOCTOR'S FRIEND

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Message from the Dean's Office

PAINT AND POWDER

Chester Nimitz, Admiral, United States Navy, once said "a ship always is referred to as 'she' because it takes so much paint and powder to keep one."

The Medical School is not unlike the ship! Her current State operating budget, excluding the Hospital, is $3,325,000. But that's not enough paint and powder for a crew of 288 faculty and over 1,500 students. The "crew's" primary purpose is education but in carrying out that purpose medical care is given to over 11,000 in-patients and 125,000 out-patients annually.

Of the present $3,325,000 State Operating Budget, $2,665,000 is from State appropriations, $234,000 from tuitions and fees, and the balance, or $426,000, from other miscellaneous income. Only 41% of total faculty salaries are provided from this operating budget. The other 59% of faculty salaries comes from professional fee income (18%), federal research and training grants (32%), North Carolina Memorial Hospital (3%), private gifts and grants (6%).

In addition to the State budget, last year the School of Medicine spent over $6,000,000 in federal and private grants for research and research training. North Carolina Memorial Hospital spent another 10.4 million including 4.6 million in State appropriations, primarily for indigent patient care, and 5.8 million from patient fee income. These, too, are generous doses of paint and powder which are helping to build this Medical Center into one of the best anywhere. But greater State support will be needed for this School to fulfill effectively her objectives of producing more health specialists and broader health knowledge through research and service.

The Medical School's operating or educational budget, known as the "A" Budget, is increased annually in direct proportion to the increase in full-time students. Thus, if enrollment increases 2%, the State Operating Budget increases 2%. This would seem to be a powerful argument for increasing enrollment, but it's not. The present base budget of $3,325,000 is insufficient; hence, each year the School falls farther behind in meeting its financial needs. In this connection is is important to know that of over 1,500 students taught by the medical faculty, only 695 are full-time students in the School of Medicine. Others include 139 dental students, 86 nursing, 387 pharmacy, 27 public health and 153 other undergraduates and graduates. There were also nearly 800 participants in continuing education programs last year. The 695 full-time students in the Medical School include medical students, physical therapy, medical technology, and graduate students as well as fellows, interns, and residents.

Based on the anticipated increase in enrollment (from 695 to 810 full-time equivalent students), the School should receive an additional $506,000 in 1969-70 and another $440,000 in 1970-71. Most of these additional funds will necessarily be used for salaries for the new faculty needed when entering medical classes are expanded from 75 to 100 students and dental classes from 55 to 75 in 1970. Special "A" budget funds also are anticipated to support the revised teaching program as it is moved to the new Basic Science teaching building. The School expects about $312,000 in 1969-70 and $276,000 in 1970-71 with a major part of it specified for teaching equipment. This will represent the first significant equipment budget since this became a four year School in 1952. Provided there are funds in the State's treasury, the Medical School can be fairly certain of receiving these sums.

Because the School operates on such a close margin, not many new programs are initiated with funds derived from the State budget. Therefore, to correct current deficiencies, to initiate new programs or expand existing programs, there is a mechanism referred to as the "B" Budget. Historically, there has been little success with "B" Budget requests. Most of the new programs added over the past decade have been initiated with non-state funds. Those non-state funds are largely committed today, and it is important to seek new "B" Budget support for the balanced growth of the School of Medicine.

After much study last winter and spring, the School of Medicine submitted a request for twelve "B" Budget programs requiring funds as shown below.

	1969-70	1970-71
1. Special Teaching Program for North Carolina Medical Students	$ 141,986	$ 278,160
2. Program to Improve Community Medical Care	346,592	460,686
3. Education of Personal and Family Physicians	66,947	131,754
4. Laboratory Medicine	37,815	54,963
5. Transplantation of Human Organs	177,075	215,288
6. X-Ray Treatment of Cancer	53,477	60,419
7. Infant Survival	46,993	74,777
8. Child Development Center	53,662	107,782
9. Rehabilitation Medicine	39,167	62,411
10. Biomedical-Engineering and Biomedical-Mathematics	66,946	78,302
11. Ophthalmology	75,366	100,123
12. Comprehensive Respiratory Care	60,060	67,484
	$1,166,086	$1,692,149

These programs are in priority order and are the ones considered most important to the institution at this time. This list does not include all the new programs, or program improvements wanted. It does in-

clude those which can be implemented during the next two years.

The "C" Budget is the University's mechanism for providing capital improvement funds. Because new space is needed and some old areas must be renovated, the "C" Budget for 1969-71 includes the following:

1.	Preclinical Education Building	$ 4,889,000
2.	Medical Examiner's Laboratory (Addition to Preclinical Facility)	720,000(1)
3.	Clinical Science Office and Laboratory	8,900,000
4.	Bed Tower Addition to North Carolina Memorial Hospital	5,970,000
5.	Research Animal Farm	282,000
6.	Renovate MacNider	2,155,000
7.	Renovate Clinic Building	1,550,000
8.	Renovate NCMH	2,200,000
9.	Chapel for NCMH	250,000(2)
		$26,916,000

(1) This facility is for the State Medical Examiner's Program and has the full support of the State Board of Health.

(2) No State funds are requested for the Chapel, but we are required to secure approval for its construction.

(Applications for Federal support for priorities 1, 3, and 4 were submitted in June 1968. In mid December the School was notified that the applications had been approved as submitted, with financing subject to the availability of funds. It is too early to predict the "availability" but these grants could provide $9,677,079 towards the total cost of $20,269,000.)

A brief description of each "B" and "C" budget item starts on this page.

If you were to drive around the medical campus today, you might well ask, "With all the construction now under way and with the general confusion which already exists, why do you need more space to create even more confusion?" The fact is the School needs more space to catch up so class expansion plans can be realized. From 1952 to 1962 no new Medical School facilities were constructed. Then in 1962, the Medical Research Building was built. In 1966, the Ambulatory Patient Care Building was started to provide clinic space for an increasing out-patient service and to provide modern radiological facilities including Radiotherapy. In the spring of 1968, construction began on a new Basic Science Teaching Building and a new library. No new faculty space, either office or laboratory, is provided in this new construction, funded in part from State appropriations. A research building which will provide faculty and office space is under construction in the old Victory Village area, but that is privately financed and will be rented by the School of Medicine, with rental funds from outside of the State budget. A small, one-story, limited-life laboratory building has been constructed by the University to ease, ever so slightly, the press for new faculty space. The School continues to add mobile trailers for temporary offices and laboratories for faculty and their technicians. With the completion of the Ambulatory Building and the teaching building, there soon will be space to see more out-patients and teach more students. But the institution is not keeping up with faculty space, not only for the present faculty but for the increased numbers required as more students are admitted. At the present time there is an average of 493 square feet of usable office and laboratory space per faculty member. Very conservative estimates indicate medical schools should have at least 725. The simple fact is—more space is needed to recruit more faculty.

Admiral Nimitz's statement applies well to the Medical School. The University administration approved "her" budget requests for "paint and powder" and included them in the University's request to the General Assembly. Each item has been selected for one reason—to correct a serious weakness at this institution.

The School of Medicine of the University of North Carolina seeks and will welcome your active support of these requests which will help the School fulfill its educational and service responsibilities to the citizens of North Carolina.

SUMMARY DESCRIPTION OF "B" BUDGET PROGRAMS

1. Special Teaching Program for North Carolina Medical Students

The major objective of this program is to permit more students from North Carolina to become physicians. The admissions policy of the School of Medicine gives preference to residents of this State. To continue this policy as we expand the size of each class from 75 to 100 beginning in 1970 will require that students with less than optimal premedical education be admitted to this School. If such students are to become competent physicians the School must offer special educational programs designed to meet their needs. The special instruction will take a variety of forms in different departments, but in general will involve special lectures and small group instruction of students with problems related to learning the biomedical sciences required by competent physicians.

2. Program to Improve Community Medical Care

This request is for the support of the Division of Education and Research in Community Medical Care in the School of Medicine of the University of North Carolina at Chapel Hill. It is the responsibility of the School of Medicine (1) to educate physicians and other health professionals for service in the State, (2) give leadership in developing at the community level the resources and facilities which will bring comprehensive health service to our people, and (3) seek new approaches for the delivery of health care to North Carolinians. This request will permit the School to greatly accelerate its contribution to over-all health services.

3. Education of Personal and Family Physicians

A major objective of the School of Medicine is to educate individuals who will practice in the State as personal and family physicians. To this end the School must expand its educational program in which students and house staff can be taught to care for patients who do not need to be in a hospital. Most of medicine is practiced in physicians' offices or in ambulatory care facilities where individuals are treated as "ambulatory" or "out-patients." If our students and house staff are to be attracted to the practice of general medicine rather than to one of the many specialties, they must see that general medicine is one of the most important and satisfying areas of practice. This program proposes to expand the out-patient or ambulatory teaching facility of the School of Medicine in a manner so students have the desired experience.

The new faculty to be added will be individuals with a primary interest in the care of patients on an ambula-

tory basis and who have an interest in expanding our training program in family medicine. Such physicians will be able to teach students the importance of office practice and that most patients can be effectively provided the care they need without sending them into a hospital. At the same time, in the new ambulatory care facility he will be able to teach the value of consultations by specialists when indicated. In this setting the students can learn much of what they need to learn about family medicine from individuals who are excellent teachers and who are well informed regarding the most recent developments in medicine. The new ambulatory care facility will also offer a good setting for teaching the student the value of using individuals in the allied health professions in providing patients comprehensive primary medical care on a continuing basis. With the help of these individuals a physician can give good care to a much larger number of patients.

4. Laboratory Medicine

Hospital laboratories are playing an ever increasing role of importance in all types of medical care. Modern medicine is based to a great extent on precise knowledge of each patient's illness gained through complex laboratory studies. There is an urgent need for physicians with special training in laboratory medicine and for medical technologists to staff the community hospitals and the major medical centers of the State. The School of Medicine has a responsibility to educate individuals required for these positions. In addition, it has the responsibility of teaching each medical student and each intern and resident who are going into various branches of medicine an appropriate amount of laboratory medicine. To meet these responsibilities a new Division of Laboratory Medicine is being developed in the School of Medicine and the North Carolina Memorial Hospital. Laboratories that are providing excellent services to patients and in which new methods are being developed are required if our students and house staff are to receive sound education in this important branch of medicine. This proposal is for the support of the teaching functions of the new Division of Laboratory Medicine by providing funds to support the faculty that will have responsibility for teaching in this Division.

5. Transplantation of Human Organs

The Transplantation Program will have as its main purpose the education of physicians, nurses, technicians and supporting personnel to develop transplantation-kidney dialysis services in community hospitals and medical centers throughout the State.

6. X-Ray Treatment of Cancer

With the impending availability of new physical facilities, the development of a cancer X-Ray therapy program in the School of Medicine will fulfill a serious need at this institution. The educational program in this important area of endeavor has lagged badly because of the unavailability of equipment and facilities, including, in particular, super-voltage (betatron and cobalt) methods. Accordingly, the resources of the Department in its educational and service responsibilities have been invested largely in diagnostic radiologic work. About eighty per cent of patients referrable for radio-therapy could not be treated here because facilities have not been available. We now will have the opportunity to contribute greatly in this vital area of cancer treatment.

7. Infant Survival

The most dangerous time of life is that of the period immediately before and after birth, during which time many special problems arise. This is called the perinatal period. The purpose of this infant survival program is to educate physicians, nurses and technicians who eventually will become responsible for perinatal care in community hospitals throughout North Carolina. Such a program would focus on (1) improvement of obstetrical care of complex cases with particular emphasis on preventable disorders such as certain blood problems and diseases and on (2) improvement of the intensive care of seriously ill newborns, prematures, and infants with complex medical and surgical diseases.

8. Child Development Center

The Biological Science Facility of the Child Development Center located in the School of Medicine, together with the Frank Porter Graham Center, constitute the Child Development Research Institute of the University of North Carolina, Chapel Hill. This center has as its main purpose the establishment of a major program to investigate the biological and behavioral aspects of human development.

Construction of facilities for the institute has been funded with State and federal funds for completion in 1970. The 1967 General Assembly approved an initial "B" budget of $34,786 and $79,834, respectively, for 1967-68 and 1968-69. The current proposal will provide funds necessary for the support of faculty for the Biological Science Facility of the Child Development Center as the program expands into its new facility during the next biennium.

9. Rehabilitation Medicine

The purpose of the Division of Rehabilitation is to make available the benefits of modern rehabilitation medicine to some 600,000 individuals in North Carolina who suffer from some impairment in their ability to live normal lives. More physicians and allied specialists will be adequately trained. The program in Physical Therapy will be expanded and integrated into the Division. A curriculum in Occupational Therapy will be developed within the Division. It will participate in the education of nurses, speech therapists, psychologists, various public health professions, dentists, rehabilitation counselors, and special education teachers. Better rehabilitation services will be provided to patients in North Carolina Memorial Hospital and an educational program for physicians who wish to work in the field will be developed.

10. Biomedical-Engineering and Biomedical-Mathematics

This request would establish State support for a program in Biomedical-engineering and Biomedical-mathematics in the School of Medicine. BME and BMM are concerned with bringing to bear on health problems the techniques of modern engineering and electronics and mathematics, including computers.

11. Ophthalmology

Since the four year medical school was opened in 1952, Ophthalmology has functioned as a small division of the Department of Surgery. Ophthalmology has not rendered the patient care, the instruction to students or participated in the research which is desirable in a Medical School of this caliber. The purpose of this program is to establish Ophthalmology as a Department of the School of Medicine, to expand the training programs, to produce more Ophthalmologists for the State of North Carolina, to more effectively instruct medical students and nurses in Ophthalmology, and to care for larger numbers of patients in North Carolina Memorial Hospital.

12. Comprehensive Respiratory Care

Acute and chronic respiratory disorders represent a major health problem. Recent advances in the understanding of lung function, disorders of the bronchial tubes and lungs, together with the development of technical advances in equipment and methods of treatment offer an urgent challenge for reorganized teaching and service programs in the University Medical Center. The development of this program will bring to bear an effective and multi-disciplinary educational approach in this vital health field.

SUMMARY DESCRIPTION OF "C" BUDGET PROJECTS—1969-71

1. Preclinical Education Building

This building, which will be constructed just north of the present Clinic Building, will house the Department of Pathology and the Student Commons. There will be about 55,000 usable square feet (including Item #2 below) of which 18,000 is for the Student Commons, including dining and lounge facilities. This is the "make up" space which had to be cut from the Educational Building two years ago because of increased construction costs.

2. Medical Examiner's Laboratory

This will be at the top of the Preclinical Education Building. The Medical Examiner's laboratory actually is a State Board of Health project required to provide space for the new Medical Examiner. However, since it is being constructed on UNC property, it must be shown in the UNC budget request.

3. Clinical Science Office and Laboratory

With about 91,000 usable square feet, this building will have 9 floors. The basement is designed for animals and the upper floors are offices and laboratories. The location is behind MacNider and south of the Infirmary.

4. Bed Tower Addition at NCMH

North Carolina Memorial Hospital beds will be increased by about 220 beds with this addition. This addition is considered essential by the time classes of 100 students reach their clinical years.

5. Research Animal Farm

New Department of Agriculture regulations pertaining to the care of animals require us to expand animal facilities. Phase I will be financed by the University in 1968 (approximately $60,000 plus utility costs). The 1969-71 request we expect to use for matching funds for a Health Research Facility construction grant.

6. Renovate MacNider

No major renovations have been made in MacNider since its construction. When the animal quarters are moved from the fourth floor and the teaching laboratories to the Education building, much renovating will be required to convert space for faculty labs and offices. The name applies to existing faculty offices and laboratories.

7. Renovate Clinic Building

The first Clinic Building space requiring renovations will be the first and second floors, when the clinics are relocated to the Ambulatory building in Spring, 1969. In 1970 the library will move. Major building changes will be required to make the space into efficient faculty labs and offices.

8. Renovate NCMH

Many improvements are required to maintain NCMH as a modern teaching hospital. This request would provide renovations in many areas, including the fourth floor. The renovations are also necessary to integrate existing space on the first three levels with the new ambulatory patient care facility.

9. Chapel for NCMH

No State funds are required for the project but State approval is required for its construction. The exact site is not yet known but an architectural study is under way. It will be constructed entirely with private funds.

EDITOR'S NOTE: Since this article was written for the *Bulletin*, the budget recommendations of the Advisory Budget Commission and the Governor's budget message have been heard. The "A" budget recommendations are about as anticipated. "B" budget support has been recommended only in the amount of $191,000.00 for 1969-70 and $204,000.00 for 1970-71 for priority 2, "Program to Improve Community Medical Care."

No funds have been recommended for the three major new capital improvement projects, items 1, 3 and 4 of the "C" budget. Only item 5, Research Animal Farm ($282,000) has been recommended for the School of Medicine, although item 2 was recommended for the Medical Examiner's program.

Now, more than ever, the School needs the help of "her" friends.

Painless and Enlightened Giving

HENRY A. LOWET*

Henry A. Lowet

During the closing days of December, 1967, a client of my firm astonished me by asking whether some last minuate charitable gifts should take the form of highly appreciated securities or the net cash proceeds from the sale of these securities. I hastened to advise our client that he would be much further ahead if he gave the securities directly to the charity instead of selling them and giving the net proceeds to charity after payment of the capital gains tax, brokers commissions and other expenses resulting from the sale. By giving the appreciated securities to the charity, the charity would not only realize more, but the client would obtain a larger charitable contribution deduction on his 1967 Federal income tax return.

This experience demonstrated to me that even sophisticated business and professional people are not always entirely clear as to how to maximize charitable gifts and minimize taxes. It need not be repeated that individuals should not make charitable gifts entirely for tax reasons; on the other hand being "tax conscious" doesn't "taint" your charitable gifts. As has been said before, the Commissioner of Internal Revenue is clearly your "partner" in the sharing of your income and your "heir" in sharing the assets of your estate at the time of your death. The Commissioner therefore may be very influential in your making gifts to a charity. To make the medicine go down a bit easier he does not merely encourage such gifts, he actually sets forth alternative ways of giving and designs some ways more suitable for the very wealthy and other ways for persons of more modest means.

This article is intended as a general introduction to more specific ones which may appear from time to time, setting forth some ideas on estate planning and ways to maximize charitable gifts and minimize the impact of income, gift and estate taxes.

BROAD TAX GUIDELINES FOR CHARITABLE CONTRIBUTIONS

A. *The Federal Income Tax*

The Internal Revenue Code provides for a Federal income tax ranging from 14% to 70% of your taxable income. An individual during any one year may deduct up to 30% of his "adjusted gross income" as a charitable contribution provided that the contributions are actually made to schools, churches, hospitals and other charitable organizations that receive a substantial part of their support from the general public or a governmental unit provided such organizations are located in the United States. If an individual, on the other hand, makes gifts to personal, family or other non-public foundations or makes gifts where he merely gives the income, as distinguished from the principal, of a fund "for the use of" a charitable organization, such charitable contributions are subject to a 20% limit.

In addition to the extra 10% allowable as an income tax charitable contribution deduction for gifts to certain special charities, you may "carry over" for the next five years the amount of any gifts in excess of 30% of your adjusted gross income if the gifts comprising the 30% *and* the excess are all to these special charities.

You should note, moreover, that charitable contributions have not been made by a "cash-basis" taxpayer if he has merely *pledged* to give to a charity; he cannot take a deduction until he has paid off his pledge.

* Henry A. Lowet, a partner in the New York City law firm of Jackson, Nash, Brophy, Barringer & Brooks, was raised in Winston-Salem and was graduated from the University of North Carolina at Chapel Hill in 1954 and from the Yale Law School in 1957. While at Carolina he was elected to Phi Beta Kappa and to the Golden Fleece. Mr. Lowet has participated on various Practising Law Institute panels and has been the author of articles in the fields of estates and trusts and related taxation.

Consequently, a life-time gift to a charity will generally—from a Federal income tax point of view—really only cost you that portion of each dollar given away which exceeds your Federal income tax bracket. Thus, if your top bracket is 50%, each dollar contributed only costs you 50 cents out of pocket.

B. *The Federal Estate Tax*

In contrast to the 20% or 30% limitations on life-time charitable gifts for Federal income tax purposes, there are no similar limitations with respect to gifts made at one's death to charity. Caveat: there *are* restrictions under the laws of most states, however, as to the amount of testamentary charitable gifts one can make where there is a spouse, child or parent surviving the decedent.

C. *The Federal Gift Tax*

There is no Federal gift tax on a transfer of cash, securities or other property to a charitable organization. It should be noted, however, that an organization must fall within the definitions of the Internal Revenue Code before the donor may be certain that a taxable gift has not been made.

D. *State Taxes*

Although this article applies only to Federal taxes, if you are a resident of a state with an income tax or with a death tax in excess of the maximum Federal credit for state death taxes, it is possible that these guidelines will also serve to reduce your state taxes.

PROPERTY WHICH MAY BE THE SUBJECT OF A GIFT

A few rules should be remembered in connection with making contributions to a charitable organization. In the first place, the value of such a gift, where it is other than in cash, is the fair market value on the day the gift is made. Incidentally, appraisals of property which may often be necessary are deductible by the donor on his income tax return. Secondly, when dealing with gifts of property other than cash or securities, it is entirely feasible and sometimes quite desirable to give a fractional interest to the charity in one year, an additional fractional interest in a second year and so forth. This often avoids the problems resulting from making a gift exceeding 20% or 30% of one's adjusted gross income. Now to list some types of property which may be given to charity:

(1) Good old cash
(2) Securities
(3) Life insurance
(4) Art objects
(5) Real estate
(6) Oil and gas interests
(7) Books and manuscripts
(8) Remainder or reversionary interests in trusts and life estates

There are, of course, many other types of property which will come to the mind of the reader.

WAYS IN WHICH PROPERTY MAY BE GIVEN TO CHARITY

Although most persons are familiar with the ways in which cash or property may be given to charity as an outright gift, either during their lifetime or as a bequest under their wills, they are less familiar with the techniques of setting up trusts either during their lifetime or by their will where either the income is left to charity for a term of years with the principal then returning to the family's use or where the income is reserved for one or more persons' life or lives, with the remainder going to charity at some indefinite point in the future. It is the trust approach which may offer some of the most interesting and challenging opportunities for making gifts to charity without substantially upsetting the donor's cash flow.

NOW TO THE "PAINLESS" OR "THERAPEUTIC" PART OF GIVING . . .

A. *Alternative Gift Over to Charity*

One of the least painful methods in which a charity may be remembered is to provide for an alternative gift over to charity in the event that for unexpected reasons the persons who are to be the beneficiaries of a trust or an estate should not be living at the time of the distribution. I have always found that clients are receptive to providing for an alternative to charity where it is pointed out that the trust fund or estate might pass to unknown heirs should the natural objects of one's bounty not be living at a certain point in time. This may also save administration expenses to the extent that one's executors or trustees do not need to search for distant relatives at some future date. The other side of the coin, of course, is that the charity under this type of provision may not realize anything should it not become necessary to utilize the alternative provisions.

B. *Gifts to Charity of Highly Appreciated Securities or "Donative" Sales*

Referring back for a moment to my firm's client who requested advice as to whether to give highly appreciated securities directly to charity or to sell the same first and then give the net proceeds after expenses to charity, it should be pointed out that there are several ways in which such gifts may be accomplished:

(1) Let us suppose that you wish to give The Medical Foundation $20,000 and your portfolio includes 400 shares of XYZ Corporation stock which

cost you, at $50 a share, a total of $20,000. Let us further assume that these same 400 shares are now worth $40,000 or $100 per share. You could give The Medical Foundation 200 of these shares and continue to own 200 shares without a change in the $50 a share basis of the retained shares. Your charitable gift would be $20,000 and you would not recognize any capital gain by giving the stock directly to the charity.

(2) Another approach to making gifts of appreciated property is the so-called "donative" or "bargain sale." Let us take the same 400 shares of stock which have a $20,000 basis and a $40,000 market value at the time you are considering making the gift. You are still only desirous of making a gift of $20,000. You could consider selling the 400 shares to The Medical Foundation for an amount equal to your basis, that is the $20,000. Since the sales price is equal to your basis, you would not realize any capital gain and the difference between the sales price and the present market value would constitute a charitable contribution for Federal income tax purposes. The value of the gift to The Medical Foundation and the amount of your charitable deduction would be the same as if you had made a gift of cash or securities equal to the difference between the fair market value of the property and the sales price.

Although your charitable deduction is the same whether you use approach (1) or (2), if you use (2) you have the additional benefit of a "stepped-up" basis for this reason: If you now took the $20,000 sales price and purchased 200 shares of the same stock at $100 per share, you would be reducing your potential capital gain on eventual disposition by having "stepped-up" your basis from $50 to $100.

Undoubtedly, the charity should be advised in writing as to the intention of making such a gift and the amount by which the fair market value of the stock exceeds the same price.

C. *Increasing One's After-Tax Dollars by Charitable Gifts*

It is often possible to increase one's after-tax income by making charitable gifts. As an example, let us take a taxpayer who has adjusted gross income of $100,000 (Line 9 from U. S. Individual Income Tax Return [Form 1040]). Let us assume that he has $15,000 of itemized deductions which include no charitable contributions. After also deducting, say $1,200 for two $600 exemptions, the taxpayer would have taxable income of $83,800. The Federal income tax on this sum, assuming that a joint return is filed, would be $35,544, with the taxpayer being in a top bracket of 58%. If the same taxpayer gave away $10,000 to charity, which is within both the 20% and 30% limitations, his figures would be deductions aggregating $25,000 which, with his $1,200 of exemptions, would give him taxable income of $73,800. Filing a joint return, his Federal income tax would be $29,900, which is $5,644 less than if he had not made the charitable contribution. Thus far, this would result in a reduction of the income tax, but would not, of course, result in the taxpayers having more cash after all expenses and taxes had been paid by him at the end of the year.

If, however, the taxpayer had in an earlier year bought, let us assume, a working oil or gas interest for which he had paid $20,000 and had taken a deduction for intangible drilling costs in the year of purchase of, say, $10,000, the taxpayer could then perhaps give away this oil or gas interest in a later year, after obtaining an appraisal for the same, and receive a charitable deduction for this gift. Even if the oil or gas interest for which $20,000 had been paid were now only valued at, say, $10,000 to $15,000, the total economic benefit of the original tax deduction for the intangible drilling costs taken as an expense, plus that for the $10,000 to $15,000 charitable contribution would substantially serve to make the taxpayer "whole" and possibly more so, particularly if he received some oil or gas income (subject to the depletion allowance).

D. *The Charitable Remainder Trust, Reserving Life Income*

One of the best ways of eating one's cake and having it too is by creating an irrevocable trust reserving the income for the grantor's life and setting aside the remainder to charity. This type of trust will be discussed in further detail in a later article, but it will suffice to say here that such a trust will not result in any reduction of income during the grantor's life as he has reserved the right to receive the income from the property. On the other hand, by virtue of having irrevocably set aside the remainder to charity, the actuarial value of the remainder (that is, after deducting the actuarial value of the life estate from the fair market value of the property placed in the trust) will qualify as an immediate charitable contribution under the Federal income tax laws. Moreover, although this type of trust will be included in the taxpayer's gross estate for estate tax purposes, it has the further advantage of maximizing the marital deduction, where one is survived by a spouse, and of giving the estate an off-setting charitable deduction roughly equivalent to the amount included in the estate for estate tax purposes.

* * * *

No doubt, many persons reading the foregoing will prefer to remain straightforward fellows who will much prefer the simple methods; others perhaps may not deplore the subtleties quite so much. For those who believe that these are all new "tax avoidance" schemes, let them be reminded that these are in many respects present day forms of what English solicitors began to do for their clients hundreds of years ago.

*Are Our Medical School Faculties Qualified To Teach Medicine?**

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My title is provocative, perhaps unkind. Coming from one who has tried to teach medicine for the past forty-odd years, it is a betrayal of my own class—the worst form of social treason.

I shall start by seeking a principle according to which our discussion can proceed, and I shall do this in traditional fashion by going back to Plato—specifically, to the Laches, one of his early dialogues having to do with teaching.

The scene opens with two gentlemen, Lysimachus and Melesias, who being concerned about the education of their sons, are having a conference with two old generals as to whether or not their sons should be instructed in swordsmanship. The question is referred to Socrates, who is standing by. In his quiet way, Socrates then propounds one of the great principles in all reasoning. (I am surprised that philosophers have not given more attention to this principle.) ΟΥΚΟΥΝ ΕΤΙ ΠΡΟΤΕΡΟΝ: he asks. "Is there not something before? Have we not a prior question?" It is this principle which I shall try to apply, from time to time, as we proceed. Have we not a prior question?

In continuing his reply to Lysimachus and Melesias, Socrates asks further, "What exactly is this thing for which we are seeking good teachers? Surely it is not swordsmanship as such." After further conversation, Socrates then asks, "Do we not say, then, that we are looking for learning that is in behalf of the souls of our young men?" Be it noted that *soul* is a most inadequate translation of the original Greek word here, which is ΨΥΧΗ, *psyche*. ΨΥΧΗ is a very large and comprehensive work in Greek; originally a "breath," it connotes spirit, mind, reason, spiritual desire, understanding—the whole inner life of man. This is what Socrates says teaching is for. We shall come back to this.

But to return to my title, ΟΥΚΟΥΝ ΕΤΙ ΠΡΟΤΕΡΟΝ; Have we not a prior question? To start with, I suggest three very obvious prior questions:

1. Who are, who constitute, our medical school faculties?

2. What are, or should be, the qualifications for teaching medicine?

3. What is medicine?

Being perverse, I shall answer first the last question: What is medicine?

Traditionally, the objective of medicine has been to relieve human suffering in all its multitudinous forms. We cannot hope or even try to deliver man from the totality of his suffering; but it is our responsibility to contemplate this—all the way from humanity uprooted down to the merest scratch or passing anxiety—and to relieve what we can.

This is well enough for a generalization, but we need more. What actually does medicine consist of? Four categories come to mind: (1) the individual care of the individual sick man; (2) the study of disease or diseases as such; (3) the care of sick people in groups, as in an institution; and (4) concern for all the illnesses, and the health, of an entire population.

The scope of medicine has varied greatly over the ages. With Hippocrates and his school—to begin at the beginning—it was extraordinarily broad. They

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dealt with all branches of medicine which they encountered, giving a description, a diagnosis, and a prognosis for each recognizable entity and pursuing vigorously such empirical therapy as was then available. They wrote on epidemiology and environmental medicine. In surgery, obstetrics, and other specialties, their anatomy was accurate and their treatment, rational. In community care, the interest and concern of Hippocrates himself extended all over the Aegean basin and surrounding countries. He visited plague-stricken lands as far as distant Illyria, and received honors from Argos, Athens, and Thessaly. He was "a man for all seasons," if medicine ever had one.

Galen, six centuries later, was far more of a scientist than Hippocrates was, making outstanding discoveries in anatomy and physiology; but as a physician his egotism, his contentiousness, his claim to omniscience and to miraculous cures, and the enormous multiplicity of his remedies tended actually to reduce rather than enlarge the scope of medicine as a profession. Under him and after him medicine became fixed, its vision lost, its horizon shrunk. Personal care of individual patients, with appropriate rewards, became the beginning and end of medical practice.

The true conception of a hospital, as an institution for the sustained care of the sick and needy, probably began upon the closing of all Aesculapia and pagan temples, by order of the Emperor Constantine in Byzantium in the year 335 A.D. Under the influence—so tradition tells us—of his mother Helena, institutions to care for the sick, for foundlings, for the helpless poor, for the aged, for poor and infirm pilgrims, and so forth began to be founded in the Eastern Roman Empire. For a thousand years and more, these remained largely under the care of the Church. In the sixteenth, seventeenth, and eighteenth centuries the hospitals were progressively taken over by the cities and the state.

Physicians served in these hospitals. William Harvey, for example, was physician to St. Bartholomew's Hospital in London for 35 years, his duty being to present himself there one day in the week, prescribe for such patients as could walk to his desk in the Great Hall, and go and see in their beds those who could not. But the individual care of the individual patient, in the Galenic tradition, remained by far the major activity of the medical profession.

We shall come back presently to events on the continent of Europe, but let us now, in the best isolationist manner, look at America first.

It was from the tradition of the great clinicians of the eighteenth century that American medicine had its origin. Its leaders were trained in the clinics of Paris, Leyden, Edinburgh, and London. Returning to this country, they established medical schools in the same tradition; and these institutions were excellent for their day. But in the mid-nineteenth century schools increased in numbers and declined in quality to a deplorable degree. This was the setting for a true revolution in medicine, perhaps as great as any that has occurred, at least in our country's history and within the span of one generation. This revolution was instigated and, in large part, carried out by one man, Abraham Flexner. In any evaluation of American medicine of today, it is necessary to look into this remarkable transformation, taking into consideration both the gains and the losses that have occurred as a result of it.

The situation in the United States and Canada in 1908, when Dr. Flexner began his survey, was as follows: Within the preceding century, 457 medical schools had been started in the United States and Canada; and in 1907, 155 of them were still extant and in active operation. They included good, bad, and indifferent schools—but most of them were of the poorest quality. They were private ventures, undertaken for the purpose of making money, the income being divided among the lecturers. A school starting in October might graduate a class the following spring.

As a result of the oversupply of medical schools, the country became immensely oversupplied with doctors. Pennsylvania had one physician for every 636 citizens; Nebraska, one for every 602; Colorado, one for every 328. Towns of one or two hundred might have two or three physicians. Doctors were as numerous in those days as churches, and as varied. In 1908, with about 1500 new M.D.'s needed, according to Dr. Flexner, 3497 were graduated. "It appears, then" wrote Flexner, "that the country needs fewer and better doctors, and that the way to get them better is to produce fewer."

Let us look briefly at the background of this remarkable man. Educated in the liberal arts, Abraham Flexner taught in the secondary school system for 15 years. After a year of graduate training at Harvard and some courses in education in Germany, he plunged forthwith into the examination and evaluation of medical schools in the United States and Canada. He admitted at the start, and later even boasted, that he had previously never even set foot inside a medical school. Whatever knowledge of medical education he eventually possessed, he picked up as he went along.

His method of attack was direct and his conclusions were uncompromising. He visited personally every one of the 155 medical schools, and then wrote his report to the Carnegie Foundation, the famous Bulletin No. 4. The effects of this report were so shattering that within a few years the number of medical schools in the country was reduced from 155 to less than 80.

Leaving the critical and destructive, Flexner moved to the creative, reorganizing good medical schools and establishing new ones. His model of perfection was Johns Hopkins, and his hero, guide, philosopher, and friend was William H. Welch. He certainly could not have chosen better.

Flexner's was the era when private enterprise was supreme and private fortunes were all but inexhaustible. He went after these fortunes relentlessly, and with prodigious effect. The medical schools which

were rebuilt, or created *de novo*, through funds which Flexner extracted from local sources and from foundations, are those in which most of us have had and still have our training and our jobs; and those which have been built since Flexner's time are largely cut from the pattern which he envisioned.

Flexner's motto was "excellence," and his principles: that the medical schools should be founded on a faculty of full-time men; and that the schools should be independent, devoted to the teaching of medicine and the advancement of medical science, and not involved in outside responsibilities. He had no great concern for the public welfare in the broader sense, nor practical interest in the public domain. He was interested in interesting people, not in the run of the mill.

After his studies of the 155 medical schools, one is not surprised that he was not too favorably inclined toward the practice of medicine as such. Of his new faculties he wrote,

> The clinical teacher becomes one in type with the teachers of the scientific branches. Teaching and research cease to become incidents: they become his interest, business and duty. Practice, whether general or consultative, becomes secondary.

However this may be, Flexner's "citadels of excellence" went forward with enormous success. In describing the whole of the Flexner era, I believe that there is value in considering it in two parts, the division being based not so much on the state of medicine as on the state of society: (1) the quarter-century from World War I to World War II, and (2) the three decades from World War II to the present.

Without going into the philosophic question as to whether it is the spirit of the men that produces the age or the spirit of the age that produces the men, one is certainly impressed by the number of remarkable men, most of them quite young, who filled the chairs of medicine, surgery, pathology, biochemistry, physiology, and other disciplines in the early and late 1920's. These were great days. If education is to be concerned, as Socrates said, with the "souls of our young men," this was one of those times. The science of medicine concentrated on the mechanisms of health and disease, and this disease-oriented research, as we all know, produced truly stupendous achievements. I suppose every man has his own most vivid experience. For me there has never been anything quite as thrilling as the discovery of insulin. In 1922 and 1923 I was a third- and fourth-year medical student, working on the wards of the "old Presbyterian Hospital" in New York. One ward there was devoted to diabetic children. To see those brave, hopeless little skeletons suddenly come to life again and grow into normal children within weeks or months was an experience not to be forgotten.

But we must also look more broadly at the American scene in those days. It should be emphasized that the social framework within which the Flexner revolution took place was, for it, a fortunate one—and some of the most fortunate aspects were those toward which Flexner himself was most scornful.

Whether the physicians caring for the people of the country were good, bad, or indifferent, there were plenty of them. They would come when you sent for them and would do the best they could—and most of them learned much from the advances of medicine in their time.

Of at least equal importance is the fact that the first-class participating clinicians, whom Dr. Flexner spoke of so slightingly, stayed on in the revolutionized medical schools and hospitals, and provided the sound background in clinical medicine from which the new research could make its start. The collaboration then in operation, at equal levels, between clinicians and research men provided the students with high-quality and balanced teaching.

Still another aspect of the same situation is that the full-time faculty members of that day were themselves excellently trained and superb clinicians. One thinks of Francis Peabody, George Minot, Allen Whipple, Eugene Dubois, Francis Blake, and Warfield Longcope—to give the briefest sampling of a long list.

With the end of World War II, events began to change in a drastic way. While the benefits to medical science from the "citadels of excellence" continued, or even increased, the limitations—the narrowness—of the system became progressively more apparent; and the citadel, as well as the society surrounding it, has become the victim of the citadel's own virtues. Some long-neglected chickens have come home to roost; and if it is an oddly contrived metaphor to speak of chickens coming home to a citadel, perhaps this illustrates even more vividly the incongruity of our present position.

We must try to evaluate what we have lost in the course of this revolution, as well as what we have gained.

Concentrating on the conquest of disease, our leaders have pursued with sustained enthusiasm and great ability the advancement of medical science. Great achievements have issued from this research, which I need not detail. The study of the mechanisms of disease has carried medical scientists ever further into biochemistry, physics, mathematics, and engineering. The huge increases in costs, both of research and of medical care, and the overriding place of the federal government in both, while of first importance, are not a part of my subject.

To come back to research itself, the enthusiasm naturally has spread from faculty to students; and they in increasing numbers have found the ways of science not only attractive but profitable. Locating a research problem, a capable and enthusiastic student pursues it, to the National Institutes of Health and elsewhere; or, perhaps more often, he goes to the N.I.H. first and has the problem offered to him. In any case, he concentrates on this problem, becomes

a teacher in turn and, before too long, a professor. This is the path to glory.

ΟΥΚΟΤΝ ΕΤΙ ΠΡΟΤΕΡΟΝ; Have we not now a prior question? Yes, we have—a number of them. I shall distinguish two: one internal to the medical school and one external.

Concentrating on the conquest of disease or, more exactly, of a particular individual disease, the teacher tends to narrow his field of interest too greatly. The patients in a teaching hospital also tend to be selected, not run-of-the-mill cases. It is not quite fair to say that we spend most of our time teaching diseases that most people do not have; but the statement does have some relevance. As for the students themselves, especially those destined for academic careers, their early research orientation often makes them cut corners on their clinical training; when they in turn become professors, they are lacking in breadth of experience.

The effects on the practising clinicians who serve as teachers, insofar as these survive, are severe. They are truly second-class citizens. Their counsel is tolerated but not accepted, while the resident reigns supreme. They themselves become discouraged, and often fall further behind. We still do have clinicians, actually practising clinicians, who are doing top-quality research; but their path is not easy, their academic recognition is held back, and their numbers are diminishing. Clinical investigation as such is receiving relatively less attention, at a time when it is increasingly needed, and when it must become more rigorous.

Correspondingly, the full and comprehensive and continuing care of the patient, especially in relation to his family and community, is given low priority. It is true that there are excellent outpatient-care programs which do follow their patients most carefully; but the number of patients that can be handled through these programs is very small compared with the total need.

So much for the internal consequences; now for a few of the external. As we have noted, one of Flexner's cardinal principles was that his citadels of excellence should be independent, concerned with teaching and research, and not responsible for either the medical or the social needs of the community. In spite of the increasing importance given to preventive medicine and public health within recent years, this principle is responsible for some of the very large and long-neglected chickens that are coming home to roost.

In the first place, our medical schools for the past two generations have produced too few doctors for the country's needs. I realize the enormous difficulties and complexities involved in this situation, and I am only stating the fact. Second, there is more and more specialization and more and more concentration of doctors, not only in medical centers but, even more significantly, in cities and affluent communities, where good medicine can be both practiced and rewarded. Distressing as is the decline in the number of general practitioners, the increasingly serious maldistribution of physicians is even more disturbing. New practitioners are forsaking altogether the underprivileged population areas. All this is well known. The results in social terms are alarming. Dr. David Rutstein has summarized the case in his book, *The Coming Revolution in Medicine.*

The cold, hard facts of international statistics give the story more pointedly than arguments pro or con. In such indices as longevity and infant mortality, the United States has been slipping badly. Once near the top of the list among civilized nations, we are now near the bottom. In 1959, we were already thirteenth on the list of life expectancy for males, and by 1965 we had slipped to twenty-second place. In the more sensitive index of infant mortality, our country ranked eleventh in 1959, eighteenth in 1965. In 1964, infant mortality among the white population in the United States was 21.6 per thousand births; that among the nonwhite population, 41.1 per thousand. Those figures mean the death of one infant out of every 25 born in this country.

Finally—and this is the light ahead—our outdated Flexner system is now coming under strong criticism, not only from social sources outside but also from many of our younger teachers and scientists within. Perhaps the severest critics of all are many of our students, who resent our failure to teach them more of social medicine and social responsibility, and complain, as Dr. Irving London has recently reported, of the "sterility of the spiritual atmosphere in their medical education." If Socrates were standing at our side right now, what would he be saying about "the souls of our young men"?

In this country, attempts to solve all these problems seem to have emphasized chiefly more advanced organization: large regional complexes for total community care, intricate machinery for processing administrative as well as medical data, echelons of medical and paramedical personnel. These solutions, I am sure, have great potentialities; how far they will go in providing personal care of the sick is hard to predict. In any case, I am not competent to develop this theme.

It is curious that we have given so little attention to the achievements of other countries, especially in Western Europe, which have faced the same social problems, and have solved them so much better than we have. As one looks back, their progress did not take place in a year or a decade, or even in a century. Also, it was not the medical profession primarily, but rather the statesmen, who were most responsible for the results achieved.

We can look back over quite a span. Vauban, the great military engineer of Louis XIV, devoted himself also to social reform. Writing a report to His Majesty in 1707, he estimated that one tenth of the French population were reduced to beggary, while another five tenths lived continuously on the verge of destitution. Many years later, just before the French Revolution, Montyon discussed the high infant mor-

tality among the poor, industrial diseases, and ill health caused by malnutrition. As would be expected, social welfare became a problem of primary interest with the onset of the Revolution. A Committee on Mendicity during the early years, and later a Committee of Public Assistance laid comprehensive plans to deal with pauperism, hospitals, and welfare of all sorts. These plans flourished until the summer of 1794, when all was swallowed up in the demands of war. History repeats itself.

Two generations later, when the horrors of child labor and the other disasters of the Industrial Revolution were becoming apparent, a strong voice was raised, and this time it was from the medical profession—that of the redoubtable Rudolf Virchow in Germany. "The health of the people," he declared in 1847 and 1848, "is a matter of direct social concern." "Social and economic conditions have an important effect on health and disease," and "the measures involved in [remedial] action must be social as well as medical." Here again, however, politicial considerations were dominant and, as George Rosen writes, "with the defeat of the revolutionary movement of 1848, the revolutionary reform movement collapsed."

It is an interesting but largely unknown fact that Dr. Flexner, shortly after his study of medical schools in the United States and Canada had been completed, made a similar study in England, France, and Germany. His success was something less than spectacular. The distinguished medical men in Europe listened to him politely, but were not inclined to change their ways in the fashion that this rather brash young American reformer prescribed. There have been two diametrically opposed results of this inaction. The first is that the leaders and the leading schools of Europe have been trying to catch up with the American schools in their research and also in their teaching methods; the second—whether casually related or not—is that, in the provision of medical services, Europe has far outstripped the United States.

One of the most remarkable health records of any country has been that of the small, relatively poor, widely scattered people of Norway. The story is well and simply told in a recent essay by Dr. Karl Evang, Director General of the Health Services of Norway. This story is not a special and isolated instance, but illustrates the progress of medical care in the more socially minded countries of Europe.

In 1911, the year following Flexner's explosive outburst against medical schools in the United States and Canada, Norway in its own quiet way instituted an experiment in medicine that has proved to be as important for society as Flexner's was for science. This was the adoption of a public, nonprofit health insurance plan, covering about 20 per cent of the population. The program gained popularity, and has gradually been expanded. Since 1956, all the people have been covered. Today every Norwegian citizen enjoys the following benefits:

1. Overall medical care: consultation and treatment by family doctor, or specialist if needed, until the illness is relieved or cured. For all except a few services the patient pays approximately 30 per cent.

2. Free hospital care for all diseases as long as required.

3. Maternity benefits: all costs related to the birth of the child.

4. Convalescent costs within limits, drugs inside and outside the hospital, limited home nursing, funeral allowances, and cash allowances for sickness, lying-in periods, family maintenance, and so forth.

Slightly more than half the cost of this plan is covered by sickness insurance premiums; the remainder, by employers and central and local governments. The average citizen's premium is 3 per cent of his total income, although the percentage increases with higher incomes. There is free choice of doctor and hospital, and assurance of medical care, regardless of the patient's means.

"The very real problem of attracting doctors to remote areas has been 'foreseen' and to a large extent solved through the public health service," writes Dr. Evang. Local district doctors are appointed and paid by the central government. They care for the sick and must also meet all types of health and hygienic problems. Besides his salary from the government, "he can earn fees as a practising physician." There are many details of the system which obviously I cannot go into: nursing homes supervised by central hospitals; all doctors' fees, private and otherwise, held within a framework of so-called "normal rates" established by the Norwegian Medical Association and the Ministry of Prices and Wages.

Under the operation of this policy, Norway stands in some health indices at the top, and never lower than fourth, among civilized countries.

To return to our major problem, we have before us what Dr. Thomas McKeown of England has called the gap between medical knowledge and medical services. Medical knowledge, disease-oriented, is moving ahead rapidly; medical services, community-oriented, lag behind. In a word, we in our citadels still have not realized that, *while there is a science of medicine, medicine is not a science.* It requires science —physical, biological, and social—for its advancement; but medicine is primarily a service, as Hippocrates told us very pointedly 24 centuries ago.

How, then, should one proceed to bring medical teaching into modern times? I can offer a few additional suggestions, from an obviously limited point of view. Again I should like to divide these considerations into those internal and those external to the schools themselves.

Let us discuss first the internal adjustments. In general, as one approaches a changing situation it is well to bear in mind that there are things that need to be discovered, and other things that need to be rediscovered. One of the latter, I believe, is the value of the practising physician in the teaching of medicine. He should be restored to his rightful place as a first-class citizen in the world of academic medicine.

What can the practising clinician bring to the medical school and teaching hospital that is both essential and unique? It should not be necessary to spell out his contributions, and yet it seems to be.

A primary contribution, surely, is quickness of decision. Some decisions must be made within a day, some within an hour, some within a minute. An expert clinician can, as we all know, arrive at a decision on the basis of his own examination, plus at most a few laboratory tests—whether in the emergency room, in the ward, or in the home. For a student to be a part of this action is a liberal education in itself. If the case does not require immediate action, there are still important decisions to be made at the beginning: how to orient the case, how to reassure the patient, how to reassure the family, and how to get the diagnostic show on the road, without unnecessary expenditures of time and money.

Another value of the practising clinician is the opportunity afforded medical students to observe a long-continued personal relationship between doctor and patient. The student must see this type of relationship to appreciate it.

All these things can be taught, partly by precept and partly by example. The guiding principle here, which is common to all teaching—and to all decision-making, for that matter—is the art of simplification, of finding what is essential out of the mass of complexity. The clinician's ability to do this is his supreme quality. In this world of inexorably increasing complexity, we need to search constantly for simplification, for achieving by a very few data in a very short time as good a decision as the machine makes for us on the basis of hundreds or thousands of data obtained over a much longer time.

Such a process has been called intuition. I myself dislike this word, as being chiefly a gloss to hide ignorance and prevent analysis. The operation which we call intuition is actually a value judgment, derived from experience and memory, enhanced by imagination.

Since most medical students will eventually practice medicine, it seems self-evident that they will learn much from practitioners. The wider the clinical experience represented in the teaching faculty (group practice, specialty practice, public health, and so forth), the better.

This has importance not only for the direct contribution of the practitioner to medical teaching, but especially so in establishing better relations, on equal terms, between practitioner, laboratory workers, and fulltime members of the department. All should benefit. One field needing special attention these days is clinical investigation, both by scientist and clinician; and especially in research design. Joint effort should help.

Another internal consideration is that of further broadening the scope of what is being taught in medical schools. On this matter one finds large differences of opinion. In a recent editorial written for *Science*, Dr. Irvine Page expresses the hope that "the 'Ivory Tower' aspect of medical schools will not be destroyed," and suggests that "the necessary community, social, and medical functions can better be assumed by other existing agencies." Dr. Page is speaking here of actual community care; but we can still ask, "Have we not a prior question?" Regardless of how these functions are to be served, and by whom, the prior question is, "Where are they to be taught?"

I can think of no logical place except the medical school for teaching these functions, including group practice, health insurance, and social practices in the community, and for training so-called paramedical personnel—technicians, bioengineers, and the rest. I agree with Dr. Rutstein that the nursing profession also needs to be divided into a number of separate services, with separate training to correspond.

In other words, the medical school must emerge from its Flexnerian type of operation, specializing in the mechanism of disease, into a very large graduate and postgraduate institution, with many forms of instruction at many levels. The two years of basic training as undertaken by the Duke University School of Medicine, with electives in later years, would lend itself to this kind of expansion. Almost necessarily, such activities would be shared by other university departments, with extensive interrelations.

When we turn to the consideration of affairs outside the actual teaching in medical schools, we must ask ourselves, "What is the social and economic framework within which our schools will operate?" In a recent discussion of health care under regional medical programs, Dr. Dwight Wilbur has warned that, in the midst of change, certain things must be preserved, and among these is freedom for doctors to practise in the specialties, locations, or jobs that they choose. Dr. Rutstein seems to imply the same thing, and I agree with both. There must, of course, be firm regulations to ensure ethical practice—and if Europe is a precedent, as it probably is, these will become more stringent as time goes on.

Finally, I want to offer some suggestions that extend beyond the range of many that have been proposed to cope with the coming revolution in medicine. Here they are, thrown at you all at once.

First, I believe that all medical education should be paid for out of government funds—federal, state, or both. This has been done for years in most European countries, and there is every reason that it should be done here. Logistically, this would be the simplest and most direct way to meet at least a large part of the massive costs of the plans that are now being made. Those who are knowledgeable in these matters tell me that the cost would be significantly less than half a billion dollars per year—less than one-tenth the annual cost of our moon-shot program, or if you prefer, one-fifth of the *monthly* toll of the Vietnamese war. This single action would, it seems to me, cut a number of Gordian knots: relieve hard-pressed medical schools and solve many problems of medical

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Notes on a Trip to England and Ireland

By G. Patrick Guiteras ('69)

Preface:

Most prefaces are to stories what uvulae are to palates—unnecessary. This story, however, requires a preface in order to make it understandable.

I spent this past summer working as a clinical clerk at the National Hospitals for Nervous Diseases, at Queen Square and at Maida Vale, London, England. I kept a highly erratic journal of my experiences, writing only when the fancy struck or I had nothing better to do. Thus, many people, events, and places are presented haphazardly, when they really merit more thorough description.

For reasons that will become apparent as the story progresses, you must have in mind the following facts:

1) Because of scheduling difficulties, my wife's arrival in England preceded mine by one week and her departure followed mine by one week.

2) Sis and Gin are my sisters and they live in London. Sis is married to John, and his parents are Mr. and Mrs. Franklin.

3) Professor Valentine Logue is the boss of neurosurgery at Queen Square and Maida Vale.

4) The names of all patients and of all persons about whom nasty comments are made have been changed, more for my protection than theirs. The names of persons whom I have complimented are true, and I hope they will be flattered.

5) The identities of Sheps and Nass you must deduce for yourself. They are at once inscrutable and ethereal in real life and shall so remain in this narrative.

June 25, 1968

I want to write down a few things before I forget them. It has been six days since I was in New York City, and much has transpired.

The Biltmore Hotel, where I stayed, was pleasant, but the rest of the city was awful—crowded, expensive, dirty, malodorous, hot, and suspicious. I fought my way to Times Square just to look at people—but there were too many to look at. If I tried to follow one person down a street, assess his personality, and make up the story of his life—or only the story of his evening—he disappeared in the crowd, or someone else would catch my eye, before I could figure out what he was like. All the girls wore very short skirts, even the fat ones (theirs usually shorter than the others). The dresses were so short that it was impossible to tell the whores from the "good" girls. I soon gave up. Since it was Election Day in New York, no liquor was sold. I went to the Metropole Cafe briefly to watch the go-go girls, but they had no pride in their performance. I left shortly and went to bed.

The next morning, for $1.65, I bought a breakfast consisting of one egg, toast, juice, and coffee; it would cost less than 50¢ at home. I then walked down to the United Nations and went on a guided tour. Miss Kang of Korea was our guide. The buildings and such were interesting, but not much was happening. It then took me about an hour to walk from the U.N. to the Metropolitan Museum of Art. Toward the end of my walk I was suffering from continuous, not intermittent, claudication. I kept wanting to hail a taxi, but I just knew I would get cheated. The Museum had many of my favorite works of art ("I don't know much about art, but I know what I like"). All the Japanese, Greek, and Roman stuff was just the same (i.e., dead), but Rodin was there—**The Thinker** and all the ones of embracing bodies that embarrass you until you realize just how beautiful they are. There was a good section of Renoir with his healthy, ruddy, firm girls. Also Monet, Manet, and Seurat; **Sunday Afternoon at . . .** (?Grand Jatte?) was there and was much more beautiful than the reproductions you see in books.

Since my legs were dead by then, I gave in and took a taxi to Grand Central Station to wait for Sheps. It was an amazing place, crowded with people going in different directions, eriss-crossing, weaving in and out, running, incessantly moving; I got dizzy just watching them. I first noticed Sheps when he was about three inches from me; I must have been looking at him for 50 yards or more. We ate lunch at a restaurant featuring giggly waitresses in **leather** micro-skirts, of all things. We then went to the airport (a $10 taxi ride) and waited for our plane to England.

A large group of Negroes, old and young, were there awaiting the arrival of James Brown and His Famous Flames and carrying signs reading "Welcome Home, Jimmy"; "He's Our Soul Leader." They set up a rock band right in the middle of the terminal and began to play.

The author polishing his memoirs.

and play, and play, and play. They knew two tunes. Every half-hour or so, someone would scream, "There he is!" and everyone would streak off in the designated direction—but in vain. James Brown had still not returned home when we left at 8:30, but the beat went on. Although those boys didn't know music, they did have a lot of heart (not soul). Dr. Benjamin Spock was there, however. He got paged about 20 times (by the FBI?) and I saw him boarding a plane (to Canada?).

It was near the end of our wait that I detected the first of my ulcer pain. It was a classic case: associated with tension, made worse by an empty stomach, better by eating, and abominable by drinking.

The plane trip across the Atlantic was long and dreary. To kill time, I watched **Planet of the Apes.** Sheps appeared moribund and slept a good deal. I saw the sunrise, could not see Ireland because of the clouds, but did see England, where we landed, thank God! It was no time before I was with my wife and we were off to Ireland, my adopted homeland.* Aer Lingus, the Irish Airlines, looked efficient and well mechanized, but I somehow doubted the plane's ability to fly unless a good fairy came out, touched it with her wand, set it asparkle, and then blew out of the palm of her hand across the Irish Sea. We arrived in Dublin (the plane had real motors, after all) about 1:30 a.m. It was damn cold, dark and windy, and hard to find a taxi. When we finally got one, the driver said he had not been to our address in more than ten years and would have difficulty finding it. Eventually, however, he got us to 16 Cliftonville Road, Glasnevin, where we were greeted by our hosts, Mr. and Mrs. Murphey.

Mr. Murphey appeared to suffer from chronic pulmonary disease, both obstructive and restrictive, and Mrs. Murphey seemed bent on telling us of her world travels (America, Spain, Italy, Majorca, Africa); but they were both very kind and helpful. Their home was comfortable (although cold) and Mrs. Murphey's breakfasts were superb.

Dublin is a grand place. Although not a beautiful city, it is interesting and proud, and the people are beautiful. The streets are littered, the buildings stained, and the River Liffey cruddy; but it still looked like a fine place to be.

There was a surprising paucity of redheads in Dublin. Most of the people had thick black hair above sparkling blue eyes, clear white skin, and rosy cheeks. The accent was very soft, musical, and restful to the ear.

The first day we visited Christ Church, St. Patrick's Cathedral, Dublin Castle, and a memorial to three famous victims of the 1916 "Rising." That night we saw a play at the Abbey Theater—"Shadow of a Gunman" by Sean O'Casey. It was both amusing and touching and made one wonder about the motives of the revolutionists. Are they romantic or practical?

Saturday we went to Trinity College. I skulked around the Medical School a bit; it was not in session. The lecture hall is classic: steeply rising wooden benches, worn and sagging floorboards, and an antiquated podium and rusting sink in the front. The building is ancient and decrepit but, judging from bulletin-board notices, the curriculum is not too dissimilar from ours. I attempted to visit the Royal College of Surgeons but found it closed—and so we whiled away an hour in beautiful St. Stephen's Green. Although it was cold and blustery, the Dubliners were out in force, strolling about, walking dogs, feeding ducks. To warm ourselves afterwards, we stopped in Davy Byrnes's "moral pub" for a pint of Guinness—a lovely brew.

That afternoon I picked up our rented car and we drove to Sandycove to see James Joyce's tower—a very beautiful place. Driving on the left was a problem; making a left-hand turn was an exercise in geometry. That night we visited O'Mara's singing pub, where we stood shoulder to shoulder with Dubliners singing melancholic and glorious songs of the "Rising."

*(I don't know why I have always been so enamored of Ireland and have always wished to be Irish. It may be because many people have told me that I *must* be Irish, since I have red hair. Little did they know that I am as Spanish as the Armada. Nevertheless, I have for many years secretly hoped that a drop or two of Irish blood trickled within me. I was overjoyed to learn that in 1601, 4,000 Spaniards landed in Ireland to aid in the rebellion against England. So there is yet hope.)

The following morning we set out on our journey across Ireland. All roads are similar to Bethel Church Road at home—well paved but narrow and winding; they are not numbered, and small direction signs are erected only at crossroads. The countryside provided one stunning vista after another. I only wish I had a moving-picture camera in my head with my eyes as its lens, so that I could record everything I saw. Better yet, why not live here and know the country? Several places, events, and people stand out—among them, the fresh, cheerful boy we carried to the cinema in New Ross to see "a western and a comedy, I think." I couldn't understand his name nor half of what he said, but he did feel "just grand" and was lovely company.

Annestown, on the coast, was priceless. It is a sharply circumscribed, quaint village nestled in deeply rolling hills which abut St. George's Channel. The small public beach was filled with townspeople. The cliffs overlooking the rugged coastline were too beautiful for words. Down the road a piece is Dungarvan, a slightly larger village, which was having its annual festival. The town square was packed with cars and people, the center of attraction being a basketball game; the players were clumsily effective. I stifled a Mitty-esque urge to strip off my shirt, bound onto the court, and gracefully bang in a hook or a jumper.

Sheps and I overjoyed to be in London.

Coursing through the Caha Mountains is Tim Healy Pass—undoubtedly the world's most beautiful area. The mountains are not excessively tall but are very rocky and steep and rugged. They are full of lakes and rivers and multitudes of long-haired goats. The roads are narrow and tortuous. We stopped at one rural pub for a Guinness, then reluctantly pushed on to Kenmare to spend the night. The next morning we drove to Newcastle West and stopped in a small pub for a Guinness. It was tendered by a young, fair, and beauteous girl who nearly stole my heart. She was from a farm 11 miles away and had previously worked in a hotel, but found the pub's wages of 3 pounds a week too munificent to turn down. She said she loved Ireland, nevertheless. She showed us the woolen sweater she had knitted and said she wore it always—to work, to church, and for dancing! I know she could dance; she was so lovely. We wished her well when we left.

We returned to Dublin at 5 p.m. and had one last nostalgic Guinness at Davy Byrnes's before departing for London. I felt very sad to be leaving Ireland, but happier for having been there.

June 26

First Day at Maida Vale—I walked to the hospital, arriving at 9 a.m. The place looks like a middle- to low-class apartment house from the outside; inside, it looks definitely low class. I took a slow, caged elevator up to Professor Logue's office on the third floor; his secretary took me in to meet him. He had a most striking appearance: tall and sharp-faced, with silvery-gray hair worn

slightly long. He was dressed in a tailored, dark, pinstriped suit. His manner was abrupt but cordial and he invited me to have morning coffee with him and Mr. Rice-Edwards, the chief registrar, just down from Oxford.*

We then went to surgery, where Professor Logue was to operate on a young woman with carpal-tunnel syndrome. The operating suite is similar to those at NCMH, but the **modus operandi** is slightly different. The Professor did most of the work, including prepping and draping the patient. Mr. Rice-Edwards' chores were menial: clamp-holding, knot-tying, and the like.

After the operation was completed, we went to a conference which seemed to be concerned chiefly with social and rehabilitation problems of past and present patients; Professor Logue was very much interested in this aspect of his work. Rounds were next. The patients were in small wards of four to eight beds each. The rooms, although old-fashioned, were comfortable. Mr. Symon, the newly appointed consultant (after 14 years of being a registrar), conducted the rounds very ably. We were accompanied by about five or six members of the house staff, two ward nurses (sisters) and two Spaniards, whose function was not apparent. Mr. Symon was sartorially resplendent, as were the Spaniards; but the house staff (called **housemen** in England) looked fairly dowdy, wearing long white coats over baggy wool pants.

The group then wended its way through several dark halls and one garbaged alley to the neuropathology department for slide review. The eminent Dr. McMenemy was absent and his place was taken by a younger man who looked as if he were **born** to be a neuropathologist: short, tightly built, and beady-eyed, with huge spectacles and a crisp, Bard-Parker voice. He lingered over Mr. Ewen's glioblastoma multiforme, described with obvious relish Mrs. Fitzsimon's meningioma, and was ecstatic while differentiating Miss St. Pierre's venous angioma with inflammatory reaction from a vascularized glioma.

Next came neuroradiology, where we were served coffee and "biscuits." It was here that one of the Spaniards, Gonzalez, proved most sinister. He had been continually bumping into things and generally getting in the way during rounds. When the sugar was being passed, he held it while I served myself. Between the first and the second spoonful, his previously steady hand developed a rapidly progressive tremor, which he quelled with some effort including an expiratory grunt. Very bizarre, indeed.

Doubly-blinded study of Guinness' best and its effects on higher cerebral functions in a Pub along Tim Healy Pass-Caha Mountains.

One case was most interesting. A 33-month-old Negro boy had reportedly been normal until the age of 9 months, when he had a "fit." A right-sided palsy developed soon thereafter and persisted, although some improvement had been noted. The boy did not appear to be retarded. A carotid angiogram showed widening of the subarachnoid space and straightening of the middle and anterior cerebral arteries. A ventriculogram showed the first ventricle to be widely dilated and unicellular; a large cerebral defect was present, permitting communication between the ventricle and the subarachnoid space. Air would not pass into the third and fourth ventricles. This case was even more bizarre than Gonzalez's behavior, although the lesion may be similar.

After the neuroradiology conference, it was time for lunch. The hospital dining room was in the basement of an apartment house two blocks away. For 2s 9d (33c) I got soup, pork chops and sausage, peas, bread, coffee, and dessert. Professor Logue had his table set in his office by a little old lady who devotes her life to his comfort. I had only a glimpse of it, but it looked very formal. I am told that his lunch hour (1 to 2 p.m.) is inviolable.

From 2 to 5:30 I watched three operations, all performed by Professor Logue. Two were shunt revisions and one was the excision of a lipoma that was causing posterior interosseous nerve palsy (same as radial but without sensory loss). Again, Mr. Rice-Edwards assisted in a limited capacity. At the end of the day, as they settled down for tea and sandwiches, Mr. Rice-Edwards suggested that tomorrow I be "turned loose on a patient."

June 27-30

Thursday (Second Day at Maida Vale). I was not "turned loose" but had an interesting day nevertheless. Rounds with Rice-Edwards and Grinwald (Australian houseman) began at 9 a.m. and lasted until about 11:45; they gave many of the patients rather detailed neurologic exams in order to assess their progress. One patient was especially interesting—a man with parkinsonism who had undergone right stereotaxic coagulation thalamotomy. His right hand was tremulous, whereas his left hand—which before surgery had been far more tremulous—was quiet at rest. He is most eager for the left-sided procedure, which will be done shortly. I must examine him more closely tomorrow.

At noon we dashed over to Queen Square Hospital to see Professor Logue present a case. Although this hospital seems a bit newer than Maida Vale, the lecture room is straight out of the history books: steeply rising wooden benches with a wooden partition in front of each. The walls are hung with portraits done in oils. The case was one of epilepsy treated by surgery following corticography—**most** interesting.

At 2 p.m. I watched Professor Logue remove a pituitary adenoma with Rice-Edwards's able assistance. Arfonad was used to keep the patient's systolic blood pressure at about 70-85 mm. Hg. The professor turned down a very neat bone flap, retracted the right frontal lobe, and sucked out the adenoma. I left before the operation was completed and went home about 4:30 p.m. Judy and I then went into town, strolled down Fleet Street, visited the Strand and St. Paul's Cathedral, then bussed over to Piccadilly and bought tickets to **Man of La Mancha** for tomorrow night.

Friday—Third Day at Maida Vale. This was not a good day at the hospital. Rounds terminated early and I was left with nothing to do. I spent a lot of time in the library, which is housed in one room and contains very few books. About 15 current journals, mostly neurologic in content, were on the shelves; **Lancet, American Journal of Medicine,** and **Postgraduate Medical Journal** were among them. In the afternoon, I watched Mr. Symon perform a laminectomy for cervical spondylosis; it was the first I'd seen and was quite interesting.

That night we celebrated my wife's birthday by going to Piccadilly for supper at Queen's Head pub and for the play at the theater next door. **Man of La Mancha** was sentimental and romantic but very good entertainment. We sat way up high in the balcony, surrounded by groups of teen-agers from the U.S.A.

Saturday. We went to an open-air market and ate lunch at a very posh pub on Paternoster Square near St. Paul's. Then to George's Inn (1676) for a three-hour performance of **King Lear** in the inn's courtyard. (It took me six months to read this play last winter and spring.)

*(N.B.—Registrar is equivalent to resident and any surgeon who is not a professor is addressed as Mister. Houseman is equivalent to intern.)

Afterwards we went home, had supper, and took a long walk through our interesting neighborhood.

Sunday. We slept late, then went to Hyde Park and listened to the speakers briefly. Two men were delivering strongly anti-American polemics which became very dull after a while. A very timid older man was explaining his theory of world economic reforms, and a younger man next to him was attempting to persuade all of us to practice **agape** (Greek for love and charity) as a basis for life, rather than fear and suspicion. Such oratory provides a good way to blow off steam, I suppose.

Maida Vale Hospital, London.

We then ran into Sis and Gin, who joined us in a guided walking tour of Thomas More's Chelsea. The tour was occasionally interesting, but the crowd was too large and the temperature too high to make it really enjoyable. The most striking feature was the undisguised antipathy with which the natives greeted us. Several boys on motorcycles felt it necessary to roar by and blow their horns loudly. One old woman walking a dachshund accosted the group and protested the guide's claim that Chelsea had only recently been joined to Metropolitan London. It seemed an article of faith with her, and she would not shut up despite many comments from the group. We were forced to retreat. While we were trapped in a narrow street between two rows of tall houses, a voice from a window groaned, "Go away, go away"; then music blared from the window, stopping only after we had moved on.

July 6

Because of a cold, followed by sinusitis and bronchitis, I have not felt up to writing in this book.

Work at the hospital has slowed down and I am beginning to feel uncomfortable ("Work is the crutch of the anxious mind"—Guiteras, 1968). I have become friendly with Mr. Spencer, the parkinsonian, who has undergone his second procedure. The result was good except for slight slurring of his speech, which will probably be transient.

The two most interesting operations that I have seen were the aspiration of a necrotic brain tumor in a West Indian lady (flown all the way to London courtesy of the National Health Service) and the implantation of a ventriculocaval shunt for a glioma of the brain stem in a 19-year-old boy. Both operations demonstrated increased intracranial pressure in reality and not as a concept on a blackboard. When the dura of the lady's brain was incised, the brain bulged through; the sulci were almost inapparent. When the catheter was inserted into the boy's ventricle, the cerebrospinal fluid spurted through it for a distance of about six inches.

Despite these educative events, I am becoming a bit worried about things. There is not much to do and the members of the house staff, though polite, are certainly not effusive in their relations with me. I was told to expect this, however. Another American has arrived, to do research on multiple sclerosis with Dr. McMenemy. Unfortunately, he already has a British accent and has grown a moustache; need I say more?

To fill up time, I have gained access to the very excellent slide and specimen collection of the pathology department, have asked Professor Logue to get me a brain for dissection, and have checked out some good neurosurgical books from the Queen Square Hospital library. I also attended the first of a series of clinical demonstrations at Queen Square. Dr. Gooddy made the presentations, which were excellent.

The first case was one of posterior cerebral artery insufficiency, the basis of which was a stenosis at the origin of the left vertebral artery; the patient's most remarkable complaint was that she occasionally saw things upside down. The second case was that of a man whose now-apparent left frontal glioma had defied diagnosis for seven months since the onset of right-sided clonic seizures in December. The electroencephalogram, skull films, brain scan, pneumoencephalogram, lumbar puncture, and arteriogram were all normal, and he had no headache, nausea, vomiting, or papilledema. Not until July did a repeat pneumoencephalogram finally demonstrate a left frontal mass, and all other tests were still normal. The third case was one of cavernous sinus thrombosis causing unilateral proptosis and probably due to neoplasm. The eye did not pulsate, but it was interesting to note the absence of hypesthesia in the distribution of the mandibular division of the trigeminal nerve, which does not course through the cavernous sinus as do the maxillary and ophthalmic divisions.

Entertainment has not been neglected this week. Tuesday night we took "Jason's Trip" down Regent's Canal; this was most enjoyable. Small herds of baby ducks frantically following their mothers along the canal were among the many wondrous sights we saw. On Wednesday we went to see **Fiddler on the Roof** and on Friday saw **Tartuffe** at the Old Vic—both excellent performances. Thursday afternoon I went to Wimbledon, where I saw Maria Bueno overpower Rosemary Casals, and Rod Laver eventually defeat Dennis Ralston. It really seemed strange to be at Wimbledon, after having read about it for so long. On Saturday we took the train to Canterbury to see the cathedral and St. Augustine's Abbey (or ruins thereof). They are fabulous places and the train ride was a real adventure. We saw some pretty dismal slums, as well as some nice farms.

July 28

Since I last wrote in this book, I have been seized by a malady of passivity which has prevented me from attempting to write anything. It is a strange affliction which usually comes on when I feel that I am not the master of day-to-day activity or when I feel like a stranger in a strange land. Almost no endeavor seems worth the effort or likely to succeed if attempted.

Despite this mental inertia and spiritual timidity, I have accomplished a surprising amount over the last three weeks. I am still not a member of the Maida Vale neurosurgical team, as I had originally expected to be—but I am reasonably content with my present status of guest. I am completely free of any clinical responsibility but am permitted to examine any and all patients and to observe all operations. This arrangement is not as idyllic as it may first appear: since I am not a full-fledged houseman, my frequent appearances on the ward and in the operating room take on the flavor (to me, anyway) of intrusions. Despite this neurotic problem, I have seen some interesting patients. One is a woman with spasmodic torticollis for whom Professor Logue is planning a thalamotomy. This procedure is not as effective in this condition as in parkinsonism (75% vs. 90%) and the mortality is about 3%. In this case, however, the effort and risk seem justified; for the patient has had no improvement since the onset of symptoms, associated with a bout of "the flu," six months ago. Her movements are very peculiar. I had expected them to be abrupt and violent, in keeping with my concept of the word **spasmodic**. Rather, they are fairly slow, sinuous rotations of the head which are not always to the same point nor of the same speed; and there is no sign of wildly contracting sternocleidomastoids or trapezii. In fact, the first few times she did it (perhaps one

should say "it happened"), I thought she was merely looking out the window beside her.

Another very interesting patient is Mr. Allbright, a former steeplejack who, in 1955, fell 120 feet down the inside of a chimney. Being a plucky fellow, he sustained only compression fractures of T_{11} and L_2. Since the spine was unstable, Professor Logue (then plain Mr. Logue) inserted some sort of stabilizing device. For three or four months afterward, Mr. Allbright's only complaints were severe but not crippling weakness and hypesthesia of the left leg, and moderate bowel and bladder disturbances. He was able to begin rehabilitation training as a shoe repairman and, by dint of hard labor and an engaging personality, eventually built up a hugely successful repair and retail shop. All of this Mr. Allbright documented for me with photographs which he had in his bedside table.

Me and the Petit Palace—Paris.

Three or four months after discharge, Mr. Allbright noticed that very occasionally his left leg would be seized by a severe "burning, shooting, electric" pain running down from buttock to heel and accompanied by an involuntary "kick" of the leg. This symptom increased in frequency and severity over the years, until in January he was forced to quit work and sell his business, since he had nearly injured himself on his shoe-repairing machines.

A myelogram shows a partial block at the level of his plates—i.e., over the cauda equina. The problem is very puzzling, and its solution even more so. It has been given the label **spinal cord myoclonus**, but that certainly does not explain the cause of the symptoms. It is impossible to determine what is happening; however, the nature of the injury and the motor and sensory manifestations suggest that the chain of pathologic events begins in the posterior root cells and continues through internuncials which, as a result of misguided regeneration, synapse with cells in the ipsilateral anterior horn. There are many other possibilities; in fact, because of the damaged cord and cauda equina, one can postulate almost anything. Surgical therapy based upon unknown pathology is doomed to an unrewarding conclusion. Professor Logue has been considering all the possibilities for two weeks now. His latest idea is to attempt to release the partial obstruction, but he is not too keen on this since it might result in further obstruction.

Another patient is a 19-year-old boy with a three-month history of neck pain and progressive right spastic hemiplegia, muscle atrophy, and hypesthesia; the left side is affected to a much lesser degree. Operation disclosed a very large cerebellar cyst, which had filled the fourth ventricle and pushed down the central canal through the foramen magnum; this was aspirated. Since the exact nature of this lesion is still undetermined, the prognosis is in doubt. He is a nice kid; we had a jocular discussion on the pros and cons of marriage and my ignorance of British geography.

In addition, I have read a book by I. S. Cooper on the treatment of parkinsonism and am now reading **Correlative Neurosurgery** by a group at Michigan. Next on my neurosurgical reading list is **The Biology and Treatment of Intracranial Tumors.**

On Thursday I received a brain from the postmortem assistant at Middlesex Hospital for 10 shillings. He said this was his standard fee for "you young doctors," although "the big man on Harley Street" has to pay £1. I spent the first day reviewing the surface anatomy, cranial nerves, and vessels. The next step is to inject the ventricles with wax and attempt to dissect out the basal ganglia, the thalamus, the internal capsule, and the optic radiation. These structures have a relationship which has so far defied my feeble understanding; no book or brain slice has ever clearly demonstrated it to me. I have been warned, however, that this dissection is none too easy. We shall see.

One last thing: I went to a clinical demonstration at Queen Square Hospital by the famous Dr. Roger Bannister, the first man to run a mile in less than four minutes. No, he did not lope in wearing a sweat suit. On the contrary, he was the impeccable consultant and his presentation was quite good, if a bit haughty. He occasionally bared his fangs when making an important point—an expression reminiscent of his finish-line facial contortions in years past.

In the realm of plain ol' general culture, I have done reasonably well the last several weeks. I read Brendan Behan's **Confessions of an Irish Rebel**, and **A Short History of Ireland** by J. C. Beckett. Brendan's story is too good to be true, though I'm sure it is; and the history of Ireland's domination and oppression by England is too pathetic to be true, though I'm equally sure it is.

We have also attended some superb dramatic and musical productions recently. **Canterbury Tales** was really well done, with a modern adaptation and music. I thought I would herniate from laughter during the climax of the "Miller's Tale." We have seen five plays: **As You Like It** and **Edward II** at the Old Vic, **Dr. Faustus** at Stratford on Avon, **The Tempest** at Chichester, and **Two Gentlemen of Verona** at Regent's Park.

As You Like It and **The Tempest** were the best. Both had sort of a dream-world atmosphere about them that made me feel quite childlike and receptive to what they had to say. **As You Like It** had an all-male cast; since the plot involves a female-to-male disguise, this was occasionally confusing. **The Tempest** was beautifully done, and the appearance of Ceres and the other goddesses before Ferdinand and Miranda was really magical.

Edward II was of a somewhat harsher note, but very interesting to watch. It was quite troubling to see the Queen and Mortimer go to the dogs so quickly after they had originally seemed so admirable. Gaviston, the Irishman, was fun to watch; he had no concern but for himself, and didn't try to hide it.

Dr. Faustus was not so great. The acting and production were terrific, but the theme of selling one's soul to the devil is rather boring nowadays. Everyone knows it isn't worth it. The best part was the costuming of Lucifer, Beelzebub, the Seven Deadly Sins, and assorted minor ghouls. They were definitely the most repulsively fascinating creations I've ever seen.

Two Gentlemen of Verona was strictly amateur by comparison but was worth seeing. Besides, they had real hot dogs at Regent's Park and quick service with the Guinness.

We also went to **Cosi Fan Tutti** at Covent Garden. This is a very beautiful theater with much red and gold trim, and fancy chandeliers. The opera, I'm told, was quite good; but I had my usual difficulty in appreciating this art form. True, some of the arias were very moving, provided you didn't look at the silly person singing them and made no attempt at all to relate them to the absurd plot. One of the heroines looked like an overweight lady wrestler, and her suitor looked like he probably spun pizzas over his head on week nights. A very boorish appraisal, I know.

The Messiah and the place of its performance, the Royal Albert Hall, were excellent matches. I don't think Joan Sutherland and Handel could have been contained in any auditorium less colossal than the Royal Albert. We had "seats" on the promenade, which is a wide circumferential walkway around the hall; it must be about 200 feet above ground level. Immediately below us was a set of obliquely raised seats; below them, three tiers of boxes, then some stalls and the main floor—all this in a big

circle. Behind the performers was an organ so big that the pipes looked like the smokestacks of a Pittsburgh steel mill.

On July 14 we took a train to Cambridge. Despite heavy rain, we had a pretty good time. The colleges were very pretty and we had lunch in an excellent pub run by a grandmother-mother-daughter squad who served super fare and a very refreshing Guinness.

The following week-end we entrained for Oxford—a most interesting place. The colleges are similar to those in Cambridge but seemed more varied and larger, and the town seemed to have more going on. In the afternoon we visited Martin Rice-Edwards' college (Wadham) and went to the Ashmolean Museum, where there are some ancient Chinese artifacts and other items of interest. We spent the night at a very nice "bed and breakfast" (run by Mrs. Lawful and her lawful wedded husband, Mr. Lawful) on Pembroke Street, near the center of town. Our window looked out on St. Aldate's Church, a very old building and very lovely. Next to it was Pembroke College and just across the street was Christ Church College. In the evening we picnicked along the banks of the Cherwell and then strolled down to where it joined the Thames. The view through the trees, with the sun setting over the spired colleges, was really beautiful.

The next morning we took a train to Warwick, where we were met by Dr. Whittaker, the director of the Warwick Hospitals and good ol' Clement, a classmate of mine who was visiting the eminent doctor. Dr. Whittaker was an excellent host. We drank wine and were shown around his lovely home and gardens, then had a tasty dinner served by his cook. Afterwards, he took us on a drive around Warwick and Stratford, and then up into the Cotswolds, which is a group of hills providing the best scenery since Ireland. In them are nestled two villages where I could easily spend the rest of my life—Chipping Campden and Broadway. The first is a single-street town lined by a continuous row of joined shops, houses, and small hotels, all made of a yellowish-brown stone. In the center of the town is a fifteenth-century corn market made of the same stone. A general practitioner had opened his home to the public (for 3s 6d, the proceeds to be used for some charity) and Dr. Whittaker, who knew the man, led our charge inside. It was too much—really authentic fifteenth and sixteenth century and well kept. The gardens in the back were very beautiful and were inhabited by tame rabbits and guinea pigs. Broadway was somewhat larger and a bit more touristy and fancy, but very lovely nevertheless.

The next day we toured around Stratford, after having canoed up and down the Avon. We attended a lecture on Shakespearean comedy by the renowned Professor Allardyce Nicoll. Later we visited all the sights: Shakespeare's birthplace, Ann Hathaway's cottage, the houses where his married daughters lived, and the remains of his own home. A very good trip, indeed.

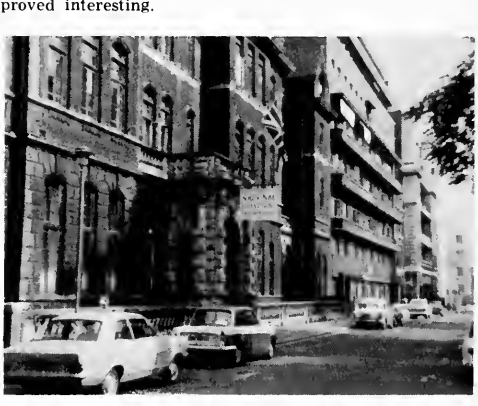
August 7

Conditions at the hospital have improved in some respects and deteriorated slightly in others. On the positive side, there have been some very interesting patients. Mr. Allbright had his obstruction relieved by some very meticulous work on the part of Professor Logue. The block was caused by a goodly amount of intradural fibrosis, which was adherent to the cauda equina; much of this had to be left. The Professor put me to work during the operation as a "toe watcher." To distinguish fibrous tissue from nerve tissue, he used a stimulator. If a toe wiggled, I would holler from beneath the sheets, "Adduction of the left great toe, sir!" To which the Professor would reply, "Thank you, thank you. Very helpful, indeed." Or the Professor might initiate the discussion by querying, "Dr. Guiteras, are there any movements?" My answer was a swift and decisive, "None at all, Professor!" Because of this assignment, I missed a clinical demonstration at Queen Square. The Professor seemed grateful, however, and invited me to attend a film on the uses of L-DOPA in the patients with parkinsonism. To return to Mr. Allbright—the results are very encouraging. He has had only a few slight painful twinges and no involuntary kicks. He has increased difficulty with micturition, however, and requires a catheter so far.

The movie that I saw with Professor Logue showed some cases in which good results had been obtained with high doses of L-DOPA (6-8 gm. per day). Results were classified as "good" in 60% of the total series. Although this figure is not as impressive as the 90% efficacy for stereotaxis, one must remember that the patients in the latter group are selected. Mr. Symon is trying out the drug on a patient at Maida Vale who, because of minimal tremor, marked bradykinesia, and abnormalities of posture and gait, is not an ideal candidate for surgery. He is up to about 2 gm. per day now and everyone, especially the patient, (Mr. Traphell) gives optimistic replies when asked to comment on his progress. It does not yet appear breathtaking to me.

The stereotaxic procedure for patients with torticollis was very interesting. I can't explain the Professor's method too well. The initial step is the implantation of perforated skull plates bilaterally, followed by myodil ventriculography to delineate the target point. A frame is then fixed to the patient's head; this is used to make measurements of angles and distances which will serve as a guide for introduction of the coagulating needle. A day or so later, the patient is taken to surgery for stimulation and coagulation. After bilateral procedures, her symptoms gradually diminished, and today they have almost disappeared. This response is just the opposite of that frequently seen in parkinsonism and is very curious, since the lesion has most likely been growing smaller in size during this time.

Another interesting patient, Mrs. Matthews, is a 24-year-old woman from Barbados with a one-month history of severe headaches and papilledema. She has no neurologic deficit, however, and appears well otherwise. The differential diagnosis lies between benign intracranial hypertension and an expanding lesion. A right carotid arteriogram will be done first, and if this is negative a pneumoencephalogram will follow. She mentioned that a lot of her scalp hair has fallen out recently, axillary hair has appeared, and her menses have become irregular. She has had no other endocrine abnormality. I wonder about the possibility of a tumor in or near the hypothalamus or the anterior pituitary. We shall soon see. Martin Rice-Edwards gave me a brief synopsis of the treatment for benign intracranial hypertension and a reference on the mechanism of papilledema (**Brain** 89:1, 1966), which proved interesting.



The National Hospital, Queen Square, London.

I must put in a good word for the registrars here. Although they are not overwhelmingly friendly, they are somewhat more refined than their counterparts in the United States. They do not use expressions like "gork," "rotten squash," or "troll," and they seem to have more interest in fundamental pathophysiologic mechanisms and less disdain for the "nit-picking fleas" than the residents at home. Rice-Edwards epitomizes these good qualities and, in addition, is quite well versed in literature and music—at least as far as my unschooled sensibilities can discern. I might add that, at the Victor Horsley Memorial

Lecture, the speaker, Douglas Northfield, was praised as a "compleat physician" and he, in turn, stressed Horsley's ability and interest in diverse medical and surgical fields. Certainly one could ask for no better examples upon which to model one's career.

On the negative side, the brain dissection has been only fair. It was quite difficult injecting the wax into the ventricles before it hardened, and I was never able to get a good cast. The dissection is very tedious and it is almost impossible to avoid chewing up important structures. Nevertheless, I have managed to show the lateral ventricle, the caudate and lentiform nuclei, and the internal capsule. I will have to remove the wax impression in order to see the thalamus and the third ventricle. Miss Hester, the librarian—for some reason comprehensible only to a member of that compulsive profession—has kicked me out of the museum, and I must now go into the autopsy room; I much preferred the solitude and convenience of my original location.

Another unfortunate development is that Professor Logue went "on holiday" to Spain and won't return until September 5. This is regrettable from my point of view, because it will reduce the number of admissions and operations.

To finish up on a happier note, I attended a seminar on craniopharyngioma given by Rice-Edwards, Professor Logue, and an endocrinologist. It was well done and informative, covering the subject from a very elementary to a sophisticated level. Martin's presentation of the patient and general discussion were done with careful elocution, syntax, and organization, despite his apparent nervousness. Professor Logue's surgical discussion was also very good.

I guess the ultimate compliment was given to me yesterday, when Mr. Symon asked me to take on a houseman's job for two weeks while Paul Grinwald goes on holiday. Since his vacation begins just after my departure, this suggestion will unfortunately come to naught.

I must mention our recent camping trip—a four-day affair in the Lake District in northwest England. The area is filled with short but rugged mountains and deep black lakes, interspersed with small valleys containing sheep and cattle farms. We camped in an isolated spot hard beside the River Esk—but not 500 yards away was the warm and congenial Tatiegarth Inn and Public House, which we visited nightly. The second day we hiked up Illghyll Head (elevation about 2000 feet), across a barren plateau on which we saw some ancient (Saxon? Gaelic?) stone circles and mounds, and down the other side to Wast Water, a lake about four miles long, half a mile wide, and 250 feet deep. We continued along one side of the lake, traversing the steep, slippery, and treacherous "screes," or rock slides, which form most of the south border of the lake. We were able to complete only 10 miles of our proposed 13-mile journey and opted to thumb our way back to camp. We rode with a very nice young couple —school teachers from Birmingham. Unfortunately, I sat upon and demolished a loaf of bread in their back seat.

The following day we drove to the Atlantic shore at Seascale, which was only about 10 miles away. We bought some freshly caught plaice, potatoes, and cider, which we prepared at camp—a most delicious meal. We then spent an hour at the pub with a glass of Benedictine and an Antonio y Cleopatra cigar, listening to the curious Yorkshire accents and a group of boys intent on song. Surprisingly enough, they chose old-time American favorites—"She'll Be Comin' 'Round the Mountain," "Darlin' Clementine," "Sidewalks of New York," etc.—as well as some more recent songs such as "Here's to You, Mrs. Robinson," and "Yellow Submarine."

Before I forget, there was a most unusual patient presented at Queen Square Hospital this afternoon—a very nice little old lady with incontinence, tremendous enlargement of the bladder, ureters, and kidneys; neck pain; diminishing auditory acuity, and very slight leg weakness. She had no urinary tract obstruction and her myelogram was normal. Guess what? Neurosyphilis. No kidding.

And yet another, at Maida Vale: a 22-year-old pugilist with a neurofibroma of the fifth nerve causing lancinating pain over the right maxilla and sixth-nerve palsy on the right side. I missed his operation, unfortunately.

Still another! A woman with pulmonary carcinoma metastatic to both occipital lobes. She felt well, but her vision was "distorted"; she saw faces as gargoyles, and fingers appeared much longer than normal. How ghoulish!

August 11

I am writing today to mention a few important items previously left out and also to try out my new nylon-tipped pen, a technological advance I've assiduously avoided for the several years since its invention. The other day, I finally gave in to progress and bought one. It works very well.

I must describe our living quarters. We are at 119 Pinduck Ave., W.9, one of a lengthy row of conjoined, nearly identical houses. A little farther down the block the houses become fairly dingy, but ours is the best of a good lot. The house has four floors and we occupy part of the basement. Our place consists of one large room, which serves as bedroom, living room, and dining room, and a very small kitchen with sink and gas stove—no refrigerator. The toilet is on the first floor and the bath on the second. You must pay 6d for a bath.

The carpet on our floor was undoubtedly bought as a reject from a Portobello Road Market rug hawker, and the curtains which cover our back door and window were chosen because of their unparalleled ugliness. They are dirty red with white and black surrealistic representations of the pelvic and splanchnic nerve plexuses. There are three wall pictures—all Venetian canal scenes. These hang against a background of wallpaper patterned with bamboo and thistles. Nevertheless, our apartment is most comfortable, cheap, conveniently located, and there is a lovely walled garden outside our back door. I like it here.

The owners, and resident landlords, are a pair of middle-aged Welsh bachelors who live together on the first floor. The larger one, who appears to be in charge, is Mr. Cynwyth. His partner's name is a matter of some dispute. My wife maintains that it is Mr. Stokes, but this name is not found on the apartment's registry; perhaps this is because he lives with Mr. Cynwyth, under his aegis, so to speak. In any event, I refer to him (not to his face, of course) as non-Cynwyth, since this seems the most honest and safest thing to do, at least until the facts are known. This is the sort of complicated problem that arises from not making sure right from the start.

Prince Alfred Pub in our neighborhood.

Non-Cynwyth or, for the more daring, Mr. Stokes, appears relegated to doing the more menial household chores. Every Sunday he hauls out the carpet sweeper, bucket, and scrub brush, and cleans the halls and stairs carpets and the various bathrooms. He is quite fastidious in the performance of his chores; his compulsiveness frequently bubbles over into our room, where we have a laissez-faire policy of housekeeping. This apparently causes the poor man much anxiety, which he allays occasionally by emptying our garbage, scrubbing the sink, making the bed (here I must interject, lest one think we are absolute grubs, that we do usually make the bed), or sweeping the carpet. He does not begrudge us these services; in fact, we probably do his psyche a bit of a

favor. Their apartment, which I've entered occasionally, is extremely well appointed and at all time immaculate. Mr. Cynwyth handles the cooking for major dinner parties, while non-Cynwyth is permitted to cook breakfast every morning and to wash the dishes. If one asks them for advice or for directions to a place, they invariably squabble over the answer in their sing-song Welsh accents and Mr. Cynwyth **always** wins out. When Mr. Cynwyth is not at home, non-Cynwyth refers to him only as "he."

There are fifteen apartments in this building, all occupied, and the only persons we've taken note of, save for the landlords, are our next-door neighbors, Mr. and Mrs. Johns and their infant child. Mrs. Johns may be Spanish but is probably South American; her husband is English. Their life seems to be an interminable shouting match, with Mrs. Johns doing 99.9% of the shouting and her husband bawling out an infrequent, "Oouw, shut up!" to which I usually append a silent but heartfelt "Amen!" Their disputes are primarily financial; it is not the content but rather their frequency and duration, and the amazing durability of Mrs. Johns' larynx, that distinguish them. She is easily capable of squealing in a voice very similar to that of an enraged sow (a voice so common among Latin women) for 15 minutes without stopping. The timbre of her voice changes only slightly while she plays with her baby in the morning; since she talks to him in Spanish, we can only hope that her utterances are more complimentary than those to her husband.

August 13

Today I watched the first stage of a thalamotomy for parkinsonism, a procedure which merits description. The patient, Mr. Willis, is a civil servant from a town south of London, who for the past six years has been troubled by rigidity of his left arm and leg and tremor of his left hand. He has the immobile facies of parkinsonism but does not suffer from bradykinesia or any autonomic dysfunction. Were it not for his hypertension (200/110) he would be the ideal candidate for surgery, and Mr. Symon decided that an operation was justified in spite of this relative contraindication. A right frontal burr hole was made; a stainless-steel ring was fitted into this hole and then nailed into the skull. The ventricle was tapped and the scalp incision closed around the cannula. The patient was then set up and a large, heavy, rectangular steel frame was fixed to his skull by means of four screws, much as one fits the stand to a Christmas tree. This frame had etched on it a series of graduations which would later be used as reference points for definition of the target.

The trip to the X-ray department commenced. Leading the procession were Mr. Symon and Mr. Illingworth in full, white surgical regalia, with hands folded across their breasts. Behind them came two operating-room assistants, struggling mightily with the chair in which rode the patient, oblivious to all. Mr. Willis is a large, obese, hirsute gentleman and appeared as the god of some black cult. The ventricular cannula protruded from his domed, shaven head, crowned with the massive frame screwed into his skull. Dark red blood oozed slowly from around each screw and trickled down his head in four separate streams. He was naked, save for inflatable pants around his legs, to be used in case his blood pressure fell precipitously. A large black rubber tube extended from his mouth down to the anesthetist's cart, which she dutifully pulled alongside him. Connected to the cart was a trolley containing cylinders of compressed gas; this was pushed by another of the faithful.

Bringing up the rear were Rice-Edwards—carrying the sacred scrolls upon which would soon be written the coordinates of the dark god's nucleus ventrolateralis thalami (**et cum spiritu tuo!**)—and me, in a long white robe, canvas overshoes, cap, and mask. I felt I should have been carrying an incense burner. The whole affair resembled a macabre religious procession as we slowly wended our way through the gloomy halls of Maida Vale. Not even Marlowe at his best could have surpassed this scene for sheer ghoulishness.

Once inside the x-ray department, myodil contrast material was injected into the ventricles and pictures were taken in anteroposterior and lateral projections. From these were made careful measurements relating the frame to the appropriate point in the thalamus. We then regrouped and paraded back to the operating room, where Mr. Symon inserted a perforated plastic hemisphere into the steel ring at the angle indicated by the measurements just obtained. Theoretically, when a coagulating needle is passed through one of the holes to the correct depth, it will come to rest in the ventrolateral nucleus. This procedure will be done after the dark god has had time to rest up.

Last night we went to Queen Elizabeth Hall by the river to see and hear Perlman at the violin and Ashkenazy at the piano play Prokofief's **Second Sonata,** Debussy's **Sonata in G Minor,** and Beethoven's **Kreutzer Sonata.** The first two pieces, although undoubtedly played with brilliance, were a bit too exotic for my simple tastes. The **Kreutzer Sonata** was better but seemed too fiercely organized. Afterward, we tried to find a pizza at Piccadilly but were thwarted.

Campsite, River Esk.

The previous night we went to the Royal Festival Hall for the ballet set to Tchaikovsky's **Sleeping Beauty.** The music was superb, but the ballet seemed to feature gymnastic feats rather than the graceful motion of the body.

Right now I'm sitting in the Student's Common Room at Maida Vale, which is usually a pretty relaxed place except on Wednesday mornings. Then Dr. Gautier-Smith, a consultant neurologist, arrives with a truckload of papers which he spreads across the table. He is writing a book and seems very sensitive to disturbances, such as the loud scratching of my nylon-tipped pen.

August 17

Today was cold, windy, and dark; but nevertheless we sallied forth by train to Windsor Castle, which is only about 20 miles from London. It is a huge and very well-preserved place, dominating the town and countryside from the hilltop upon which it stands. We visited the Old Masters' Gallery, where there are some of Leonardo's sketches, including those of St. Anne and the Christ child which appear in **Madonna of the Rocks,** and of the patterns of flowing water, the plans for a cannon foundry, and exploding mountain, and a study of the human leg and arm. These sketches are incomparable; they really do take on motion and life. I wish the entirety of the huge anatomical collection were open to the public. Holbein's sketches of Sir Thomas More and his father and son are also hung in the Old Masters' Gallery.

We also toured the State Apartments where the royalty, in times past, resided. They are so grandiose as to be occasionally nauseating. Nevertheless, they make quite a good show.

Last night I had a curious experience. About 10 p.m., in the midst of a thundershower, a young man knocked at our back door and explained that Mr. Singer, an elderly man who lives in the basement of the next house, was suffering from some sort of "nervous reaction" and had asked for me to see him. Mr. Singer had been a patient at Maida Vale before my arrival, and this tenuous link has been the basis for our acquaintance. He has never been a favorite of mine, being very obsequious when he

talks to me, yet a terror when scolding the children who play in our back garden.

Knowing all too well the scantiness of my medical resources, I nevertheless trotted over to see him. He was sitting in the landlady's apartment and seemed a bit tense and shaky; he explained that he had "something wrong" in the back of his neck upon which the surgeons would not operate and today had gradually become increasingly "nervous, weak, and unsettled." He had called his GP, who told him there was nothing he could do. When I asked him if he had taken any medications during the day, he replied, "Yes, two Amytal," but added that he had unfortunately dropped his newly-filled prescription on to the train tracks shortly after his morning dose. I didn't let him ask the inevitable question but explained to him that I was still unlicensed, and made a brief examination, being careful to effect a good laying on of the hands. I then reassured him and told him to call his GP should his condition worsen—an event I seriously doubted. With that advice I left, and only on the way home remembered that withdrawal from barbiturates is more dangerous than from alcohol, and frequently leads to seizures. Urks!

August 20

Not much is happening at the hospital. Mr. Willis's thalamotomy was successful and he is quite pleased. Mr. Trapnell was discharged improved on about 6 gm. of L-DOPA per day. He says he is now able to plant a row of peas—something he hasn't done for years. He is still moderately disabled by his parkinsonism, however. Mrs. Matthews's right carotid angiogram and pneumoencephalogram were normal. Since her headaches and papilledema are subsiding, she received no therapy and will soon be discharged with the diagnosis of benign intracranial hypertension. Mr. Allbright appears to have profited from surgery; the spasms in his leg occur very infrequently, and his bladder function has returned to its preoperative state. In addition, motor strength and sensation in the leg seem to have improved. He is contemplating a return to the shoe business after his discharge.

Last night we saw **Merry Wives of Windsor** at Aldwych Theater. I'm told that Shakespeare wrote this play specifically to feature Falstaff, who had been so popular with the bourgeoisie in previous plays. Falstaff was less than overwhelming in this production, but Master Ford and the rest of the cast kept me laughing all night. Guess I'm just demi-bourgeois.

Liffey River—Dublin.

We were fortunate enough to be invited to a party in honor of Dr. Robert Smith, a member of the Social Medicine Department at Guy's Hospital who is joining Dr. Lyle's crowd at UNC. The party was held at the Staff Common Room at Guy's. Dr. Smith is a real gentleman and will be a definite asset to our faculty. Nass and Sheps were there, both needing haircuts.

This reminds me: Last month I met with them at a pub near Victoria to discuss our respective curricula for next year. Although our conversation wended its way through many topics, spurred on by camaraderie and frequent rounds of beer, we did make some worthy decisions on the business which ostensibly brought us together. In addition, we heartily saluted Dr. Peters and other members of the faculty who brought about such a beneficent change in the course of study.

August 21

This was my last day at Maida Vale, and it was fairly profitable. Mr. Symon conducted the rounds and did a little bit of teaching, perhaps because of the presence of Miss Ann O'Faolain, a newly arrived student from Trinity College, Dublin. A pearl dropped: headache rarely occurs in vertebrobasilar ischemic attacks because this system has no meningeal branches. In carotid ischemic attacks, however, headache is prevalent because the carotid does supply the meninges.

Tonight we take the all-night train to Paris—a big adventure!

August 27

This is my last night in London. Tomorrow the jet flies me back to New York, then home. We spent almost the entire day packing, and wrapping and mailing packages, but went to the movie tonight to see **The Bofors Gun**, which starred Nicol Williamson. We had seen him in **Of Mice and Men**, which was excellent, and were not disappointed by his performance tonight.

Yesterday we attempted to visit Parliament to hear the condemnation of Russia for its invasion of Czechoslovakia. The line was blocks long, however, and a group of Czechs at the front of the line had been standing for seven hours. My heart, if not my feet, was with them.

We then went to the Welcome Medical Museum and studied a little pathology—ainhum, Burkitt's lymphoma, and sprue—and medical history. On leaving, we got lost and stumbled upon a fabulous shop of medical books, both old and new. I went wild and, within 10 minutes, bought a **Leonardo da Vinci on the Human Body** and a sixth edition of Osler's **Textbook of Medicine.** The prices were excellent: 4 guineas for the Leonardo, and 15 shillings for the Osler.

We then zipped over to Earl's Court to meet John, Sis, Gin, and Mr. and Mrs. Franklin for a farewell dinner at a fine Chinese restaurant. The Franklins have been excellent hosts and friends whom I trust we will meet again soon.

Our visit to Paris comes back to me like a dream. This effect is probably due as much to the fact that we had to take the all-night boat-train over and back as to the ethereal qualities of that warm and beautiful city.

We arrived there at 6:30 a.m. and, after some oily coffee at Gare St. Lazare, hiked down to the Arc de Triomphe, which is big. We then took a leisurely stroll down the broad and pleasant Champs Elysees. By the time we arrived at Place de la Concorde, our sleepiness had caught up with us; we tottered into the Tuileries Gardens and slept on a bench for an hour. On arising, we visited the Musee d'Impressionistes, which revived our souls. We then continued through the gardens to the Louvre, where our tired eyes feasted upon Leonardo's **Mona Lisa**, **Virgin of the Rocks**, **John the Baptist**, and some others I can't remember. We also saw **Venus de Milo**; it was slightly amusing to see a group of diminutive Japanese tourists having their pictures taken individually while standing at attention by the statue. Feeling bone-weary, we walked down to the banks of the Seine on the Ile de la Cite, to have lunch and another nap.

Notre Dame Cathedral and the Sorbonne drift lazily through my memory, then a long nap back at the Tuileries, interrupted by an elderly, stooped, but highly aggressive woman demanding 45 centimes for the use of the chair. I paid after sputtering a few protests, but noticed that the natives merely moved on when she confronted them.

And so, that is it. Much more than what is contained in this narrative has happened to me, and a lot of what is recorded here deserves better description. I should like to end with some moving, eloquent statement, but it seems to escape me just now. I've had a good time here, but I want to go home.

Blood Transfusion Three Hundred Years Ago

PETER HUTCHIN, M.D.
Assistant Professor of Surgery

Although references to blood transfusion can be found in the ancient literature, the first well-documented attempts to transfuse blood into human subjects were made late in the seventeenth century. The necessary background for this development was provided by William Harvey's discovery of the circulation in 1628 and the organization of scientific societies in the early 1660's—the Royal Society of England, established by Charles II, and its rival organization, L'Academie des Sciences, established by Louis XIV in France. The events which took place three hundred years ago—in the full glare of publicity, controversy over priority, chauvinistic tendencies, and public opposition—are reminiscent of recent developments in cardiac surgery.

From antiquity blood was regarded as synonymous with life and was believed to carry with it the physical and mental qualities of its owner. It is not surprising, therefore, that the early attempts at blood transfusion in man were based on a belief in the therapeutic effects of blood on the psyche. No consideration was given to blood transfusion as a treatment for hemorrhage.

The first intravenous infusion of any kind was probably performed at Oxford by Christopher Wren and Robert Boyle, both members of the Royal Society of England. To settle an argument as to whether the effects of drinking beer resulted from the presence of the alcoholic beverage in the stomach or in the blood stream, Wren and Boyle infused beer, wine, and various other "juices" into the veins of dogs, using as a primitive syringe a quill and a dog's bladder (Fig. 1). These experiments came to the attention of Richard Lower, a young medical student, who was one of the first to implement Harvey's discovery by transfusing blood from the circulation of one subject to that of another. His experiments with transfusions in animals are described in his now-famous book, *Tractatus de Corde.*

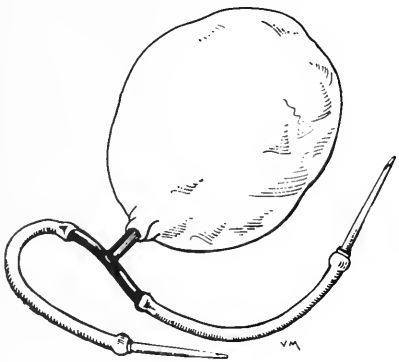


Figure 1
Intravenous infusion apparatus made of quills and a dog's bladder used by Christopher Wren and Robert Boyle in 1656.

Lower first repeated the experiments performed by Wren and Boyle, infusing much larger quantities of beer mixed with wine. Finding that the solution mixed well with blood, he then proceeded to transfuse blood from one animal into another. He performed the first blood transfusion in 1665 just four months before receiving his degree of Bachelor and Doctor of Medicine. After an unsuccessful attempt to transfer blood from the jugular vein of one dog into that of another, he decided to perform an artery-to-vein transfusion, using silver cannulas connected by the carotid artery of an ox (Fig. 2). His description of this experiment follows:

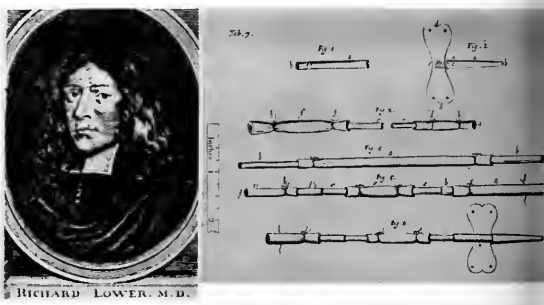


Figure 2
Richard Lower first performed a transfusion of blood from one animal to another in 1665, using silver cannulas shown here.

> From the dogs suitable for experimental purposes I selected a medium-sized one and drew off its blood from an exposed jugular vein. The dog first set up a wailing but soon its strength was exhausted and convulsive twitchings began. In order to resuscitate this animal from such a great loss of its own blood with blood of another, I securely bound a large hound along the smaller dog and allowed its blood to flow from the cervical artery into the smaller dog. This rushing in of blood soon transfused too much as evidenced by a returning restlessness of the engorged dog. The artery of the donor was now ligated and blood again withdrawn from the recipient. This withdrawal was re-

peated in another large dog until neither blood nor life remained. In the meantime blood was being drawn away and turned loose from the small dog, equalling in amount, I would judge, the weight of its body. Nevertheless, its jugular was again joined and its chains unfastened. The animal immediately leapt down from the table and apparently forgetful of its injuries, fawned upon its master. It then cleansed itself of blood, rolled in the grass, and apparently was no more inconvenienced than if it had been thrown into a flowing stream.

It is interesting that the result of this experiment did not suggest to Lower that blood transfusion might be life-saving for patients suffering an acute blood loss. He was obviously influenced by the prevailing opinions of his time including the psychic effects of blood, and his mind was not properly prepared to recognize the significance of his findings.

In France, the experiments of the Oxford group became known to L'Academie des Sciences and aroused a great deal of interest among its members. Under the leadership of Jean Baptiste Denis, professor of philosophy and mathematics at the Faculty of Paris and physician to Louis XIV, experiments with animal transfusions were performed early in 1667. An appreciation of the atmosphere in which this work was conducted and the spirit of the time can be gleaned from the following entry in the *Archives* of the Academy:

> . . . at about this time there was much noise concerning a new discovery, for which the English had all the glory, but which the French perfected from day to day; it was the famous Transfusion of Blood, founded upon the circulation, which seemed to promise, along with an infinity of unusual experiments, the cure of all diseases of the blood, and an almost complete transformation of medicine . . .

Denis and his assistant, Emmerez, rapidly perfected their techniques and, in June of 1667, were ready to attempt a transfusion from animal to man. They decided to use a sheep because its blood was believed to be of greater purity in relation to milk and meat, which are man's food. The patient was a 17-year-old youth exhausted by fever and repeated phlebotomies. Denis gave him 9 ounces of blood from a sheep's carotid artery without any immediate adverse reaction. The patient surprisingly recovered, and Denis concluded:

> Now who does not see that all these admirable effects derive without doubt from this little arterial blood of the sheep, which being mixed with the mass of his own gross blood served as a ferment and leaven to rarify it and refine it more than ordinary, to produce a greater abundance of spirits and to maintain all the functions of the body more free and unconstrained?

Encouraged by this success, Denis and Emmerez chose for their second subject a healthy 45-year-old man who volunteered to submit to the experiment. A record of his transfusion is preserved in Denis' report to the academy:

> And because this man had no considerable indisposition at all, we proposed to make on him a transfusion more ample than the first, but having found his vessels quite deep and little filled with blood, we only withdrew about ten ounces and then we introduced a good twice as much from the crural artery of a sheep that we had expressly prepared, as much because it is larger and easier than the carotid as to include some diversity between this second experiment and the first. For the rest this man did not abandon his jovial humor during the entire period of the transfusion and among the other reflections he made on the situation of the sheep alongside his arm, he told us laughingly that there were strange means of conserving life in medicine, that he knew not who had invented this means of blood-letting but that he felt a very great heat from the incision that we had made in him as far as the axilla, which derived from the course of this new arterial blood which had to take this route to get to the heart.
>
> When the operation was completed we wished him to lie down, but as he felt no alteration in himself, it was impossible for us to achieve this end, and we could not prevent him from instantly cutting the throat of the sheep, blowing it up, and skinning it because he was skillful therein and has practiced it durin his youth. Then he wanted to return home, promising us that he would take a bouillon, and that he would lie down there the rest of the day, but he had no more than left than he went to find his comrades and took them to the tavern to drink up a piece of money that had been given to him to pay him for his day. And feeling more vigorous at noon, either from the new blood that he had received six hours before or from the quantity of wine he had just drunk, he undertook a task involving his whole body and as hard as a man can endure since even horses would have trouble enduring it. He worked all afternoon and thus prevented us from making the observations on him that we had proposed to make. I met him in the street the next day, and having learned of this behavior from himself, I was surprised at it, I disapproved of it strongly, and reproached him for imprudence, but he said as his whole excuse, that he could not remain at rest when he felt well, and that he had not felt any pain during or after the operation, that he had drunk, eaten and slept well, that he had more strength than before, and that if we still wished to repeat the same thing some day, he

begged us to choose no one but him, and that the next time he would rest and execute punctually everything that we ordered him to do.

Denis's third transfusion was performed on July 24, 1667. The patient was a young Swedish baron, Eric Bonde, who was moribund at the time and succumbed soon after the transfusion.

Denis sent a letter describing his first animal-to-man transfusions to the *Philosophical Transactions* in London, a publication of the Royal Society. This letter was printed in the *Transactions* when the secretary of the society, Henry Oldenburg, was temporarily absent from town. On his return, Oldenburg arranged to have the distribution of this particular issue suppressed, evidently to eliminate the claim of the French for priority.

Nevertheless, the news about the successful performance of a sheep-to-man transfusion in Paris stirred the Royal Society to activity. Lower in particular was not to be outdone by the French. On November 23, 1667—a month after his election to the Royal Society—Lower, with the assistance of Edmund King, transfused the blood of a docile lamb into "a mildly melancholy insane man" named Arthur Coga. The procedure went smoothly. The patient was first bled 7 ounces and then transfused for two minutes from the lamb's carotid artery, receiving an estimated 9 to 10 ounces of blood. The patient himself later described his experience to the Royal Society in an address delivered in Latin and entitled "Humble Address of *Agnus* Coga." His amusing account, in which he stated that he was much better, left the impression with those who heard him that he was "cracked a little in his head."

Meanwhile, Denis was beginning to encounter opposition from jealous colleagues in his own country. Fearful that the new operation might replace all the other remedies to which they were accustomed, some of the French physicians were determined to put an end to transfusion. Their opportunity to accomplish this arrived with Denis's fourth patient, Antoine Mauroy.

This 34-year-old house servant, recently married, suffered from periodic attacks of mania. During one of these attacks, Denis was called for help. He decided that a transfusion of blood from a calf might have a calming effect on the patient, because of the animal's gentle spirit. The transfusion took place on December 19, 1667, in the presence of several physicians as spectators. Denis and Emmerez performed a venesection on the patient's arm vein, first withdrawing about 10 ounces of blood and then infusing 5 or 6 ounces of blood from the calf's femoral artery. It was not possible to transfuse more blood because of the patient's lack of cooperation and violent behavior. The procedure was repeated the next day, after he became quieter, and a larger amount of blood was transfused. The resulting transfusion reaction—which of course was not recognized as such—was described by Theophile Bonet.

> As this second Transfusion was larger, so were its effects quicker and more considerable. As soon as the bloud entered into his Veins, he felt the same heat all along his Arm and in his Armpits which he had done before: His Pulse was forthwith raised, and a while after we observed a great sweat sprinkled all over his face. His Pulse at this moment was very much altered; and he complained of a great Pain and Illness at his Stomach, and that he should be presently choaked, unless we would let him go. The Pipe whereby the bloud was derived into his Veins, was presently drawn out, and while we were busied in doing up the wound, he vomited up what he had eat before, and besides, both pist and shit: By and by he was laid in his bed, and after he had for two hours sustained much violence, vomiting up divers liquours which had disturbed his Stomach, he fell into a profound Sleep about ten o'clock, and slept all that night without intermission till eight o'clock the next day, being Thursday. When he awakened he seem'd wonderfully compos'd and in his right mind, expressing the Pain and universal weariness that he felt in all his members. He pist a large glass full of such black Urine, that you would have said it had been mixt with Soot: He also slept well all the next night. Making water on Friday morning, he filled another glass with Urine that was altogether as black as that he made the morning before. . . .

Mauroy recovered from the transfusion reaction and was improved for about two months. He then had a recurrence of his mania, and his wife is said to have insisted on another blood transfusion to quiet him down. Because of technical difficulties and the patient's lack of cooperation, it is not certain that the transfusion was ever accomplished. Nevertheless, Denis was charged with murder when the patient died the next day. It is said that the patient's wife, bribed by Denis' opponents, pressed charges against him, stating that her husband died during the tranfusion. Although Denis was acquitted in the legal battle that followed, the influential physicians of the Faculty of Medicine in Paris arranged to have Parliament prohibit further transfusion experiments in man by an edict from the criminal court dated April 17, 1668.

Blood transfusion was not attempted again, either in France or in England, after the edict was issued. Although surgical textbooks retained illustrations of the procedure for a number of years (Fig. 3), blood transfusion was essentially abandoned until the early nineteenth century. Nevertheless, Lower never lost faith in the possible value of blood transfusion. In an effort to establish his claim to priority, he wrote a

detailed account of the circumstances and experiments preceding his first actual transfusion of blood. "A certain Denis," he explained," in a letter recently made public, attempted to deprive me of the credit of originating this famous experiment and appropriate it to himself." While there is no question that Lower was the first to perform and report an animal-to-animal transfusion, Denis deserves the doubtful credit for the first animal-to-man transfusion.

The transfusion of blood remained a highly dangerous procedure until 1900, when the existence of blood groups was recognized. Since then, blood transfusion has become a common and extremely valuable medical procedure. The account of its beginnings 300 years ago affords a vivid example of man's devious road to progress, demonstrating how the success of a discovery depends on the time of its appearance and on the mental and ideological preoccupations of that particular era.

Figure 3
Sheep-to-man blood transfusion. Illustration from an early 18th century surgical textbook.

—Are Our Medical Faculties Qualified?—

(Continued from Page 18)

school–University relations; make a medical education available to all qualified applicants regardless of economic status; and allow medical graduates to begin their postgraduate training without being overwhelmingly in debt.

My second suggestion has to do with the provision of good medical care in rural areas and in the poorer districts of our cities. I am not persuaded that equitable distribution of medical services can be accomplished entirely by intricate and tight administrative organization of the whole community, nor even by the addition of paramedical personnel, though this may well contribute. Nor do I believe that the answer lies in bringing all sick people to a hospital. As Dr. Henry Cecil of Philadelphia points out, when a harassed mother brings her acutely ill child to the hospital, the doctor has no way of knowing that this is the only member of the family who is in trouble, or even the one in most serious trouble. Granting that visiting nurses can do much for families, physicians can do more. It seems obvious, however, that few physicians will choose unprofitable locations in which to set up a private practice.

Is there not merit in the Norwegian scheme of having a public health officer, medically trained, in general charge of providing medical care to all the residents in his district? He should, of course, be paid well enough to make the post attractive. Carrying the idea further, I think of these outlying areas as excellent training grounds for physicians at all levels, and of those who are in charge as being also high-quality teachers. Medical students would take part of their practical training in these places; and a year or two of residency training or post-residency practice in such a location would provide a sound background for the young physician. As we carry our Utopia to its best conclusion, such a term of training might substitute for military service. Such a practice has been employed in Scandinavia. This would provide at least a framework of continuity of personal medical care that is so much endangered by mechanized systems.

Are we aiming for a revolution in medicine? It depends what you mean by the word. Strictly speaking, it should mean turning things upside down. If by revolution we mean that we are to make many changes, obviously the answer is *yes*. If we are to throw what we have overboard, and start over again, the answer is *no*. We have so much going that is excellent, let us not give away all the good that Dr. Flexner did for us.

And now I come back to the categorical question with which I began: Are our medical faculties qualified to teach medicine? At this point, having said all I have to say, I shall once again have recourse to a Socratic precedent. Socrates, you will remember, asked all the important questions–but he never answered any of them.

The Implications of Computer Technology to Medical Education

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The computer is a curious child of man's ingenuity, a recently evolved species apparently descended from such innocuous ancestors as the gear-driven adding machine (fathered by Paschal in the mid-1600s), the punch-card record (probably first developed by Falcon in the early 1700s), and Babbage's "analytical engine" (invented in the mid-nineteenth century). After the discovery of the electron by J. J. Thompson in 1897, a series of mutations brought about the more recent relatives of the computer: the radio, radar, TV, and calculator. These ancestors, however, were comfortable for us to live with. They had a specific job to do; they did it well, and they knew their place.

Not long after the birth of this child we call the computer, it became apparent that few of the virtues were in its nature. The computer seemed not to be satisfied with a single purpose, and it inspired a peculiar kind of loyalty almost approaching fanaticism in those who espoused its cause. There seemed to be no end to the things that the computer could do and, for a while, little beginnings to things the computer *would* do.

The computer, in recent years, has moved out of its childhood. It has accepted many responsibilities and promises to accept many more. Many people have stated their belief that the computer will completely revolutionize society, that it is the most significant innovation since the invention of the wheel—and have made other equally modest statements concerning its impact on our lives.

What is it about the computer that makes its impact so much greater than that of many other technological developments? Let us take a brief look at some of the innovations of man, starting with the wheel. The wheel increased man's mobility and, by so doing, increased his contact with his fellow men. It enabled him to carry heavier loads and, over the long term, certainly did revolutionize society. This invention altered the physical realities of man's environment; it revolutionized man's ability to cope physically with his problems. The same can be said of more modern inventions such as the steam engine, the automobile, and the airplane.

Man's brain enabled him to extend the effect of his brawn. His brain also enabled him to extend the influence of his mind. This channel of man's creativity starts with the beginning of writing. Writing represents an extension of man's mind. The printing press greatly enhances the ability of man to communicate. The telegraph, the telephone, the radio, and television are further refinements of man's ability to communicate what is on his mind. These inventions revolutionized man's ability to cope mentally with his problems. Yet each of these inventions amounted to an extension or a continuation of man's intellectual influence on his physical power.

The function of the computer is different. The computer seems willing to invade the tasks traditionally reserved for man. While it may be an oversimplification to say that men have served in the role of information processors, it is true that we gather information, evaluate it, make decisions, and take action. So rapidly has our technology expanded the amount of knowledge available that this problem of information management has become a critical challenge which must be met if we are to ensure continued progress. In medicine, as in other fields, the problem of progress centers around information: how to gather it, how to store it, how to retrieve it, how to understand it, and how to act on it. The possession of the computer, with its potential for the extension of human knowledge, changes the context within which we work.

The computer is capable of performing a wide variety of tasks, from the most simple to the very complex. It can perform these functions tirelessly, rapidly, and accurately. More important, perhaps, its ability to handle a vast amount of data and analyze it in a fashion similar to that of the human mind gives it great potential and usefulness as a cybernetic device. Therein lies its great power: the ability to analyze, integrate, and control.

It has been suggested that the computer is an extension of man's mind. Probably it is more nearly correct to say that the computer serves as a tool for the extension of man's *will*. Some of the problems that have developed around the use of the computer may be traced to this source. I certainly am ready to view the contribution of the computer positively if it is *my* will that is being extended; if it is the will of an adversary, I might not see the computer in such a favorable light. At any rate, the computer will be no more effective than the men who guide it and, eventually, no less effective. Thus it leaves us with a hope of applying on a broad scope the best that men have to offer, both in medicine and in other fields.

Major uses of the computer in medicine have included the handling of medical data, information retrieval, and the maintenance of medical records. Probably the two most exciting uses—at least to my mind—are in the areas of process control and com-

puter-aided instruction in medical education.

Let us look first at the computer's handling of medical data. It was in this area of scientific statistical analysis that the computer met its earliest successes. The reasons are clear. In the experimental laboratory, data are accumulated at such a rate as to be, if not stultifying, at least a significant deterrent to prompt analysis. We will never know how many answers to critical questions lie hidden in masses of data which could not be analyzed economically. Application of the computer is making it possible to analyze such data more promptly and accurately.[1-8]

In the clinical laboratory, similar problems exist. While a detailed and careful clinical evaluation will, for a long time, require the services of expert technicians and creative minds, blood chemistry values, automated photomicrography, enzyme kinetic data, gas composition, and measurements of blood flow, heart rate, cardiac output, and respiratory air flow are being successfully analyzed by computers.[9-16] Computers are also being used effectively in the analysis of electrocardiograms. This does not mean, of course, that the only analysis is made by the computer. Computers are used as screening devices to identify electrocardiograms which need further study by the trained cardiologist. [17, 18]

In pharmacology, we see an example of the computer's versatility and its application at different levels. At the clinical level, the computer makes possible the maintenance of accurate, up-to-date, and detailed drug inventories and automates the process of drug reorder. At another level, the computer makes it possible to record and analyze responses to drugs, facilitates the evaluation of new drugs, assures prompt recognition of any toxic characteristics, and analyzes the effects of various dosages on patients of different ages and physical characteristics. [19, 20]

As an information retrieval device, the computer is faithful in clinical diagnosis, in literature searches, and in making effective use of clinical records in all areas of medicine. Diagnosis has been defined as "the art of envisioning many possibilities and discarding all but the most probable." Although the thought processes of the expert diagnosticians are complex and intricate, they are, in their best form, systematic and thoroughgoing. Because of its enormous memory and almost instantaneous matching capabilities, the computer has significant potential as a diagnostic *aid*.[21]

The best-known example of the information retrieval technology is found in the operation of MEDLARS, where vast amounts of medical information are stored and retrieved in a large-scale computer-access library. The limitations which have become evident in MEDLARS are a function of the coding system operation and not limitations of the computer capability itself. Other literature-searching systems in use include the Current Awareness Program in Metallurgy at Western Reserve University, the Ophthalmology Literature System operated by Reineeke at Harvard Medical School, and the Literature Analysis Program of the American Rheumatism Association.[21-27]

Various medical records applications, too numerous to mention, also illustrate the computer's usefulness as a retriever of information.

One of the most promising medical applications of the computer is in the area of process control. It is possible for computers to monitor continuously various aspects of a patient's condition, and to modify medication or other aspects of therapy in a preordained fashion on a continuous basis. This amounts to round-the-clock, ongoing treatment by the computer. The potential of such treatment is obvious to all of us. There are at least two major obstacles standing in the way of widespread usage of computers for process control in medicine. First, it is extremely expensive; and, second, the problems of effective programming are highly significant.

The use of computers in instruction has been heralded for the past ten years as an innovation that would revolutionize American education. The same problems—those of high cost and difficult programming—have kept this prediction from becoming a reality. It seems apparent, however, that computer-aided instruction, which has the flexibility to allow students to learn a variety of subjects on a schedule suited to their learning ability, has a definite place in medical education. The University of Illinois, Harvard, Western Reserve and San Francisco medical schools have ongoing projects which involve the teaching of medical students through the modality of computer-aided instruction.[28]

Hardware which will make computer-aided instruction economically feasible is expected to be available within the next decade. It may take a little longer to develop quality instruction materials suited to this modality on a scale that will make it significant in the overall picture of medical education. Meanwhile, the kind of rigor that is necessary in developing computer-aided instruction materials is forcing many of us to look at the medical curriculum with a new intensity.

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The UNC Health Services Research Center*

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Universities serve the public in new and important ways. Many of these ways are not as new to medical schools as they are to the remainder of the university. For many years a first principle of medical education has been to involve students as participants in the delivery of health care. If young physicians are well prepared to serve the public's medical needs, then their experiences as students must be consonant with those needs. This principle has guided the efforts of medical educators for decades. It is an important determinant for a new endeavor at the University of North Carolina.

The University's new Health Services Research Center owes its life to at least three convictions and to the efforts of a great many people. The convictions are these:

(1) Personal health in this country is not as sound as we believe possible, and health services are not adequate to meet the public need. We face the difficult paradox of mounting public—and possibly professional—dissatisfaction in the face of improving professional competence, better hospital facilities, and more reliable diagnostic and therapeutic procedures.

(2) Although many proposals are made to improve health and health services, we do not in fact know what corrective measures will be effective or at what cost. These proposals are researchable. The greatest potential for productive research of this kind resides in universities working in partnership with practitioners and public and private agencies that are concerned with health care.

(3) Great opportunity for improved health lies outside the efforts of traditional medical sciences, important as these are. Improved housing, improved education, improved recreation, improved nutrition may all be necessary for improved health and may in fact offer greater opportunity for substantial benefits than isolated expansion of curative medical services.

Nearly everyone accepts these premises or some modification of them, sometimes with intense feeling. The arguments and data are impressive. Most people are familiar with our sad record of high infant mortality. About 16 countries (many of them we like to believe are less well developed than ours in some ways) have better records of infant survival. Life expectancy in 25 or 30 other countries, including Puerto Rico and Albania, is longer for most age groups than in this country.

There is, of course, no reason why we should be first or best except that our potential for improving the quality of life is so far unrealized. We cannot be proud that small children in a large city, when shown a teddy bear and asked "What is it?", respond nearly half the time that it is a *rat*. These same children have never seen a dentist; and most of them are anemic from diets poor in iron. We have tended to explain all of these sorry medical data with evidence that they are due to poverty, racial discrimination, and associated poor diet, poor schooling and poor housing. These are major contributors but they are not the sole answer. The same unfavorable mortality statistics and survival data pertain to white as well as to black Americans and to people of all socio-economic levels.

These considerations were some of the concerns leading to the establishment of the Health Services Research Center, but there were others. Cost of medical care was one of them. Payments for health services are a growing anguish to individuals as well as to government agencies. The anguish is particularly acute when it becomes difficult to document that improved quality is necessarily associated with increased cost. We have had a tendency to pay increasingly for poorer services. And even when money is available for the purchase of high-quality services they are apt not to be completely accessible in a manner

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that is protective of individual convenience and dignity.

What are the proposed solutions to these problems? We may need more professional workers, or more practitioners of a certain kind, or we may need a different distribution of doctors. We may need supportive personnel. In some other countries, a large staff of paramedical associates makes it possible for as few as four physicians to provide seemingly adequate service to as many as 30,000 people. We may need more group practices, more regional medical centers, more prepayment plans for health services, or an expanded insurance program. The air is full of speculation about what we need, but there is very little experimentation or bold innovation in patterns of health services that might give substance to these speculations.

If one studies the documents written nearly 20 years ago in association with the establishment of the Division of Health Affairs in this University, one is impressed with the fresh sound of the ideas and their pertinence to the problems of today. The University's programs in the health sciences were expected to have a dramatically beneficial effect on the quality and availability of health services to all people in North Carolina. The fact that so many of the problems are still with us, some of them in accentuated form, is testimony to their pernicious nature rather than to the lack of effort or desire on the part of the University to cope with them. The problems were far bigger than imagined, and the resources needed to solve them were far greater than what was provided.

Renewed effort began in the School of Medicine several years ago with the establishment of the Division of Education and Research in Community Medical Care. This division, sponsored enthusiastically by Dean Taylor and headed by Dean Berryhill, has helped mobilize the Medical School's interests and resources to emphasize attention to problems of community medical care. This effort was one of the early steps toward establishing our new Health Services Research Center. Another was the creation of a joint committee of the Medical School and the School of Public Health to study ways for improving patient care.

Further advance was made in the Spring of 1967 when a faculty committee was established to study and propose a center or institute for research and demonstration of improved ways to provide health services. This faculty committee was drawn from many schools of the University including Business Administration, Arts and Sciences, Social Work, and the Institute of Government. Over a period of time the committee expanded its membership to include nearly 20 people on a regular basis. Dr. Frank Williams of the School of Medicine and Dr. John Cassel of the School of Public Health provided capable leadership for this complicated endeavor. A series of faculty conferences was held, involving first a number of representatives from the five health schools, and later, members drawn more widely from across the University. From these discussions the proposal to establish a Center was finally developed. This proposal came to maturity at a time when a new federal agency for research on health services was created. The agency had been given $30 million and a mandate to establish an intramural research program, and a number of extramural national research centers. Our proposal for support was among the first submitted to this agency. It competed with about 20 proposals from other universities and research centers. It was one of the first three granted and funded. Acceptance of the proposal is a tribute to the resources of the University in health services research, to the efforts of a great many people who worked conscientiously over a long period of time to bring the concept to fruition, and to an atmosphere in the University which fosters problem-focused, multidisciplinary research efforts of participants from many departments and schools.

Chief administrative officer for the Center will be Dr. Cecil Sheps. Dr. Sheps was previously a member of the University of North Carolina faculty; he subsequently had a distinguished career in the Schools of Public Health at Harvard, Pittsburgh, and more recently at the new Mount Sinai Medical School in New York. As Director of the Center he will report to the Chancellor's office through the Vice Chancellor for Health Sciences. He will be assisted by an administrative board consisting of faculty members drawn from various divisions and schools of the University. The Board will advise the Director on the administration and implementation of the Center's research and training programs.

Two additional supportive and consultative groups will be attached to the Center. The first will be a panel of advisers, both professional and lay, representing communities participating in the Center's demonstrations. The second will be a national panel composed of 6 to 12 recognized leaders of research in health services; it will meet at least once a year to counsel and advise on the Center's activities.

Four interrelated research units will be established within the Center, each functioning under an associate director.

(A) *An Experimental Practices Unit* will devise model practices to test possible solutions to problems of delivering personal health care in community settings. We anticipate that six such models will be conducted in communities scattered across North Carolina, representing widely the state's populations and needs. These communities will be selected with great care to guarantee the willing participation and support of the affected people, agencies and practitioners.

Experimental variables now being considered for demonstration practices include: (1) definition of the role and functions of the various health professions, (2) organizational characteristics of health teams, including relationships between public and private pur-

veyors of services, (3) methods of financing, (4) definitions of extended responsibility, (5) accessibility to the public on terms acceptable to it, (6) methods of measuring effectiveness of services.

(B) *A Monitoring and Surveillance Activity Unit* will gather data, both cross sectional and continuing, from the study communities to facilitate (1) the sharpening or redefining of research questions, and (2) the assessment of experimental changes.

(C) *A Community Studies Unit* will analyze and interpret interactions between personal health services and other characteristics of the study community. This will provide a conceptual framework in which the success or failure of attempted innovations may be understood.

(D) *An Economic, Financial, and Legal Unit* will define economic and financial limitations imposed upon innovations in personal health services by existing community structures. This unit will monitor the cost of experimental practices and propose new financial and legal approaches to providing more adequate health care.

These four units will relate closely one to another. Reciprocal feedback systems will be established so that analysis of data will modify procedures in a continuing fashion.

In order to implement this ambitious undertaking, we requested $9 million to be spent over the next five years. The first 12 to 18 months of the grant period was to be the planning and developmental stage. The money was to provide support for a core staff of about 30 people and the operational funds for the entire period.

We were not granted the full amount. Instead, we received nearly $3 million, sufficient to underwrite the planning stage and to guarantee support of the core staff for the full five years. We were charged to submit additional requests for operational funds at the end of the first and second years.

The Center has defined programs which we believe will attract the participation of a great many faculty members, community and professional leaders. We believe the programs will serve multiple interests; we believe, for example, that they will serve as important educational laboratories for students involved in the study of health care. The Health Services Research Center will also provide a mechanism through which additional funds for support of research projects of many faculty members and professional leaders may be requested. Neither the projects nor the investigators need to have been previously included in the planning or definition of the Center.

Implementation of this ambitious undertaking has been largely suspended in recent months pending the arrival of Dr. Sheps. In the meantime he has conferred with many of our faculty and has recruited several candidates for positions with the Center and with various interested schools and departments.

The intervening months have not been entirely idle. A second major project has been spawned from the establishment of the Health Services Research Center. Last June, when we were certain that money was in hand to begin planning, I became convinced that an effort of this sort should have a substantial element of concern for the consumer. My admiration for the purveyors of health services is considerable, but it seemed to me that we should be as concerned with the problems of *receiving* health care as with the problems of *delivering* it. While numerous reports on medical care problems in the United States have appeared in recent years, none has really focused on the problem confronting the patient. Studies have dealt with health care facilities, health manpower, utilization of services, costs, method of payment, and the delivery system. All of these aspects of health care have been examined to a greater or lesser degree by the increasing body of experts on health care research. Yet despite the individual consumer's large stake in the improvement of the health care system, there are few opportunities for him to make his needs felt and his interests understood. We therefore incorporated a study concentrating on the experiences and viewpoints of patients and potential consumers in the planning of our Health Services Research Center. Dr. Lester Breslow, director of a sister center simultaneously established at the University of California at Los Angeles, was contacted and became an enthusiastic participant in a plan for measuring consumer satisfactions and dissatisfactions with health care, and consumer expectations for its improvement. Applications for support of the study were submitted to five foundations. We have received word from three of them and it is our expectation that within the next week or two announcement will be made of a major study, extending over the next 18 months, emanating from this University and from the University of California at Los Angeles. The aim of the study is to examine health services in the United States from the standpoint of the patient's problems in obtaining adequate care. The study will include such aspects of the problem as bewilderment about what constitutes good care, when and where to obtain it, how to pay for it. Continuing limitation of large segments of the population to only the most meager care will receive particular attention.

In closing I wish to emphasize that the Health Services Research Center is a collaborative project, not confined to a particular school or division of the University. A strong case can be made that every area of learning has pertinence to health. It is our hope that the Health Services Research Center will give support and encouragement to many investigators with latent interests in this field, as well as to many others who are now actively and productively engaged in it. Many of the country's leaders in health services research now work at this university, or have done so at some time in the past. It is our intention to build on this strength and to give new emphasis and new support to this important aspect of the University's accomplishments and future development.

The Challenge of Personal Professional Development*

by Chester M. Sinnett
Contributing Editor of Research/Development

As each month rolls around I find myself with many different things that could be discussed, but I'm never quite sure which one would be of interest to those of you who read this column regularly. My aim is to bring up some points that may cause you to pause and think for a moment. Perhaps you do not agree with me. If this is the case, I should like very much to hear from you. A few of you have questioned some of the things I have said; this is fine, since it brings out points from which we both learn something.

It seems to me that this month particularly, before the start of a new year, we should be taking stock of ourselves. We should decide whether we are actually doing as well as we could.

Professional development can mean different things to different people. To me it means that a man, or woman, must have ideals and goals by which he (she) lives. These goals do not have to be far out ones, but rather just the garden variety—providing they take the other fellow into consideration.

One cannot live for himself alone. Regardless of how we look at it, we are not alone as we work each day. Some of us rubs off on each person we meet, just as some of him rubs off on us. We cannot get through a day without being influenced by or influencing other people. For this reason, if for no other, we should take careful stock of our actions toward those we supervise, those we work with, and those we work for.

It may be trite to ask, but how often have you tried to see what a smile or a kind word will do for others? Why should we sometimes think that the world is against us, when really our feelings have little to do with the world as such but rather with ourselves as individuals. Take a good look at yourself first; see if you did not contribute a great deal to the particularly bad day you had. Sometimes it is possible to locate the exact spot where things went awry and to understand why they did.

Maybe for a few minutes we should get down to earth and think through just what we are trying to get out of life. Are we trying to "win friends and influence people" or do we feel so right in our actions that we think people should search us out? When the other fellow is feeling lousy and tends to blame everything but himself for his actions we can help very much by showing a little sympathy and understanding. It seems to me that we have forgotten the simple things in life. We demand so much from everyone and everything. We do not want to take the time to think about things; we rush to and fro with no time to be considerate of others.

How can one consider himself a professional unless he acts like one? He may be a technical expert, he may be considered one of the best in his line, but is he truly professional if he does not win the respect of his fellow men? Who is to judge one's professional standing—his peers, his friends, his family or those whom he meets from day to day? I have seen, and surely you have also, people who just radiate professionalism. Their carriage, their speech, their actions toward others, their dress, and their self-confidence all fit together to make the whole person something different than average. It is a real pleasure to meet and know such a person. He inspires one to try harder to become professional.

Think back over the people you have known. How many can you really call professional? Probably very few. But wait a minute, are you sure that you really meet those same requirements? It is so easy to look for things in others and to mark them down for something we do not consider professional, but are we ready to mark ourselves down for the same thing?

I firmly believe that professionalism begins at home and that one must do some real soul searching to determine just what ideals and goals he must have to meet the criteria of a professional. Professionalism is not something anyone else is going to give to you —you must earn it, and you cannot do this until you know exactly where you stand with yourself. 1969 is a brand new year made up of months, weeks, days, and hours. How well you spend them and the progress you make is entirely up to you and your attitude. How about setting those goals for yourself a little bit higher just to see what happens. You just might be surprised.

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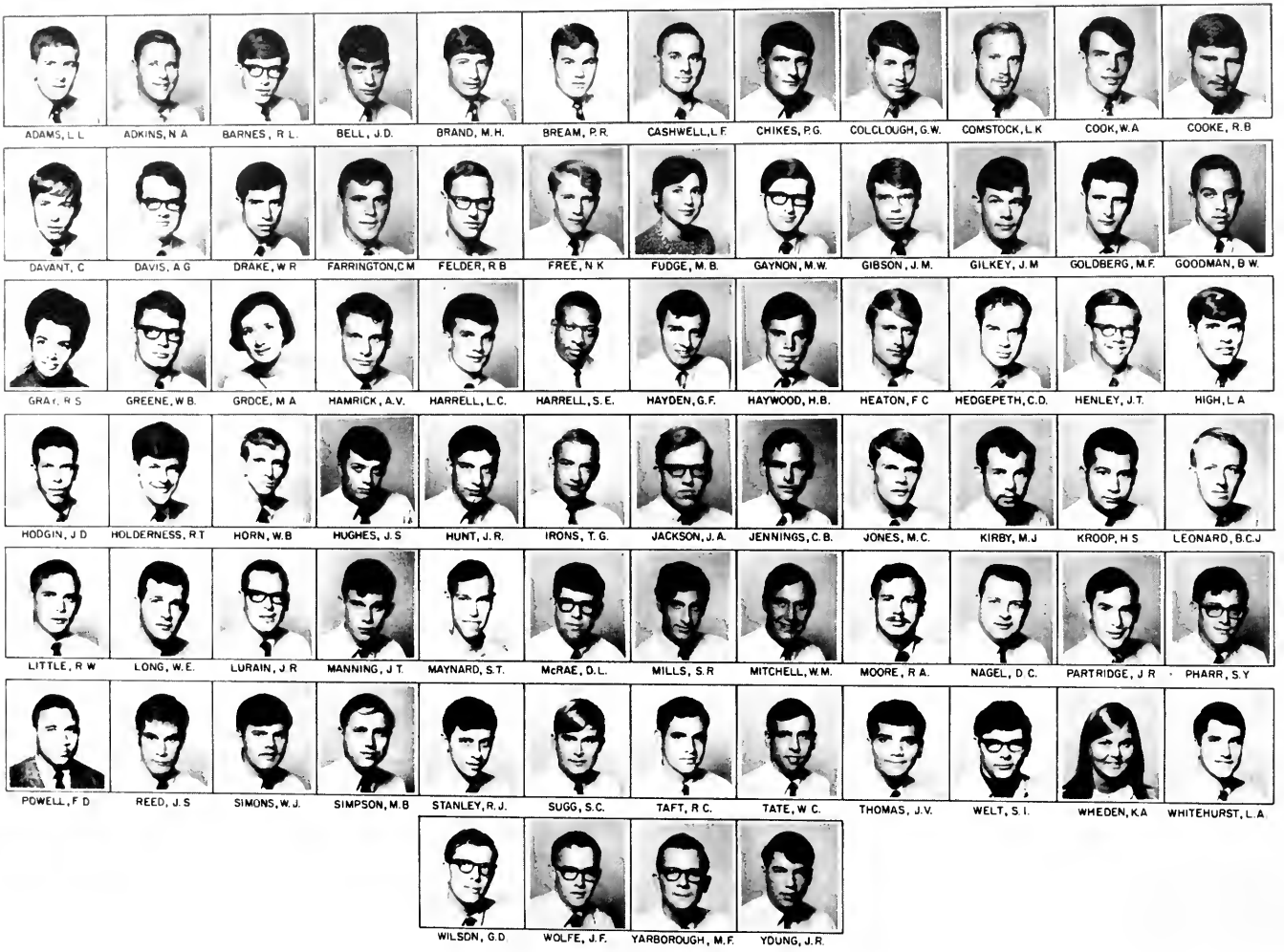
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ADKINS, N A
BARNES, R L.
BELL, J.D.
BRAND, M.H.
BREAM, P.R.
CASHWELL, L.F.
CHIKES, P.G.
COLCLOUGH, G.W.
COMSTOCK, L.K
COOK, W.A
COOKE, R.B
DAVANT, C
DAVIS, A.G
DRAKE, W.R
FARRINGTON, C.M
FELDER, R.B
FREE, N.K
FUDGE, M.B.
GAYNON, M.W.
GIBSON, J.M.
GILKEY, J.M
GOLDBERG, M.F.
GOODMAN, B.W.
GRAY, R.S
GREENE, W.B.
GROCE, M.A
HAMRICK, A.V.
HARRELL, L.C.
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HAYDEN, G.F.
HAYWOOD, H.B.
HEATON, F.C
HEDGEPETH, C.D.
HENLEY, J.T.
HIGH, L.A
HODGIN, J.D
HOLDERNESS, R.T
HORN, W.B
HUGHES, J.S
HUNT, J.R.
IRONS, T.G.
JACKSON, J.A.
JENNINGS, C.B.
JONES, M.C.
KIRBY, M.J
KROOP, H.S
LEONARD, B.C.J
LITTLE, R.W
LONG, W.E.
LURAIN, J.R
MANNING, J.T.
MAYNARD, S.T.
McRAE, D.L.
MILLS, S.R
MITCHELL, W.M.
MOORE, R.A.
NAGEL, D.C.
PARTRIDGE, J.R
PHARR, S.Y
POWELL, F.D
REED, J.S
SIMONS, W.J.
SIMPSON, M.B
STANLEY, R.J.
SUGG, S.C.
TAFT, R.C.
TATE, W.C.
THOMAS, J.V.
WELT, S.I.
WHEDEN, K.A
WHITEHURST, L.A.
WILSON, G.D
WOLFE, J.F.
YARBOROUGH, M.F.
YOUNG, J.R.

MEDICAL CLASS OF 1972

Name and College	Hometown
Adams, Larry Lee (UNC)	Fuquay-Varina, N. C.
Adkins, Jr., Neal Ashley (N. C. State)	Rocky Mount, N. C.
Barnes III, Robert Luther (UNC)	Simms, N. C.
Bell, John Davis (Tulane)	Tuxedo, N. C.
Brand, Myron Howard (SUNY)	Brooklyn, N. Y.
Bream, Peter Reynolds (Bucknell)	Chapel Hill, N. C.
Cashwell, Jr., Leon Franklin (Duke)	Raleigh, N. C.
Chikes, Peter George (Duke)	Washington, D. C.
Colclough, George Watts (Elon)	Elon College, N. C.
Comstock, Lloyd Karr (Oberlin)	Smithburg, Md.
Cook, William Andrew (UNC)	Badin, N. C.
Cooke, Randolph Boyd (UNC)	Wilkesboro, N. C.
Davant III, Charles (Duke)	Blowing Rock, N. C.
Davis, Archie Graham (Davidson)	Hickory, N. C.
Drake, Jr., Wilton Rodwell (Duke)	Macon, N. C.
Farrington, Jr., Cecil M., (N. C. State)	Granite Quarry, N. C.
Felder, Robert Brabham (UNC)	Clemson, S. C.
Free, Noel Karl (UNC)	Alexandria, Va.
Fudge, Mary Beth (Duke)	Hillsborough, N. C.
Gaynon, Michael (Kenyon)	Milwaukee, Wisc.
Gibson, John McNeil (Duke)	Laurinburg, N. C.
Gilkey, Jr., John Millard (UNC)	Marion, N. C.
Goldberg, Marshall Franklin (Maryland U.)	Baltimore, Md.
Goodman, Jr., Benjamin W. (Davidson)	Hickory, N. C.
Gray, Roberta Skinner (UNC)	Chapel Hill, N. C.
Greene, Walter Blair (Davidson)	Fayetteville, N. C.
Groce, Mary Ann (Duke)	Winston-Salem, N. C.
Hamrick III, Alger V. (UNC)	Shelby, N. C.
Harrell III, Lonnie C. (UNC)	Saratoga, N. C.
Harrell, Sampson Emanuel (N. C. College)	Ahoskie, N. C.
Hayden, Gregory Francis (Yale)	New Rochelle, N. C.
Haywood, III, Hubert Benbury (UNC)	Raleigh, N. C.
Heaton, Frederick C. (UNC)	Raleigh, N. C.
Hedgepeth, Charles Dwight (UNC)	Fayetteville, N. C.
Henley, Jr., John T. (UNC)	Hope Mills, N. C.
High, Jr., Larry A. (Davidson)	Nashville, N. C.
Hodgin, Jon Darryl (UNC)	Miami, Florida
Holderness, Richard T. (UNC)	Greensboro, N. C.
Horn, William Baker (UNC)	Chapel Hill, N. C.
Hughes, John Schley (UNC)	Durham, N. C.
Hunt, Jack Ronald (Davidson)	Boone, N. C.
Irons, Thomas Grant (Davidson)	Greenville, N. C.
Jackson, Joseph A. (UNC)	Pilot Mountain, N. C.
Jennings, Jr., Carter Brooke (Princeton)	Wilmington, N. C.
Jones, Michael Charles (UNC)	East Flat Rock, N. C.
Kirby, Michael James (Antioch)	Rochester, N. Y.
Kroop, Howard Samuel (Yale)	Perth Amboy, N. J.
Leonard, Baxter C. J. (UNC)	Bryson City, N. C.
Little, Robert Winfield (UNC)	Gibsonville, N. C.
Long, William Everett (UNC)	Newton, N. C.
Lurain III, John Robert (Oberlin)	Hampshire, Ill.
Manning, Jr., John Thomas (UNC)	Greensboro, N. C.
Maynard, Jr., Stuart Tyrus (Guilford)	Greensboro, N. C.
McRae, Jr., Duncan Langston (Davidson)	Sanford, N. C.
Mills, Steven Robert (UNC)	Asheville, N. C.
Mitchell, Jr., William M. (UNC)	Greensboro, N. C.
Moore, Ronald Alvin (UNC)	Virginia Beach, Va.
Nagel, Donald Charles (Northwestern)	Ft. Thomas, Ky.
Partridge, John Robert (Yale)	Alexandria, Va.
Pharr, Scott (UNC)	Plymouth, N. C.
Reed, Jr., James Stewart (Duke)	Lansdowne, Pa.
Simons, William John (Duke)	Wilson, N. C.
Simpson, Jr., Marcus B. (Davidson)	Statesville, N. C.
Stanley, Ronald Jay (Duke)	Kernersville, N. C.
Sugg, Jr., Samuel Clarkson (Davidson)	Kinston, N. C.
Taft, Richard Chesson (Duke)	Greenville, N. C.
Tate, William Cummings (UNC)	Banner Elk, N. C.
Thomas, John Vikram (N. C. State)	Charlotte, N. C.
Welt, Selman Irvin (William and Mary)	Arlington, Va.
Whedon, Karen Anne (Rochester U.)	Bethesda, Md.
Whitehurst, Lee Albert (UNC)	Greenville, N. C.
Wilson, Jr., George Dean (UNC)	Fayetteville, N. C.
Wolfe, John Frederick (Duke)	Winston-Salem, N. C.
Yarborough, Michael F. (Davidson)	Wilmington, N. C.
Young, James Richard (UNC)	Raleigh, N. C.

NEWS FROM THE HILL

DR. H. STANLEY BENNETT, currently Director of the Laboratories for Cell Biology of the University of Chicago will join the faculty as chairman of the Department of Anatomy and Director of a new program in Reproductive Biology on June 1, 1969. He will succeed Dr. Charles W. Hooker as chairman of the Anatomy Department. Dr. Hooker is retiring from this position after 20 years of service. The Reproductive Biology program is being made possible by a generous grant from the Rockefeller Foundation.

Dr. Bennett brings to Chapel Hill long and distinguished experience in the fields of anatomy and cell biology. Born in Japan, he received his A.B. degree from Oberlin College and M.D. from Harvard Medical School. Prior to military service during World War II he instructed at Harvard Medical School and subsequently taught at Massachusetts Institute of Technology. He then became Professor and Head of the Department of Anatomy at the University of Washington in Seattle. In 1961 he moved to the University of Chicago where he served as Acting Chairman of the Department of Anatomy, Professor of Biophysics and Dean of the Division of Biological Sciences, including the School of Medicine. Since 1966 Dr. Bennett has been Robert R. Bensley Professor of Biological and Medical Sciences and Director of the Laboratory for Cell Biology at Chicago. He is a member of numerous scientific societies and national committees. An active investigator throughout his career, Dr. Bennett has been one of the outstanding contributors to the rapid advance that has been made in cell biology during the last two decades and is the author of about 75 publications in the scientific literature. This background makes him specially qualified to direct the new program in reproductive biology that will incorporate a broad attack on the problems of human fertility and population control. These basic investigations will compliment the current population program on the UNC campus and will help make Chapel Hill one of the world's foremost centers for population studies.

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DR. LARS ERIK BOTTIGER from the Karolinska Institute in Stockholm, Sweden, visited the university last September. On the 24th of that month he lectured at the Clinic Auditorium on "Fevers of Unknown Origin."

* * *

DR. H. NEIL KIRKMAN (Pediatrics) spoke on "Variants of Human Glucose-6-phosphate Dehydrogenase" at the national meeting of the American Chemical Society held at Atlantic City last fall.

Following national competition, MR. HOWARD M. JERNIGAN (Biochemistry) won a research fellowship award from the National Institute of General Medical Sciences. His principal research area is the binding of histone fractions to various DNA types.

* * *

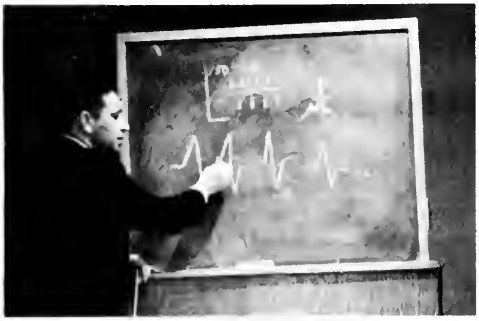
DR. JAMES A. BRYAN (Medicine) was selected by the members of the Whitehead Medical Society to deliver the 1968 "Whitehead Lecture." Here he is congratulated by President Ellis Fischer after he delivered his address, "A Dibble for Medical Education," which will be published in the next issue of the **Bulletin.**

* * *

DR. G. P. MANIRE (Bacteriology) is shown above with members of the staff of the Biophysics Department, Institute for Virus Research, Kyoto University, Japan, where he spent one week last September. Dr. Manire was Visiting Professor at the Institute during 1963-64, and is continuing collaborative studies with some members of this group. Dr. Akira Tamura, shown at top right, recently returned to Japan following a two year stay in Chapel Hill, where he was Assistant Professor of Bacteriology. Dr. Tamura was co-author of a paper given by Dr. Manire in Teheran, Iran, at a special session on trachoma at the International Congress for Tropical Medicine just preceding his September visit to Japan.

As part of the medical school's program of continuing education for practicing physicians, six-week postgraduate courses were held last fall in Asheville and in Morganton. Under the sponsorship of the school and the Burke and Buncombe County Medical Societies, afternoon and evening meetings were held every Tuesday in Asheville from September 17 through October 29, and every Wednesday in Morganton from September 18 through October 30. Among the topics considered were cystic fibrosis, the use of antibiotics, cardiac arrythmias, and the management of depression and anxiety.

The first speaker in both cities was Dr. Calvin M. Kunin, chairman of the Department of Preventive Medicine at the University of Virginia, who discussed the use of antibiotics and the prevention and management of urinary infections.



DR. EDWARDS J. BATTERSBY (Vanderbilt University) and participants at Asheville post-graduate course.

Participants at the Morganton post-graduate course.

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A lecture on "Some Problems in Percutaneous Adsorption" was given by DR. RICHARD B. STOUGHTON, Head of the Division of Dermatology at Scripps Clinic and Research Foundation (October 2).

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DR. HUBERT C. PATTERSON (Surgery) assumed the office of president of the N. C. Surgical Association at the group's meeting in Southern Pines last fall.

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DR. JOHN A. EWING (Psychiatry) addressed the 28th International Congress on Alcohol and Alcoholism held in Washington, D. C. last fall.

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The Sigma Xi fall lectures were delivered by Dr. J. Logan Irvin (Biochemistry) and Dr. K. M. Brinkhous (Pathology). Dr. Irvin spoke at the School of Pharmacy auditorium on "Functions of Histones." Dr. Brinkhous addressed the society at the School of Public Health auditorium on "Trends in Hemophilia Research."

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On October 16, 1968, DR. OVE LUNDGREN, a physiologist from the University of Goteborg, Sweden, spoke at the school on "Regional Adjustments of Intestinal Blood Flow."

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A "Conference on Community Health" brought to Chapel Hill representatives from Student Health Organizations at medical schools in the southeast, Temple and Indiana. The Conference, held on October 25-27, 1968, was sponsored by DR. ROBERT HUNTLEY (Preventive Medicine and Sch. Public Health) through the Melbank Foundation and SAMA's southeast division, and organized by MR. JAMES S. HENNING ('71), president of the SAMA section.

(l-r) DR. C. GLENN PICKARD, JR. (Medicine), DR. ROBERT DeMARIA (Duke University), DR. JOHN C. CASSEL (Sch. Public Health), DR. ROBERT SMITH (Preventive Medicine), MR. JOHN V. ALLCOTT, III ('71), and MR. JAMES S. HENNING ('71).

MR. JOHN CALLEJA, from Tulane University School of Medicine and a member of the Student Health Organization of New Orleans, addresses the participants.

Occupational and physical therapists, physicians and nurses from United States, Puerto Rico, Canada and Finland were among the 50 participants in a five-day course in hand rehabilitation held in September at the Hand Rehabilitation Center.* The course, in its second consecutive year at the University, is the first of its kind in the United States.

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Last fall, DR. WILLIAM P. WEBSTER (Sch. Dentistry and Pathology), was appointed director of the new NCMH Dental Program. Dr. Webster is to develop and organize a program that will provide dental consultative services and treatment to patients in the hospital and in the new ambulatory wing.

The Hospital Dental Service will be staffed by members of the School of Dentistry and specialty training programs. Dental students will gain experience in providing specialized care for hospitalized patients and working in a hospital environment. Medical and dental students will have increasing opportunities to work together in providing total patient care.

* * *

MR. HAROLD P. COSTON, a native of Winston-Salem, was appointed Acting Director of North Carolina Memorial Hospital following the resignation of MR. WILLIAM L. IVEY last November.

Mr. Coston, a graduate of Wake Forest University and a fellow of the American College of Hospital Administrators, received the degree of master of public health (hospital administration) from the School of Hygiene and Public Health of Johns Hopkins University in 1952. Prior to coming to Chapel Hill in 1966 to join the Department of Hospital Administration, he had served as administrator of hospitals in Baltimore and Cambridge, Maryland, and in Hannibal, Missouri. He also taught in the School of Hospital Administration at Washington University, St. Louis, Missouri.

Mr. Ivey, who had served as director of Memorial Hospital for two years, relinquished that position in order to assume duties in the Department of Hospital Administration of the School of Medicine.

* * *

The Department of Psychiatry sponsored a program for practicing psychiatrists and non-psychiatrist physicians on November 7-9, 1968. The program "The Troubled Adolescent,"—devoted to discussion of the problems of adolescence, included a series of presentations designed to give an over-view of the current generation of teenagers and to provide insight into key problem areas. Dr. John E. Ewing (Psychiatry) presided at the opening session. The various lectures delivered were: "Maturation, Conformity, and Rebellion," DR. L. JOLYON WEST, Professor and Head, Dept. Psychiatry, Neurology and Behavioral Sciences, University of Oklahoma; "Pharmacologic, Idiopathic, and Social Reactions to Drug Use," DR. MARTIN KEELER (Psychiatry); "Communicating with the Adolescent—Interview Techniques," DR. ROBERT MICHELS, Assistant Professor, College of Physicians and Surgeons, and Associate Attending Physician at Presbyterian Hospital, N. Y. City; "Problems Associated with the Use of Oral Contraceptive Agents," DR. FRANCIS J. KANE, JR. (Psychiatry); "Problems of the Adolescent and Post Adolescent Student," DR. CLIFFORD B. REIFLER (Psychiatry); "Current Development in Psychiatric Treatment," members of the staff of the Dept. of Psychiatry. DR. EWALD BUSSE, Professor and Chairman of the Dept. of Psychiatry, Duke University, summarized the program. DR. EUGENE A. HARGROVE, N. C. Commissioner of Mental Health and DR. RICHARD PROCTOR, Chairman of the Dept. of Psychiatry, Bowman Gray School of Medicine, also participated in the program.

DR. L. JOLYON WEST (Univ. Oklahoma Medical Center)—"Maturation, Conformity, and Rebellion."

* (Described in the September 1968 issue of the *Bulletin*.)

DR. GERALD L. MECHANIC, from New York City, and DR. SVEIN UTHEIM TOVERUD, from Norway, received associate professor joint appointments in the Department of Biochemistry and in the School of Dentistry.

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"Blood Proteins" was the topic of the 1968 Medical Science Lecture Series:

Sept. 21 **Plasma Proteins: Perspectives**
FRANK W. PUTNAM, Ph.D., Professor of Biology and Director Division of Biological Sciences, Indiana University

Sept. 28 **Inherited Variations in Serum Proteins**
ALEXANDER G. BEARN, M.D., Professor and Chairman, Department of Medicine, New York Hospital-Cornell Medical Center

Oct. 5 **Complement**
HANS J. MULLER-EBERHARD, M.D., D.M.Sc., Member, Scripps Clinic and Research Foundation; Professor of Pathology, University of California at San Diego

Oct. 12 **The Kinins**
KENNETH L. MELMON, M.D., Associate Professor of Medicine and Pharmacology, University of California at San Francisco

Oct. 19 **Immunoglobulins**
DR. PUTNAM

Oct. 26 **Plasma Lipoproteins**
DONALD S. FREDRICKSON, M.D., Chief, Molecular Diseases Branch, National Heart Institute, NIH

Nov. 2 **The Fibrinolytic System**
SOL SHERRY, M.D., Professor and Chairman, Department of Medicine, Temple University School of Medicine

Nov. 9 **Transplantation Antigens**
D. BERNARD AMOS, M.D., James B. Duke Professor of Immunology and Experimental Surgery, Duke University

Nov. 16 **Hemoglobin**
D. J. WEATHERALL, M.D., Senior Lecturer in Haematology, University of Liverpool

Nov. 23 **Cationic Leukocytic Lysosomal Proteins**
JOHN K. SPITZNAGEL, M.D., Professor of Bacteriology and Associate Professor of Medicine, UNC

DR. K. M. BRINKHOUS (Pathology) was chairman of the committee in charge of organizing the annual event this year.

DRS. MASON (Pathology) and MULLER-EBERHARD

DR. FREDRICKSON DR. PUTMAN DR. SPITZNAGEL

DRS. PARKER (Medicine) and MELMON

ASSOCIATE DEAN GRAHAM and DR. BEARN

DRS. ROBERTS (Pathology and Medicine) and WEATHERALL

In November, four assistant professors were named to our faculty: DRS. JAMES LAWRENCE HOWARD (Psychiatry) of Geneva, Ill.; WILLIAM A. MORRISON (Surgery) of Cairo, W. Va.; ROLFFS S. PINKERTON (Psychiatry) of Venezuela, and MISS SHIRLEY SANDERS (Psychiatry) of Philadelphia.

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"The Evolutionary Basis of Acid Base Regulation" was the subject of DR. EUGENE ROBIN'S lecture on November 13. Dr. Robin is from the Department of Medicine at the University of Pittsburgh.

* * *

Wagner

Hudson

Coroners and medical examiners from North Carolina met at the Institute of Government on November 8, 1968. It was the first time these specialists had met since North Carolina hired its first full-time state-wide medical examiner, DR. R. PAGE HUDSON (Pathology). MR. JOHN SANDERS, Director of the Institute of Government welcomed the members of the N. C. Coroners and Medical Examiners Association. Dr. Hudson spoke to the group on "Death Associated with Alcohol" and "Implementation of the Medical Examiner System in North Carolina." DR. ROBERT H. WAGNER (Pathology) addressed them on "Some Practical Problems with Toxicology," and MR. DAVID G. WARREN (Inst. Government) spoke on "Legal Problems in Autopsy Cases." DR. ALLAN B. COGGESHALL, president of the Association, presided over the two days meeting.

* * *

A faculty member at the Medical College of South Carolina for nearly 10 years, DR. FRANK CORDLE of Lindale, Ga., has been named a research associate in the Department of Preventive Medicine and in the School of Public Health. He holds degrees from the University of Florida and UNC.

DAVID L. RANEY, (UNC '63) a two-time winner of the Bronze Star in Vietnam, has been appointed Director of Medical Television in the Department of Preventive Medicine. The new position was created in conjunction with the medical school's expansion of its continuing education programs for practicing physicians.

Mr. Raney's duties will include planning and producing open-circuit educational TV material for physicians and laymen. A series of 34 such programs are to originate from WUNC-TV in 1968-69. In addition, Mr. Raney will oversee expanded use of intramural closed-circuit television throughout the school.

Prior to assuming his new position, Mr. Raney was an advertising copywriter with the General Electric Company in Chicago.

* * *

DR. LOUIS S. HARRIS (Pharmacology) participated in a round table discussion on "A New Side of Marihuana" broadcast over Raleigh station WLLE on November 17, 1968. The program was taped in Cambridge, Mass., for the American Chemical Society's educational radio program, "Men and Molecules." Other panel participants were scientists at Cambridge with whom members of our Pharmacology Department have been working on a cooperative project concerning marihuana.

* * *

DR. LOUIS G. WELT (Medicine), chairman of the National Kidney Foundation's Scientific Advisory Board, presided at the Foundation's medical forum held in Washington, D. C. last November as part of NKF annual meetings.

He has also been elected president of the American Society of Nephrology and will take office in November 1969.

DR. CARL W. GOTTSCHALK (Medicine), chairman of the national committee on Chronic Kidney Disease, reported to NKF on the work of his committee.

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DR. RENE JULES DUBOS (**Bulletin**, Mar. 1968), a pioneer in the field of antibacterial research from the Rockefeller University, delivered the 1968 Merrimon Lecture on December 4. Following the lecture, "Civilization and the Man of Flesh and Bone," there was a reception in honor of Dr. Dubos at the faculty lounge of the Morehead Planetarium building.

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"The Management of Digestive Diseases," the 12th Annual UNC School of Medicine Symposium sponsored by the Department on Continuation Education, was held on November 21 and 22. The following programs were offered by faculty members from our school, Bowman Gray, Duke and the University of Vermont: workshops on "Peptic Ulcer," "Biliary Tract Disease," "Diseases of the Small Intestine and Colon," and "Malabsorption"; panel discussions on "Liver Disease" and on recent advances in techniques of diagnosis and treatment; lecture on "Acute Viral Hepatitis and Its Variants" given by Dr. W. ALLAN TISDALE, Chairman of the Department of Medicine of the University of Vermont College of Medicine. Medical grand rounds were also attended.

"Digestive Diseases" sessions. Session leaders (top to bottom): DR. THOMAS O'BRIEN (Bowman Gray); DR. JOHN T. SESSIONS, JR. (Medicine); DR. JAMES F. SCATLIFF (Radiology); DR. CHARLES A. BREAM (Radiology); DR. COLIN G. THOMAS, JR. (Surgery).

At the 1968 Clinical Congress of the American College of Surgeons in Atlantic City, DR. COLIN G. THOMAS, (Surgery) received a citation and plaque for his motion picture, "Total Thyroidectomy and Neck Dissection for Thyroid Cancer," which was premiered at the meeting. The 25-minute color-and-sound film describes the evaluation and surgical treatment of a child with thyroid cancer which had spread to other areas of the neck.

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On December 6, DR. STELLA CHESS, from the Department of Psychiatry and Neurology of the N.Y. University Medical Center spoke on "Temperament and Behavioral Disturbances in Mentally Retarded Children."

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On December 11, DR. JAMES LEONARD, Director of the Division of Cardiology of the University of Pittsburgh, spoke on "The Importance of Left Atrial Systole in Man."

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Under the auspices of the Department on Continuation Education, and for the benefit of practicing physicians throughout the state, a seminar on "Disorders of the Blood Coagulation Mechanism" was conducted at the school on December 12. DRS. GEORGE D. PENICK (Pathology), HAROLD R. ROBERTS (Pathology and Medicine), CAMPBELL W. McMILLAN (Pediatrics), WILLIAM P. WEBSTER (Sch. Dentistry and Pathology), ROBERT D. LANGDELL (Pathology), and JAMES A. BRYAN (Medicine) discussed several aspects of congenital hemorrhagic disorders and diffuse intravascular coagulation.

The special guest speaker was PROF. S. VAN CREVELD, one of Europe's outstanding figures in hemophilia research and Director of the Hemophilia Clinic in Huizen, Netherlands (above). On the same day, Dr. Van Creveld also spoke to both students and faculty on "Glycogen Storage Diseases" by invitation of the Department of Pediatrics (below).

DR. MORRIS LIPTON (Psychiatry) attended the American College of Neuro-psychopharmacology convention (San Juan, P.R., Dec. 17-20) as chairman of ACN's nominating committee.

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DR. ROBERT SMITH (Preventive Medicine) of the Division of Education and Research in Community Medical Care, has been named the school's representative to the board of directors of the Regional Medical Program of North Carolina, a branch of the National Regional Medical Program created by Congress in 1966 to combat heart disease, cancer and stroke. He succeeds Dr. Ernest Craige (Medicine) in this position.

Before coming to UNC in September, Dr. Smith, a native of Dublin, Ireland, was a senior lecturer in medicine at Guy's Hospital in London where he directed research and teaching in general practice. Previously, he had engaged in general practice in several English towns and had served in an advisory and research capacity in the clinical research department of the Wellcome Foundation of England. He is an honors graduate of the University of Dublin, from which he holds six degrees.

* * *

DRS. RICHARD M. PETERS and PETER HUTCHIN (Surgery), participated in the annual meeting of the Society of Thoracic Surgeons held in San Diego, early in February. Dr. Peters's presentation was entitled "The Shock Lung" and Dr. Hutchin's (with Dr. Peters as co-author) "Pulmonary Congestion Following Infusion of Large Fluid Loads to Thoracic Surgical Patients."

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DR. ROBERT L. TIMMONS (Surgery) attended the annual meeting of the Southern Neurosurgical Society, in Dallas, on February 20-22, and presented his findings on "Ultrastructure of Somatotropin-Secreting Pituitary Adenomas."

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SHAC in Action—Charles Thompson ('70) gives routine examination.

THE STUDENT HEALTH ACTION COMMITTEE (**Bulletin**, May 1968) has continued and intensified its programs designed to assist in delivering health care to indigent communities in Chapel Hill and Durham. This group—composed of both medical students and students from the other health sciences, with the active support of faculty members—is one of which we should all be proud. The WHITEHEAD MEDICAL SOCIETY, expressing its belief that social issues can no longer be overlooked in our society, has offered SHAC a token sum of money to indicate its support for the committee's work. The WHITEHEAD COUNCIL unanimously decided to donate $300 to SHAC and encourages other persons to contribute on a voluntary and independent basis to assist SHAC in carrying out its programs. Contributions may be sent to the Student Health Action Committee, North Carolina Memorial Hospital, Box 55.

MR. CLARENCE F. CAUBLE, former administrator of the Medical College of Virginia's A. D. Williams Memorial Clinic, has joined the hospital's administrative staff as Assistant Director in charge of the outpatient services. He brings to NCMH many years of experience in hospital and clinic management, as well as in formal teaching in training programs for hospital administrators and medical record librarians. Mr. Cauble had been at MCV since 1960. Prior to that, he was chief medical record librarian at Kings Mountain Memorial Hospital in Bristol and an administrative supervisor for VA hospitals at Oteen and Swannanoa, N.C. He holds a certificate from the American Association of Medical Record Librarians in Medical Record Science through the Duke University Hospital School for Medical Record Science.

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DRS. NEWTON D. FISCHER and W. PAUL BIGGERS (Surgery) will develop and carry out a program initiated by DR. WILLIAM C. TRIER (Surgery) to train a new type of medical aide—the surgical assistant. The training project is patterned after the program for physicians' assistants being developed at several other medical schools. Emphasis here is on training personnel to assist **surgeons**. It is planned to develop first a nucleus of trained assistants who later can aid in training others. Candidates must have a medical background, such as that acquired by hospital corpsmen in military service.

The first trainee was a former Navy hospital corpswoman who worked with Dr. Trier at Bethesda before he retired from the Navy, MISS SUSIE BARBON.

Dr. Trier will leave UNC this summer to join the faculty of the School of Medicine, University of Arizona.

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DR. HARVEY L. SMITH (Psychiatry), director of the Social Research Section in the Division of Health Affairs and professor of sociology in the University's Department of Sociology, has been promoted to Professor of Medical Sociology and appointed assistant to the Vice Chancellor, Health Sciences, for planning. In the latter role, he is to assist in the development and coordination of planning efforts in the University's various units of health sciences, and in relating these efforts to planning elsewhere within the institution and in the state. Dr. Smith also is currently engaged in planning activities for the N.C. Regional Medical Program (Heart Disease, Stroke and Cancer).

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DR. WILLIAM L. FLEMING (Preventive Medicine) served as a volunteer for two months aboard the hospital ship SS Hope while she was on a medical teaching-treatment mission to Colombo, Ceylon.

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DR. N. ARTHUR COULTER (Surgery and Physiology) has been appointed to the Bioengineering Special Study Section of the National Institutes of Health.

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The L. P. McLendon Scholarship in Medicine has been established at the school. Endowed by MAJOR LENNOX P. McLENDON (N.C. State Col. '10; UNC [Law]

'12, Hon. Doctor of Law degree '55) of Greensboro over a period of years and augmented by memorial funds to him following his death in 1968, the fund will be used to pay for a scholarship for a deserving medical student.

It is stipulated that the student selected should preferably be from one of four N.C. counties: Durham, Guilford, Orange or Anson. Major McLendon lived or practiced law in each of these counties during his long years of service as an attorney. He was a member of UNC Board of Trustees (chairman of the medical affairs committee), president of the Medical Foundation of North Carolina and of the N.C. Board of Higher Education. Major McLendon was WILLIAM W. McLENDON's ('56) father.

* * *

More than 20 mental health officials from the southeastern states, Puerto Rico and the Philippines attended both the second and third "Mental Health Centers Planning and Operations" courses in Chapel Hill. The series of five workshops, a joint project of the Department of Psychiatry's Community Psychiatry Division and the N.C. Department of Mental Health, is financed by the National Institute of Mental Health and will continue to be held every six months. The second course took place on September 16-27, October 21-November 1, 1968, the third one, on February 17-28, March 17-28, 1969.

DRS. J. WILBERT EDGERTON and WILLIAM G. HOLLISTER (Psychiatry) are coordinators of the project, which is designed to assist delegates in operating mental health centers and in training personnel for these facilities.

The workshop-laboratory training on "Processes of Planning and Organizing a Mental Health Center" that is held annually at Pisgah View Ranch in Candler, N.C. will take place this year on June 8-14, 1969.

DR. H. G. WHITTINGTON, Director of the Division of Psychiatry Services, Dept. of Health and Hospitals of the City and County of Denver, addresses mental health officials.

DR. WHITTINGTON and DR. EDGERTON, MRS. VACHER, DR. MILLER and DR. DERR (Community Psychiatry Division).

The Dr. Hunter Sweaney Visiting Professorship in Surgery has been recently endowed by DR. HUNTER SWEANEY ('17) of Durham, and his daughters, Mrs. Mary Sweaney Andersen (UNC '63) and Miss Betty Sweaney (UNC '66) both of Chapel Hill.

In creating the endowment to support the professorship, Dr. Sweaney directed that it alternate between the UNC and Duke schools of medicine, or annually at both should the endowment income permit. The indenture creating the trust also stated that the first visiting professor should be selected by our school and invited to the Chapel Hill campus as early as practicable in 1969. The Duke school of medicine would invite a visiting professor in 1970, or possibly earlier.

In establishing the visiting professorship for both schools, Dr. Sweaney and his daughters expressed the hope that renowned surgeons from all parts of the world may be brought to the two campuses to share their knowledge and experience with students of medicine, particularly those specializing in surgery. The unique arrangement whereby the responsibilities of the endowment are shared by Duke and us will be an important addition to the existing links between the two institutions.

DR. SWEANEY and CHANCELLOR SITTERSON

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DR. MARILYN T. ERICKSON (Psychiatry and Pediatrics) has been appointed consultant to the N.C. Council on Mental Retardation.

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CHAPLAIN FRED W. REID, JR. (NCMH) has been elected a member-at-large to the executive committee of the College of Chaplains of the American Protestant Hospital Association. While attending the Association meeting in New Orleans (January 12-17) he presented a paper entitled, "The Chaplain as Department Head or Administrator." REV. CLAUDE V. DEAL attended the meetings with Chaplain Reid.

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Specialists in internal medicine practicing in North Carolina communities are being selected for "monthly sabbaticals" to be spent at the medical school during the current school year. Each will work for a month in one of the subspecialty sections of the **Department of Medicine**. During this time, he will be teamed with a member of the faculty and will be available to talk with medical students, interns, and residents.

According to Dr. Louis G. Welt, chairman of the Department, this educational program is designed to work in two directions, ". . . the visiting internists will have something to teach us and we will have an opportunity to help them learn more . . ."

The chance for these internists to be away from their practices and to live in a university setting for a month is to be provided by funds from the N.C. Regional Medical Program. If the pilot program this year is successful, future planning may include an exchange in which senior assistant residents at NCMH will take over the practices

of the physicians selected for the monthly sabbaticals while they are at Chapel Hill.

So far, the program has had three visiting internists: DR. VERNON D. OFFUTT, from Kinston; DR. LUTHER W. KELLY, JR., from Charlotte; and DR. JAMES R. COLLETT, from Morganton. DR. GEORGE E. KOURY, from Burlington, will be the April visitor.

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DR. CLEMENT A. FINCH, Professor of Medicine at the University of Washington (Seattle) visited the school on January 15. He lectured on "Normal and Abnormal Erythropoiesis."

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DR. EDWIN T. PRESTON (Surgery) has joined the faculty as an instructor in orthopedic surgery. Last December he completed his residency program at the Peter Bent Brigham Hospital and the Children's Hospital Medical Center in Boston, Mass., where he had been chief resident in orthopedic surgery since April 1968.

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Sixty-six Greensboro physicians have been appointed to the School's part-time faculty and will participate in the UNC teaching programs at the Moses H. Cone Memorial Hospital in Greensboro. The teaching programs were established in July, 1967 to provide our medical students with clinical experience in a community hospital, to improve continuing education for local physicians, and to establish graduate medical education programs at Cone Hospital, with emphasis on preparation of physicians for family practice.

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DR. LENORE BALSAM BEHAR (Psychiatry) has been promoted to Assistant Professor of Psychology. He had been a part-time faculty member for the last three years.

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DRS. HORTON GRAY JOLLY ('65) and RAYMOND F. SCHMITT, JR. (Surgery) have received one-year appointments as instructors. Dr. Jolly completed his internship and residency at the University of Florida. Dr. Schmitt interned at Charity Hospital in New Orleans and was a resident at the Mental Health Institute at Cherokee, Iowa, and at Tulane University.

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DR. DONALD E. WIDMANN (Psychiatry) has been promoted to Assistant Professor.

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In his capacity of President of the Student American Medical Association, MR. C. CLEMENT LUCAS ('69) participated in a workshop on "The Ideal Medical Curriculum" in Chicago during the week of February 6-10. AMA, SAMA, and other organizations met to discuss revisions in the curricula of schools of medicine throughout the country.

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DR. FRANK WILSON, JR. (Surgery) has been awarded an American Orthopaedic Association Exchange Fellowship. Presented by the Association every two years to four American and two Canadian orthopedic surgeons, the fellowship provides a six-week visit to leading orthopedic centers in Great Britain. Dr. Wilson will travel to England and Scotland during April and May.

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Several members of the faculty and student body participated in the meetings of the Southern Section of American Federation for Clinical Research and the Southern Society for Clinical Investigation held in New Orleans last January. The following papers were presented:

"Adenosine-3', 5' -Monophosphate (Cyclic Amp) as the Mediator of ACTH Induced Depletion of Ascorbic Acid in the Adrenal Cortex." Mr. H. S. EARP ('70) and DRS. B. S. WATSON and R. L. NEY (Medicine).

"Alcoholic Hepatitis: Natural History and Evaluation of Therapy." DRS. R. M. HELMAN, M. H. TEMKO, and H. J. FALLON (Medicine and Biochemistry).

"Dynamic Geometry in the Normal and Abnormal Human Left Ventricle." DRS. W. P. HOOD, JR. and E. L. ROLETT (Medicine)

"Relationship between Erythrocyte Active Transport of Sodium, Lactate Production, and Erythrocyte Sodium Concentration." C. H. WALLAS, J. C. PARKER, H. J. GITELMAN, and L. G. WELT (Medicine).

"Nucleotide Permeability of Human Red Blood Cells." DR. J. C. PARKER (Medicine).

"Experience with Serum Hepatitis in a Hemophilic Population." DRS. J. A. BRYAN, C. B. BRETT, and H. R. ROBERTS (Medicine and Pathology).

"Antihypertensive Effects of an Adrenal Inhibitor, Aminoglutethimide, in Patients with 'Essential' Hypertension and Subnormal Renin." DR. J. W. WOODS (Medicine).

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DR. ERLE E. PEACOCK (Surgery) left The Hill to become Chairman of the Surgery Department at the University of Arizona on March 1. He had been a member of our faculty since 1956.

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$257,000, the first year allocation of a five-year, $1.4 million grant to train health planners has been awarded to UNC by the U.S. Department of Health, Education and Welfare. It is one of the largest HEW grants awarded for training health planners.

Three units of the university will cooperate in the program: the Dept. of Public Health Administration, the Dept. of City and Regional Planning, and the medical school's Division of Education and Research in Community Medicine. The two-year graduate training program for health planners will result in the training of 12-15 professional health planners annually, as well as in improving the teaching of health planning to graduate students in the cooperating units. In addition, several hunderd people will receive in-service training through Continuation Education programs over the five-year period of the project.

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DR. LOUIS S. HARRIS (Pharmacology) and MR. FRED M. ECKEL (NCMH Pharmacy) participated in the symposia on "Pharmaceutical Aspects of Drug Therapy" held in Winston-Salem and in Greenville under the sponsorship of the Continuing Education Committee of the School of Pharmacy. The Winston-Salem program began on March 6 at the N.C. Baptist Hospital and met weekly through April 3. The Greenville symposium started on March 12 at Pitt County Memorial Hospital and continued through April 9.

"Organ Transplants" panel

"Abortions" panel

"Prolongation of Life" panel

The WHITEHEAD MEDICAL SOCIETY sponsored a series of four two-hour panel discussions on medical ethics (February-March). Under the general title of "Conversations in Medical Ethics," the issues discussed concerned:

"The Dying Patient" (Panelists: DR. RICHARD PETERS (Surgery), DR. CHRISTOPHER C. FORDHAM (Medicine), DR. JAMES E. ALLEN (Population Center) and REV. CLAUDE V. DEAL (Chaplain NCMH).

"Organ Transplants" (Panelists: DR. WILLIAM B. BLYTHE (Medicine), DR. CHARLES F. ZUKOSKI (Surgery), REV. CLAUDE V. DEAL, MR. MICHAEL C. KATZ (Sch. Law); and DR. JAMES E. ALLEN).

"Abortions" (Panelists: DR. JAROSLAV F. HULKA (Ob. Gyn.), DR. DAVID S. WERMAN (Psychiatry), DR. JAMES E. ALLEN, FR. THOMAS O'DONNELL (from Hot Springs, N. C.) and REV. CLAUDE V. DEAL.

"Prolongation of Life" (Panelists: DR. LOUIS G. WELT (Medicine), DR. NATHAN A. WOMACK (Surgery), DR. JAMES E. ALLEN, REV. CLAUDE V. DEAL, FR. THOMAS O'DONNELL, and MR. MICHAEL C. KATZ.

DR. WILLIAM E. BAKEWELL (Psychiatry) moderated the first two sessions; REV. FRED W. READ (Chaplain NCMH), the other two.

"Conversations in Medical Ethics"—C. ELLIS FISHER ('69), President of the Whitehead Medical Society, introduces the program.

Faculty and students attend the panel discussion on "The Dying Patient"

DR. CHARLES H. HENDRICKS (Ob.Gyn.) was one of the six speakers at the 22nd Annual Medical Symposium of the Greensboro Academy of Medicine on March 27.

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MR. THEODORE H. (TED) KIESSELBACH ('69) has been nominated by the Student Research Paper and Evaluation Committee to represent the School of Medicine at the 1969 SAMA-University of Texas Medical Branch National Student Research Forum to be held in Galveston, Texas, on April 24-26. The Mead Johnson Laboratories provide award funds for this annual event that each year attracts medical and graduate students, interns, and residents from all over the country.

Mr. Kiesselbach will present his findings on "Localization of Coagulation Factor XIII in Human Bone Marrow Megakaryocytes by Fluorescent Tracing." These are the results of work done by him this year under the Senior Student Elective Program. His trip will be supported by the school's Grants Committee.

A number of other students entered the competition to select the school's official delegate to the 1969 Forum and some of them have also been encouraged to present their work at Galveston.

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The Department of Radiology has announced a dedication conference for the Division of Radiation Therapy. The two-day discussion on "The Lymphomas" will be held on April 10-11. Guest speakers include DRS. VINCENT T. DeVITA (National Cancer Institute), ROBERT J. LUKES (Univ. Southern California), HENRY S. KAPLAN (Stanford Univ.), M. VERA PETERS (Princess Margaret Hospital, Toronto), and SAUL A. ROSENBERG (Stanford Univ.).

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DRS. DAVID M. BIDDULPH, a Research Fellow from the Department of Anatomy at the University of Illinois Medical Center; TIMOTHY K. GRAY, a Research Fellow from the Department of Medicine at the University of Maryland School of Medicine; ALFRED J. MAROZZI, JR., a trainee in neurobiology from the Department of Pharmacology at the University of Connecticut; and ANDRZEJ SLIWOWSKI, an international Research Fellow from the 1st Department of Medicine at the Warsaw Medical School in Poland, are now in the Department of Pharmacology engaged in advanced, postdoctoral training. They are in Chapel Hill under the sponsorship of USPHS.

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WILLIAM T. HERZOG, M.S.P.H., has been appointed the first director of continuing education in health sciences at UNC. He will assume the new position this summer. Mr. Herzog is now Assistant Professor of Health Administration at the School of Public Health and was formerly assistant director of Continuing Education Service. In his new position he will be responsible for coordinating, expanding and evaluating all health science programs in continuing education.

MEDICAL PARENTS DAY IN CHAPEL HILL WILL BE SATURDAY, APRIL 12.

CONTINUATION EDUCATION PROGRAMS

WORKSHOP FOR THE FAMILY PHYSICIAN ON MODERN CONTRACEPTION—Sponsored by the Department of Obstetrics and Gynecology: Friday, June 6, 1969. Additional time in Family Planning Clinics will be arranged.

TWO-WAY RADIO CONFERENCES—Tuesdays, 1 to 2 P.M. through April 15, 1969. FM Stations: WUNC Chapel Hill, 91.5 mc; WSJS, Winston-Salem, 104.1 mc; WGWR Asheboro, 92.3 mc; WVOT, Wilson, 106.1 mc; and WFMA, Rocky Mount, 107.7 mc.

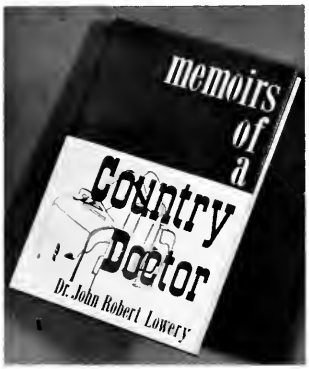
ALUMNI NEWS

PRESIDENT: **James E. Davis** ('42)
PRESIDENT-ELECT: **H. Haynes Baird** ('40)
VICE PRESIDENT: **Charles L. Herring** ('55)
SECRETARY: **G. Reginald Tucker** ('55)
TREASURER: **James H. M. Thorp** ('57)

COUNCILLORS: **John Dewey Dorsett, Jr.** ('49), **William W. McLendon** ('56), **Cornelius T. Partrick** ('54), **Ernest H. Yelton** ('41), **Harold L. Godwin** ('45), **Isaac C. Wright** (M'43), **F. A. (Ted) Blount** ('42), **John Olin Perritt, Jr.** ('50), **Zebulon Weaver, III** ('61)

Of the 14 elected officers of the N. C. Academy of General Practice, eight are our alumni. The president elect is Jack W. Wilkerson ('51) from Greenville. On the Board of Directors: Rose Pully ('49) from Kinston, Leon W. Robertson ('43D) from Rocky Mount, George R. Tucker, Jr. ('55) from Henderson, James B. Greenwood ('43M) from Charlotte, Hal B. Hawkins ('51) from Wilkesboro, C. O. Plyler, Jr. ('51) from Thomasville, and George W. Brown ('54) from Hazelwood.

1902



John Robert Lowery (1620 Wiltshire Rd., Salisbury, N. C. 28144), since his retirement from active practice, has become an author. His autobiographical book, **Memoirs of a Country Doctor**, was published last fall, ". . . a warmly nostalgic and intriguing comparison between old and modern bedside manners . . . laced throughout with homey philosophy and a fine sense of humor . . ." (Salisbury Sunday Post, Sept. 29/68.) It is being sold through Bunker's Book Shop in Salisbury ($3.50).

Dr. Lowery studied two years in Germany and practiced for a time in Raleigh before settling in Salisbury, where he opened the Lowery Hospital in 1929. This facility remained in operation until 1947.

1903

Leone Burns Newell (102 W. Trade St., Charlotte, N. C. 28202) gives his home address as 921 Berkeley Ave., Charlotte 28203.

1904

Arthur Brown English (514 Poplar St., Bristol, Tenn. 37622) obtained the M.D. degree at Raleigh in 1906. He engaged in general practice for several years (in Mendota, Va. and Portland, Ore.) prior to specializing in

ophthalmology and otolaryngology and settling in Bristol.

Dr. English and his wife, the former Ardis Stickley, have lived in Bristol for 47 years and have two children: Hazel Virginia (Mrs. George Little) and Ralph Stickley. The picture shows the Englishes (seated) with their children at the March 1968 reception in honor of their 60th wedding anniversary.

Although Dr. English celebrated his 85th birthday on October 2, he is very active and still drives his car. He no longer fishes or hunts but enjoys playing bridge almost every night.

1905

Ivie Alphonso Ward (Box 315, Hertford, N. C. 27944), since graduating from the medical school at Chapel Hill and Raleigh as president of his class, has practiced as a "country doctor" in Pasquotank, Perquimans, and Chowan Counties. During his first 35 years of practice, he delivered more than two thousand babies. In 1926, he took additional training in otolaryn-

gology and ophthalmology at Bellevue Hospital in New York City.

Now 89, he goes to his office every morning and carries on a limited practice. His health is good, and he enjoys working in his garden and yard. He is a member of the Board of Deacons of the Hertford Baptist Church and attends services twice every Sunday. He and his wife, the former Ruth Lassiter of Gates County, have been married 54 years, and he writes that they "are still together and very happy."

1909

Joseph Henry Cutchin (Box 105, Whitakers, N. C. 27891) sends his best wishes to all. Because of his age, he has reduced his office hours from 24 hours a day to 15 (7 a.m. to 10 p.m.).

1910

George W. Gentry, Sr. (Box 146, Roxboro, N. C. 27573), at the age of

84, continues to see patients at the office and the hospital and to make house calls. Although he resigned as chief of staff at Person County Memorial Hospital in 1965, he is active in the Person County Medical Society and sees 20 to 40 patients daily. He has been a Mason for more than 50 years, and received a citizenship award in 1964.

Dr. Gentry's hobbies are "working and fishing."

1914

Daniel L. Knowles (1103 Eastern Ave., Rocky Mount, N. C. 27801) suffered a crippling stroke in 1966 and is for the most part confined to his home. He was able to attend and enjoy the alumni meeting in Rocky Mount on October 22, 1968. His wife writes that ". . . he would be so happy to see or hear from any of his old classmates."

1915

Harry L. Brockmann (912 Fairway Dr., High Point, N. C. 27262) writes: "Retirement is not for this alumnus.

So what does an old surgeon do when his days of major surgery are over? Well, the need of personal physicians and medical advisers is always present, so this one majors in such activity. Self-chosen title: general purpose doctor, unlimited. For there are also pre-employment, pre-marital, and periodic health examinations, care of less severe industrial and other accidents, prophylactic measures, and treatment of many minor illnesses, real or imagined. Referring patients to active specialists friends is a two-way pleasure. Such a life allows time for one to go fishing, play checkers, tend a garden, travel a little: work and play, all enjoyable!"

1916

Henry L. Cook, Jr. (C-2 Irving Park Manor, Greensboro, N. C.) retired in April, 1968—and regrets it—after 7½ years of general practice in Fayetteville and 40 years of ophthalmology and otolaryngology in Greensboro. He received his M.D. degree from Jefferson Medical College and took two years of postgraduate work in his chosen specialty at the University of Pennsylvania.

Ben J. Lawrence, Sr. (Ashton Hall, Pace, Va. 24592) is "thankful to be alive, active, and in very good health."

On October 22, the Fourth District of the Medical Alumni Association held its annual meeting at the Benvenue Country Club in Rocky Mount, N. C. The District IV group took this opportunity to honor those 1916 graduates among their members—and their wives—who had been recognized at the State Medical Convention for 50 years of service.

1918

William J. B. Orr (4050 N. Ocean Dr., Apt. 510, Lauderdale-by-the-Sea, Fla. 33308) practiced general surgery in Washington, D. C., until his retirement in 1954. He now raises Indian River citrus fruit and belongs to the Retired Doctors Society.

He attended the 1968 Alumni Weekend and writes, "The one big thing that stands out in the minds of our class of 1918 is our Golden Anniversary at Chapel Hill, and the royal way we were entertained in April, 1968 at Morrison Dormitory and at the banquet and various lunches. The faculty and reception committee made us feel we were privileged to be UNC alumni. It was nice to mingle with our old classmates, and we value our Golden Certificates and the group picture."

1919

Glenn R. Frye (Box 1747, Hickory, N. C. 28601) is chief of the Hickory Surgical Clinic, with offices in the Richard Baker Hospital, where he and his three associates practice general, thoracic, and vascular surgery. Recent additions to this private general hospital have brought its capacity up to 120 beds.

William G. Wilson, Jr. (105 Bridge St., Smithfield, N. C. 27577) retired because of physical disabilities in 1953. His chief diversions are reading and gardening, with "hired muscles."

1922

Herbert H. Fritz (110 Pennswood Rd., Bryn Mawr, Pa. 19010) has been in general practice for 44 years, with three years out for duty in the Navy during World War II.

John Merrel Parker (7 Oak Manor Lane, Pittsford, N. Y. 14534) recently celebrated his 75th birthday, and is making a fairly good recovery from a stroke suffered last April. Recently he was awarded a plaque in recognition of his establishing a very active

Cystic Fibrosis Center in Rochester, N. Y.

1923

Catherine (Kitty) Cross Gray (203 Delaware Ave., Bridgeville, Del. 19933) retired in February after 43 years in general practice. She has lost track of most of her classmates and will be glad to have news of people she knew "long ago and far away."

Joseph W. Kimbrough (3118 Carolina St., N.E., Albuquerque, N. M.) has retired from the Navy with the rank of rear admiral, after serving as a medical officer (1926-45); an executive officer of hospitals at Treasure Island, Calif. (1943-44), Jacksonville, Fla. (1945), and Pensacola, Fla. (1950-52); commanding officer of a hospital in Cuba (1952-54); and with the military sea transportation service (1954-58). During his military service he was awarded the Legion of Merit.

Admiral Kimbrough is a member of the Association of Military Surgeons and the Industrial Medical Association and a fellow of the American College of Surgeons and the Royal Society of Health. His main interests are forensic medicine and genealogy.

1924

J. Richard Brown (2748 Virginia Ave., Shreveport, La. 71103) became a fellow of the American College of Surgeons in 1934 and is now chief of surgery at the Willis Knighton Hospital in Shreveport. His home address is 3932 Fairfield Ave.

E.N.: During the spring of 1968 the University of N. C. Press published a book on "Wild Flowers in North Carolina" co-authored by **William S. Justice** and **C. Ritchie Bell** (Prof. Botany, UNC). Not too many persons have been aware that the first author is a medical alumnus of the class of 1924, who graduated from Harvard in

Class of 1916 honored: Mrs. and Dr. Daniel L. Knowles, Dr. and Mrs. Leslie O. Stone, Dr. and Mrs. Joseph H. Cutchin, and Dr. Claiborne T. Smith. Above right: President James E. Davis ('42), Drs. Colin G. Thomas, Jr., W. Reece Berryhill ('25), Isaac M. Taylor, Carl B. Lyle, Jr., Robert A. "Daddy" Ross ('20), and J. Allen Whitaker ('31), Chairman of District IV of the reunion honoring members of that district.

1926, completed his surgical residency in Boston and began the practice of surgery in Asheville—where he still is—around 1930. It is our understanding that he and Dr. Bell have material on hand for a second volume on wild flowers in the state and hope it can be published before long.

1926

Roy H. McDowell (Main Street, Belmont, N. C. 28012) is a general practitioner. In 1930 Roy married Kathryn Bowers. He and his wife have two sons and three grandsons. The older son, Charles, is an orthopedic surgeon with the Dyerly Clinic in Richmond. The younger son, Harold, is a senior at Wake Forest University in Winston-Salem.

J. W. Roy Norton (2129 Cowper Dr., Raleigh, N. C. 27608) retired as State

Health Officer on December 31, 1967, after four years of public health work in Rocky Mount, two years of teaching at the UNC School of Public Health, and 21½ years with the State Board of Health.

1931

Louis Appel (33-03 Parsons Blvd., Flushing, N. Y. 11354) practices pediatrics in Flushing but says he loves "to tinker in our place in Connecticut on land and on water." He and his wife Rhoda (whom he calls "his finest achievement") have four children and two grandchildren.

To Louis Chapel Hill represents "the place that made it all possible, by giving me a chance to start in the field of medicine."

Frederick P. Brooks (1805 Greenville Blvd., Greenville, N. C. 27834) is a general practitioner in Greenville, where he is associated with **Davis Lee Moore** ('34), **Charles P. Adams** ('50), and **Jack W. Wilkerson** ('51) in the Greenville Clinic. He was formerly college physician and head of the Department of Health and Physical Education at East Carolina College, president of the Pitt County Medical Society, councilor of the Medical Society of the State of North Carolina, and chief of staff of Pitt County Memorial Hospital.

One son, Fred Jr., is professor and head of the Department of Information Science at UNC; another son, John, a former Morehead Scholar, is executive secretary of the N. C. Legislature; and a third son, Henry Frank, is a businessman in Kinston.

Morris Dworin (4 Roanoke Ave., White Meadow Lake, Rockaway, N. J. 07866) was a general practitioner until he entered military service in 1942. After his discharge he took a residency in radiology, becoming a certified radiologist in 1951. He has been associated with the Dover General Hospital since 1956.

Morris married Ruth Wind in 1941, and they have two sons: Elliott Matthew, who attended UNC from 1961-65, and Harvey Douglas, currently an undergraduate at UNC.

1932

Harold W. Glascock, Jr. (Meadowbrook, Gilbertsville, N. Y. 13776) is Medical Director of the Norwich Pharmacal Co. (Norwich, N. Y. 13815). His son, Harold III, is a freshman at UNC this year.

1933

James Watt (a 1959 recipient of The Alumni Distinguished Service Award) is the newly appointed associate director for program planning at Children's Hospital of the District of Columbia. In this capacity he will evaluate all community related programs undertaken by the hospital and associated organizations. He will also maintain liaison with area, regional, and national planning and action groups. James is a former special assistant to the Surgeon General for program review in the Public Health Service. He served as director of the PHS Office of International Health and as director of the National Heart Institute.

1934

William B. Patterson (99 S. Market St., Wailuka, Maui, H.I. 96793) is now a grandfather and a member of a medical group of ten specialists and two general practitioners which he feels is doing outstanding work in an isolated community. "It certainly is the best way to practice."

1937

Arthur I. Sims (3215 Columbia Pike, Arlington, Va. 22204) has recently been promoted from Clinical Associate Professor of Pediatrics to Clinical Professor of Pediatrics at Georgetown Medical School in Washington, D. C.

1938

Horace H. Hodges (1351 Durwood Dr., Charlotte, N. C. 28204) has been

practicing internal medicine in Charlotte since 1947 as a partner in the Durwood Medical Clinic. He served as president of the N. C. Society of Internal Medicine in 1967, and in 1968 was elected a trustee of the American Society of Internal Medicine.

1940

H. Haynes Baird (1012 Kings Drive, Charlotte, N. C. 28207) received his M.D. degree from Washington University in 1942 and interned at Barnes Hospital from 1942 to 1943. He has practiced urology in Charlotte since 1947 and is Chairman of the Department of Urology at Charlotte Memorial Hospital. President-elect of the UNC Medical Alumni Association, he is also a member of the District Committee of the Morehead Scholarship Foundation, a trustee of Mars Hill College, chairman of the Membership

Committee of the American Urological Association, and past president of the Charlotte Rotary Club. He is a diplomate of the American Board of Urology and a fellow of the International College of Surgeons, the American College of Surgeons, and the Southeastern Surgical Congress, as well as a member of the American Urological Association.

Haynes married Cornelia Wallace in 1938 and they have three children: Wallace (currently a medical student at UNC), Harry, and Alice.

1941

Carlton G. Watkins (1630 Mockingbird Lane, Charlotte, N. C. 28209) graduated from the Washington University Medical School (Missouri) in 1943 and took his internship and residency training at St. Louis City Hospital and Duke Hospital. Except for two years in military service (1951-53), he has practiced pediatrics in Charlotte since 1946 and is a past chairman of the Department of Pediatrics at Charlotte Memorial Hospital.

Carlton was the founder and first secretary of the Charlotte Pediatric Society and has served as president of the N. C. Pediatric Society and the N. C. Family Life Council. He is a life member of the N. C. Congress of Parents and Teachers and is a member of the Charlotte-Mecklenburg Board of Education and of the Charlotte Model City Commission.

1942

Frederick A. (Ted) Blount (2540 Forest Dr., Winston-Salem 27104) is in the private practice of pediatrics and on the clinical faculty of the Bowman Gray School of Medicine. In 1967 he was awarded an NIMH Fellowship in child psychiatry at the Johns Hopkins University School of Medicine.

Ted is on the Medical Alumni Association visiting committee to the UNC School of Medicine (past chairman) and a member of the council. He is medical consultant for several Head Start programs in North Carolina, and is a trustee of N. C. Blue Cross-Blue Shield, Inc.

Louis D. Hayman, Jr. (617 College St., Jacksonville, N. C. 28540) is one of three members of the class of 1942 practicing in Jacksonville. Louis and **Hunter Heath** are internists, although Louis's activities are confined almost entirely to cardiology. **James D. Piver** is Jacksonville's only Board-certified general surgeon. Louis has been in Jacksonville 15 years. He states ". . . my most satisfying activity is centered around the installation of our Intensive Care Unit, at which I stumped for in 1964. About the fall of 1965, it was in full operation and I have been the Director ever since. In a hospital the size of Onslow Memorial Hospital, (100 beds) a combined Intensive Care Unit has been feasible, with some segregation of the coronary cases within the unit. We are now able to put in transvenous (temporary) Pacemakers, and Dr. Piver and I installed our first permanent Pacemaker a month ago."

Hugh P. Smith, Jr. (8331 Brynwood Dr., Boise, Idaho 83704) practiced internal medicine in California until 1964, when he began a residency in radiology at the V. A. Hospital in Long Beach, California. After becoming certified in radiology, he moved to Idaho, where he practices radiology in partnership with Dr. Al Stone and Wesley Levi at St. Luke's Hospital.

Hugh and his wife Sue have four children: Carolyn (2), Chuck (12), Hugh III (16), and Nancy (17).

1943

Hugh Dortch, Jr. (281 Cordova Rd., West Palm Beach, Fla. 33401) is chief medical examiner for Palm Beach County and says he also enjoys Florida's opportunities for waterskiing, fishing, skin-diving, and flying. He has a daughter at Massachusetts General Hospital's School of Nursing and a son at Loyola University in New Orleans.

Ernest G. Guy (14 S. Walnut St., Philippi, W. Va. 26416) graduated from the University of Maryland Medical School and took his internship and medical residency at the University of Maryland Hospital. He is a diplomate of the American Board of Internal Medicine and is now associated with the Myers Clinic in Philippi.

In 1950 Ernest married Josephine Pauline DiGristine, and they now have three children — Antoinette, Ernest Samuel, and Charles.

William N. Hubbard Jr., Dean of the University of Michigan Medical School since 1959 and Professor of Internal Medicine there, has been elected to the board of directors of the Upjohn Company. Before joining UM he served as Associate Dean and Assistant Professor of Medicine at New York University School of Medicine. He holds honorary degrees from Hillsdale College (Michigan) and Albany Medical College.

William H. Meroney has been Director of the Walter Reed Army Insti-

tute of Research since last summer. Bill, who holds the rank of Colonel, was formerly WRAIR deputy director.

Henry C. Newsome, Jr. (Box 606, Pilot Mountain, N. C. 27041) received his M.D. from the University of Virginia and took his internship at the North Carolina Baptist Hospital. In 1948, after two years in the Army, he began the general practice of Medicine at Pilot Mountain. He was the first chief of staff at Northern Surry Hospital, which opened in 1957,

and was mayor of Pilot Mountain in 1963.

Henry's son Clay is a senior at UNC-CH, and his daughter Tricia is

a junior in East Surry High School. Henry's hobby is serving as team physician for the East Surry High School football team (the Rebels), and he has missed only one game in five years. (Picture: courtesy of the Mt. Airy News.)

1944

Francis P. King (709 Professional Dr., New Bern, N. C. 28560) has been practicing internal medicine since 1952. In 1963 he became associated with two members of the 1956 class: **Robert P. Holmes** and **John R. Baggett.** When time permits, he enjoys the recreational facilities around New Bern, including golf, fishing, boating, and some hunting. His oldest daughter, Sallie, is married and living in Germany with her husband, who is in the Army. Another daughter, Anne, is a freshman at Salem College. A son, Frank, is at New Bern High School, and two other children are still in grammar school.

Francis writes, "The highlight of 1968 was a visit to Sallie in Germany with side visits to Holland and to England. As many other 1944 graduates, I am looking forward to our twenty-fifth anniversary reunion this spring."

Lewis B. MacBrayer, III (1530 Baracoa Ave., Coral Gables, Fla. 33146) is now on the staff of the Student Health Center of the University of Miami. Mac states that, "After practicing pediatrics in Mooresville, N. C. for 16 years, now I find that this is where I should have been all along. Would be happy to have a call from any friends who come to sun-fun filled Miami. Am in the book."

Charles A. Speas Phillips (Pinehurst Surgical Clinic, Box 1068, Pinehurst, N. C. 28374) practices in a partnership with eight other surgeons, and was elected chief of the surgical service at Moore Memorial Hospital in 1968. During the past year he has been spending one afternoon a week in the surgical clinic of the UNC School of Medicine. He is also serving as Loyalty Fund Chairman for this year.

Robert K. Quinnell (7908 Ariel Way, McLean, Va. 22101) recently retired from the Air Force with the rank of colonel. He is now Assistant Vice President and Director of Medical Relations for the Pharmaceutical

Manufacturers Association in Washington and Clinical Assistant Professor of Community Medicine at Georgetown University School of Medicine.

Bob and his wife Marianne have four sons. Two are enrolled at the Virginia Polytechnic Institute in Blacksburg; one is at an Air Force Academy Prep School; and one is in high school. He claims that they ". . . have plenty of room for any Carolinians coming through the Washington area. You need only call us . . . Maybe we should have a Carolina get-together at the next A.M.A. meeting."

Charles W. Tillett (2200 E. Seventh St., Charlotte, N. C. 28204) practices ophthalmology in Charlotte with his wife, who is also an ophthalmologist. They have three children—boys aged 11 and 12 and an 8-year-old daughter. He is Clinical Assistant Professor of Surgery at UNC and comes to the medical school every two to three months to conduct an optical-aids clinic for the partially sighted.

1945

Thomas Lane Stokes (802 Medical Tower, Norfolk, Va. 23507) has been practicing general, thoracic, and cardiovascular surgery in Norfolk for 15 years. He and his wife, the former Martha Kavanaugh of Louisiana, have three sons and one daughter.

1946

Ira A. Abrahamson, Jr. (925-7 Fifth Third Bank Building, Cincinnati, Ohio 45202) is Assistant Clinical Professor of Ophthalmology at the University of Cincinnati School of Medicine and is on the editorial board of **E.E.N.T. Digest, Pediatric Ophthalmology Journal,** and **G.P. Magazine.** He is certified by the American Board of Ophthalmology and is a member of the American Academy of Ophthalmology, the Pan-American Congress of Ophthalmology and Association of Ophthalmology, the Association for Research in Ophthalmology, the Societe Francais de Optalmologie, the Instituto Barraquer of Barcelona, and the Cincinnati Academy of Medicine, as well as the Biological Photographic Association and the Industrial Medical Association.

In 1967 Ira's motion picture entitled "Cataract Surgery" won the Third International Barraquer Award

for the teaching of ophthalmology through cinemaphotography. Since then he has lectured at the Moorfields Eye Hospital in London, the Asia Pacific Academy of Ophthalmology in Singapore, and the Japan Ophthalmological Association, as well as at the American Academy of Ophthalmology and numerous other meetings in the United States. In 1966 his exhibit on "Anterior Segment Eye Diseases" won awards from the American Academy of Ophthalmology and Otolaryngology, the American Academy of Pediatrics, the Pan-American Congress of Ophthalmology, and the Ohio State Medical Association.

William G. Sanford (10028 Spearfish, Ellsworth A.F.B., S. Dak. 57706) has been in the Air Force since 1951. He completed a residency in internal medicine at Wilford Hall U.S.A.F.

Hospital, Lackland A.F.B., Texas, in 1961, and was certified in 1963. He is a Senior Flight Surgeon and was promoted to full colonel in 1968. He has served in Germany and Thailand and

is now commander of the 821st Medical Group, Ellsworth A.F.B.

Bill was married in December, 1967. He and Leon Cowan ('54)—a dermatologist in nearby Rapid City—get together occasionally and "enjoy talking 'Chapel Hill'."

1949

Aubrey D. Richardson (700 W. 40th St., Baltimore, Maryland 21211) was named Maryland's "Physician of the Year" at special ceremonies held in Baltimore on December 18th. Aubrey was cited twice—nationally and by his adopted state—for his extra-curricular work in aiding handicapped persons. Currently, he is medical director of the Keswick Home for Incurables of Baltimore City, and Assistant Professor of Preventive Medicine and Rehabilitation at the University of Maryland.

1950

Frederick O. Bowman, Jr. (161 Fort Washington Ave., New York, N. Y. 10032) is practicing and teaching thoracic and cardiovascular surgery. In July he was appointed Associate Professor of Clinical Surgery at the College of Physicians and Surgeons of Columbia University.

Fred and his wife Betsy have "three male offspring and another on the way."

Benjamin H. Josephson (201 S. Springfield Ave., Springfield, N. J. 07081) is practicing pediatrics. He and his wife Irma have three daughters: Anne (17), Nancy (13), and Susie (10).

Charles R. Vernon (Pig Fish Lane, Greenville Sound, Rt. 3, Box 347, Wilmington, N. C. 28401) has recently moved from Durham to Wilmington, where he is practicing general psychiatry with Dr. Rolf Fisscher.

S. Kendall Willis, Jr. (310 Vandenberg St., Goldsboro, N. C. 27530) has recently returned to Seymour Johnson Air Force Base from a five-month deployment to Korea with an Air Transportable Hospital (55 people and seven tents, providing surgical facilities and four wards). He is com-

mander of Fourth Tactical Hospital in the Department of the Air Force and was promoted to the rank of colonel in August.

1951

Richard B. Gibson (130 State St., Brooklyn, N. Y. 11201) received his M.D. degree from Harvard in 1953 and is now director of thoracic and cardiovascular surgery at Long Island College Hospital in Brooklyn. He and his wife, Virginia F., have a 6 year old daughter, Virginia E.

Among his other activities is the restoration of a brownstone house (circa 1846) in Brooklyn Heights.

Corbett L. Quinn (Box 128, Magnolia, N. C. 28453) took his internship and a partial medical residency at Mercy Hospital in Baltimore and has been doing general practice in Magnolia since 1955. He is a member of the medical staff at Duplin General Hospital in Kenansville, where he has held all staff offices at various times and is now chairman of the Utilization and Credentials Committees. He is also president of the Duplin County Tuberculosis Association, chairman of the Public Relations Committee of the Duplin County Medical Society, mayor of the Town of Magnolia, assistant civil defense director of Duplin County, and a member of the Board of Directors of Branch Banking and Trust Company. A lieutenant colonel in the Medical Corps of the U. S. Army Reserve and the North Carolina National Guard, he commands a company in the 105th Medical Battalion of the N. C. National Guard. He is a Mason and a Methodist.

Corbett is married to the former Ruth Arlene Montgomery of High Rock, Pa., and they have two children: Corbett Jr., 14, and Risa Teresa, 12.

1954

David L. Collins (411 Caldwell Dr., S.E., Concord, N. C. 28025) transferred to Harvard in 1952 and received the M.D. degree in 1954. He is chief of surgery at Cabarrus Memorial Hospital, and the father of five children.

J. Franklin Graves (68 Gadsden St., Charleston, S. C. 29401) is practicing internal medicine in Charleston and teaching part time at the Medical College of South Carolina, where he holds the rank of Assistant Clinical Professor of Medicine. His major interests are clinical oncology and, to a lesser extent, connective-tissue diseases. Until last year he conducted the Chemotherapy Clinic at the Cancer Clinic of the Medical College of South Carolina and was an investigator in the Eastern and Central Regional Drug Trial Program.

Frank and his wife Ann, with their four children—Stephen (17), Franklin (15), Robert (9), and Emily Ann (4)—live on Shem Creek in Mt. Pleasant. They enjoy fishing and sailing.

Graham D. Newton (1600 E. Fifth St., Charlotte, N. C. 28208) transferred to Cornell University after two years here and graduated there in 1954. He interned at George Washington University Hospital, and went to Duke Hospital for a residency in dermatology. He was certified by the American Board of Dermatology in 1962 and is now engaged in group practice with two other dermatologists.

C. T. (Neil) Partrick (615 E. 12th St., Washington, N. C. 27889) became a member of the State Board of Medical Examiners in November.

Louis C. Spillman, Jr. (c/o Holmes and Narver, Inc., APO San Francisco, Calif. 96305) is chief physician for Holmes and Narver, Inc., a worldwide construction company. He is now stationed at Johnston Island, several hundred miles south of Hawaii.

Nat H. Swann (707 Walnut St., Chattanooga, Tenn. 37402) is an internist and a member of the Board of Directors of Newell Clinic Hospital. He belongs to the American College of Physicians and the American College of Chest Physicians and is a member of the Rotary Club. He has contributed several publications to the medical literature.

Nat and his wife, the former Sarah Hayer of Nashville, have two sons, ages 12 and 9. His hobbies are golf, music, and photography.

Robert Harrell Vinson (4 Breezeway Bldg., Vero Beach, Fla. 32960) interned at the University of Iowa and spent two years in the Air Force (serving in Spain) before taking his pediatric residency at the University of Florida School of Medicine. In

1960 he began the practice of pediatrics in Vero Beach. He is a fellow of the American Academy of Pediatrics and is currently president of the Florida Mental Health Association and vice president of the Indian River Area Council for Comprehensive Community Mental Health, as well as immediate past president of the Indian River Medical Society. Active in the First Baptist Church, he helped to organize a "Get Set" program for preschool children sponsored by the church and a class for retarded toddlers which is held in the church Sunday school rooms on Saturday mornings.

The Vinsons have five children—three girls and two boys, "in that order."

William Matthew Vinson (1190 Montgomery Dr., Santa Rosa, Calif. 95405) is an internist practicing solo in Santa Rosa, having become board-certified in 1962. He and his wife, the former Ruth Myatt (Duke '52) have two sons: Bill, age 10, and Tim, age 6.

Bill's twin brother is Robert Harrell Vinson ('54).

1955

E. Ted Chandler (1029 16th Ave. Place N.W., Hickory, N. C. 28601) is back at practice in Hickory after spending 16 months at the Bowman Gray School of Medicine. Ted went to Sierra Leone, West Africa, on a medical mission trip and describes the trip as "a very exciting and unforgettable experience."

C. Council Dudley (320 Ivy Circle, Elkin, N. C. 28621) took his internship at Duke Medical Center and served in the U. S. Army from 1956 to 1958. After a general practice residency at NC Memorial Hospital (1958-1959), he practiced in Elkin from 1959 to 1967. Since then he has been a pathology resident at the N. C. Baptist Hospital in Winston-Salem.

Council and his wife Peggy have three children: Hunter (11), Fran (9), and Robert (7).

John W. Foust (Providence Medical Center, 1950 E. Third St., Charlotte, N. C. 28204) was inducted into the American College of Surgeons at its meeting in Atlantic City last October.

G. Irvin Richardson (1716 Richardson Dr., Reidsville, N. C. 27320) is doing general practice in partnership with **C. G. Payne** ('56). He is the father of four children.

Henry L. Stephenson, Jr. (615 E. Twelfth St., Washington, N. C. 27889) has been practicing internal medicine in a group with **Neil Partrick** ('54) and **Clark Rodman** ('41) since 1961. He is president-elect of the Seaboard Medical Association of North Carolina and Virginia, which holds its annual meetings in Nags Head each June.

Henry and his wife Frances, have three boys: Henry III (11), Hale (8), and Sam (2).

G. Reginald Tucker, Jr. (918 Meadow Lane, Henderson, N. C. 27536) has been in Henderson nearly ten years, doing general practice in partnership with Dr. M. W. Wester, Jr. He precepts weekly in the Medical Clinic at U.N.C. and is secretary of the UNC Medical Alumni Association.

Reginald and his wife Maude have two children, Lib and George, and he feels that he has "already served a lifelong obligation as P.T.A. president." He enjoys tennis and water skiing, but gave up snow skiing after breaking a leg.

1957

James H. Burrus (105 Grover St., Shelby, N. C. 28150) returned to the private practice of obstetrics and gynecology in Shelby after serving one year as consultant in obstetrics and gynecology to the State Board of Health. He practices in partnership with Dr. Warren J. Collins.

James R. Clapp (Box 3014, Duke University Medical Center, Durham, N. C. 27706) is Associate Professor of Internal Medicine at Duke and an established investigator of the American Heart Association. His activities include research in the areas of renal disease and renal physiology, the care of patients, and teaching. He is also secretary and treasurer of the Board of Trustees for the Kidney Foundation of North Carolina.

T. Albert Farmer has been appointed to the new post of Executive Associate Dean and Director of Undergraduate Medical Education at the Medical College of Alabama. Albert, who was until this appointment Associate Professor of Medicine, was formerly Assistant Dean for Student Affairs and Chairman of the Curriculum Committee. He is now to supervise activities of the Office of Admissions and a new Office of Educational Research. He also is to direct ongoing curricular revision and implementation of changes.

John K. Farrington (318 Westwood Ave., High Point, N. C. 27262) served his internship at Ft. Benning, Ga., and a residency in obstetrics and gynecology at Madigan General Hospital in Tacoma, Washington. He became a fellow of the American College of Obstetrics and Gynecology in 1963 and a diplomate of the American Board of Obstetrics and Gynecology in 1966. Since getting out of the Army in 1965, he has been engaged in the private practice of obstetrics and gynecology in High Point.

Richard V. (Dick) Liles, Jr. (Box 676, Norwood, N. C. 28128) is a general practitioner in Norwood. He is president of the Stanly County Medical Society and served as Vice Chief of Staff of Stanly County Hospital in 1967-68. He is a member of the N. C. Academy of General Practice, past president of the Norwood Jaycees (1967-68), and a member of the Board of Deacons of the First Presbyterian Church.

Dick is married to the former Ann Ross Abbey of Charlotte and they have a son, Gregg Rutlege (3) and a baby daughter, Elizabeth Abbey. He writes that he needs a partner badly!

Harvey A. Page (Box 2529, Pikeville, Ky. 41501) has been in general practice in Pikeville since leaving Durham in 1964. For two years he has served as chairman of the staff of Pikeville Methodist Hospital.

Harvey and his wife, the former Linda Osborne, have two children—a son, John, aged 17, who is planning to enter UNC next fall, and a daughter, Deborah, aged 12. He is a member of the Episcopal Church and enjoys golf, hunting, and coin collecting.

James H. M. Thorp (409 Mill St., Rocky Mount, N. C. 27801) took his internship and residency in obstetrics and gynecology at U. S. Naval Hospitals in Bethesda, Md., and Portsmouth, Va. He then served on the staff of the Naval Hospital at Camp Lejeune for four years, spending a total of eight years in the Navy. He was discharged with the rank of lieutenant commander in 1965. After practicing in Fayetteville for 18 months, he returned to his home town of Rocky Mount, where he has practiced obstetrics and gynecology ever since. He is a member of the American College of Obstetrics and Gynecology and a diplomate of the American Board of Obstetrics and Gynecology.

Jim is married to the former Robin Arrington and they have three children: Robin (14), John (9), and Jim (8). He is active in the Episcopal Church, being a lay reader and a vestryman. His hobby is tennis.

Gerald M. Wagger (2470 Greer Rd., Palo Alto, Calif. 94303) was affiliated with the University of Maryland Hospital for more than ten years after

his graduation, except for two years in service (1960-62). He recently left Maryland to accept a position with the Permanente Medical Group in Redwood City, Calif., as an internist and gastroenterologist.

The Waggers have three children—two girls and a boy.

1958

Paul S. McCubbins (701 Barker St., Salisbury, N. C. 28144) practices internal medicine in partnership with Dr. Roy Agner.

The McCubbins have one son and two daughters.

Luther Sullivan Nelson (3421 Clearwell St., Amarillo, Texas 79109) completed a residency in radiology at Chapel Hill in July 1968 and has joined Bill Dunnagan (NCNH radiology resident, 1959) in the practice of radiology at St. Anthony's Hospital in Amarillo.

Sully and his wife, Dolly, have three children: Jim, Stu, and Glenda.

J. Wayne Thompson (445 Windsor Dr., Asheboro, N. C.) is associated with **Charles W. Stout** ('58) in general practice.

Wayne and his wife have three boys, ages 9, 4, and 3. They have recently moved into a new home.

1959

David L. Kelly, Jr. (Bowman Gray School of Medicine, Winston-Salem, N. C. 27103) took his internship and part of his residency training at the N. C. Baptist Hospital in Winston-Salem and completed his residency at the Boston Children's Hospital and Peter Bent Brigham Hospital. After serving as a fellow in neurosurgery at Barnes Hospital in St. Louis, he returned to Winston-Salem, where he is Assistant Professor of Neurosurgery at Bowman Gray. He is a Board-certified neurosurgeon and a member of the Congress of Neurological Surgery, the American Association of Neurosurgeons, and the Southern Neurosurgical Society.

Henry Lester Kiser, Jr. (302 N. 14th St., Bessemer City, N. C.) had a rotating internship at Tampa General Hospital in Tampa, Fla., before serving a two-year tour of duty in the Navy. After his discharge in 1962, he took residencies in pediatrics at Grady Memorial Hospital in Atlanta and at the Medical College of South Carolina in Charleston, S. C. From 1965 to 1967, he was a staff physician at Broughton Hospital in Morganton. Since 1967, he has been a staff pediatrician with the Western Carolina Center in Morganton.

Talmadge C. Reeves (707 Camden Ave., Salisbury, Md. 21801) is engaged in the private practice of psychiatry. He and his wife Nancy have one son, Christopher Norman, born on May 9, 1968.

Julian W. Selig, Jr. (408 Medical Tower, Norfolk, Va. 23507) spent three years at NC Memorial Hospital as a psychiatric resident and has been practicing general psychiatry in Norfolk since 1963. He and his wife Betsy have two children: Wood (7) and Susan (4).

1960

R. Spencer Eaves (224 New Hope Rd., Gastonia, N. C. 28052) is practicing ophthalmology in Gastonia.

J. Thomas Fox, Jr. (2525 Sharon Rd., Charlotte, N. C. 28211) has been practicing general psychiatry in Charlotte since July, 1966. He has also served as consultant for the Mecklenburg County Mental Health Center.

Tom and his wife, the former Landon Lewis (UNC '56) have three children: Kathy (9), Carter (7), and Sara (6).

Falls L. Harris (607 Arlington Ave., Greenville, S. C. 29601) is a dermatologist who says he is still trying to play championship golf but may take up bowling instead. He and his wife Barbara have two children: Falls, Jr., and Sara Elizabeth.

G. Wyckliffe Hoffler (511 Seaway Dr., Seabrook, Texas 77586) completed a medical residency at the Medical College of Georgia in 1966 and then served a two-year residency in aerospace medicine at Ohio State University. Since July 1st he has been a medical officer at NASA's Manned Spacecraft Center in Houston. He was a member of the medical team on the USS Essex, the carrier which recovered the Apollo 7, and was specifically involved in making cardiovascular tests on the astronauts. "The work is very exciting and I feel this is a just and reasonable way to apply one's medical training—when driven by appropriate interests and the obvious role space exploration will assume in our world."

William T. Huff, Jr. (960 Rothowood Rd., Lynchburg, Va. 24503) is beginning his sixth year in the group practice of anesthesiology. He is the father of three daughters: Catherine (7), Ann (6), and Elizabeth (3).

William N. Michal, Jr. (624 Quaker Lane High Point, N. C. 27262) has been practicing pediatrics in a four-man partnership since 1965.

Duncan S. Owen, Jr. (Medical College of Virginia Hospital, Richmond, Va. 23219) served his internship at the Medical College of Virginia Hospital and then returned to Chapel Hill for a year of medical residency. After two years in the Army (a year at Womack Army Hospital at Fort Bragg and a year in Korea), he returned to Richmond and completed his residency in medicine and a fellowship in rheumatic diseases. He is now Assistant Professor of Medicine and a member of the Division of Connective Tissue Disease.

In 1966 Duncan married Irene Lacy Rose of Fayetteville. They have a young son, Duncan III.

William Seymour Pearson (Bowman Gray School of Medicine, Winston-Salem, N. C. 27103) has been Director of Education and Assistant Professor of Psychiatry at the Bowman Gray School of Medicine since 1966. He was certified by the American Board of Psychiatry and Neurology in 1967.

He and his wife Shirley, with their three children (Amanda, 9; Daniel, 7; and Laurie, 6) live at 1035 Chester Rd., N.W., in Winston-Salem.

G. Thomas Strickland, Jr. (Naval Medical Research Unit #2, Box 14, APO, San Francisco, Calif. 96263) is Head, Department of Clinical Investigation of this Naval Medical Research

Unit, located in Taipei, Taiwan. His department studies clinical diseases throughout Southeastern Asia, including Viet Nam, the Philippines, and Indonesia. Tom writes that they have a large series of patients with Wilson's disease and are using a total body counter and two radioisotopes of copper to study them.

Tom's wife and three boys (ages 5, 4, and 3) are with him.

John E. Wise (1624 N. Center St., Hickory, N. C. 28601) interned at the Medical College of South Carolina and then served two years in the Navy at Jacksonville, Fla. Since completing a three-year residency in internal medicine at the University of Alabama at Birmingham in 1966, he has been practicing internal medicine in Hickory.

1961

C. Donivan Bessinger, Jr. (Greenville General Hospital, Greenville, S. C. 29601) served a year's rotating internship at Queen's Hospital in Honolulu before entering the Navy for a two-year tour of duty, part of which was spent working with Operation Deepfreeze at the South Pole Station. After two years of a surgical residency at Greenville General Hospital, he went to the University of

Virginia Hospital for a year as surgical research fellow. Since 1967 he has been chief surgical resident at Greenville General Hospital, and in 1968 he received the degree of Master of Science in Surgery from the University of Virginia.

Don married Jane Prevost of Greenville, S. C., in 1966.

John C. Council, Jr. (1053 Bolling Rd., Charlotte, N. C. 28207) has been associated with **Malcolm McLean** ('56) in the practice of pediatrics since August, 1968. He spent six years in the Navy following his graduation and was certified by the American Board of Pediatrics in March, 1967.

The Councils have two daughters: Ashley (6) and Margaret (1).

Ellison F. Edwards (225 Hawthorne Lane, Suite 305, Charlotte, N. C. 28204) completed a residency in otolaryngology at NCMH in 1966. After spending two years in the Navy at Boston, he began private practice in Charlotte.

F. Michael Fennegan (1610 Ed Carey Dr., Harlingen, Texas 78550) is a neurosurgeon doing private solo practice.

Mike and his wife, the former Nancy Davis, have two children—a boy, 5, and a girl, 2.

William S. Gibson, Jr. (Geisinger Medical Center, Danville, Pa. 17821), after completing a residency in otorhinolaryngology, joined the staff of the Geisinger Medical Center. He plans to do postgraduate work in pediatric otolaryngology. He is "enjoying beautiful central Pennsylvania and doing a lot of skiing in the winter."

Wilbur P. Matthews, Jr. (1339 Hawthorne Rd., Wilmington, N. C. 28401) interned at the Medical College of South Carolina in Charleston and then spent two years in the Navy. His pediatric residency was served at the N. C. Baptist Hospital and the Medical College of South Carolina. Since 1966 he has been associated with **Charles Hicks** ('62) in the practice of pediatrics in Wilmington.

Wilbur and his wife Katherine have two children: Suzanne (4), and baby, Ashley.

Roy Wayne Miller (The Medical Clinic, 1750 N. Palafox St., Pensacola, Fla. 32501) spent four years after his graduation at Emory University Hospital and the V. A. Hospital in Atlanta, where he served an internship, residency, and fellowship. After a two-year tour of duty at Maxwell Air Force Base in Montgomery, Ala., he joined the Medical Center Clinic, a multispecialty group in Pensacola, in September, 1967. He is an internist with a special interest in nephrology.

Roy and his wife Pat have four children: Alan (10), Mark (8), Scott (5), and Kathy (3). Roy's hobby is boating and he loves "Florida living and the beach area."

Albert Ray Newsome (3121 Kinnamon Rd., Winston-Salem, N. C. 27104) is practicing internal medicine and cardiology and is an instructor in the medical outpatient clinic of the Bowman Gray School of Medicine. He and his wife Mary have two sons, ages 5 and 8.

W. Ferrell Shuford (3008 Oleander Dr., Wilmington, N. C. 28401) served two years in the Navy after completing a medical internship at Grady Memorial Hospital in Atlanta. He then returned to Grady for a residency in internal medicine and a fellowship in gastroenterology. In July, 1967, he entered the private practice of internal medicine in Wilmington with Dr. E. Thomas Marshburn, Jr. He was certified by the American Board of Internal Medicine in June, 1968.

Donn A. Wells (600 Beaman St., Clinton, N. C. 28328) is doing general practice in partnership with his classmate, **William L. Owens.**

1962

Oscar H. Bolch, Jr. (5418 W. 76th St., Shawnee Mission, Kansas 66208) returned to the United States in August 1968 after a three-year tour of duty at the U. S. Navy Hospital in Rota, Spain. He is now in the first year of a residency in obstetrics and gynecology at the Kansas University Medical Center in Kansas City.

Robert Ashe Carter (2110 Church St., Nashville, Tenn. 37203) completed a residency in urology at the Indiana University Medical Center in Indianapolis in June, 1967. After spending a year in the private practice of urology at Terre Haute, Ind., he moved to Nashville in July, 1968. In addition to carrying on his private practice, he is an Instructor in Urology at Vanderbilt University School of Medicine and is on the associate staff at the Vanderbilt University Hospital.

James H. Gibbs (820 Fleming St., Hendersonville, N. C. 28739) began the private practice of urology in July, 1968.

Frederick D. Hamrick, III (802 N. Washington St., Rutherfordton, N. C. 28139) finished his training at Chapel Hill in 1967, and since then has been pathologist and director of laboratories at the Rutherford Hospital, Inc.

Fred and his wife, Carolyn, have two daughters, Robin Sue and Natalie.

Lambros C. Rigas (206 Hospital Circle, Rome, Ga. 30161) served an internship and residency in obstetrics and gynecology at the Medical College of Georgia. Since completing his residency in 1967, he has been engaged in the private practice of obstetrics and gynecology in Rome.

He and his wife Anne, have one son; they live at 29 Virginia Circle, Rome, Ga. 30161.

Michael H. Temko (3116 Victoria Blvd., Hampton, Va. 23361) is engaged in the private practice of internal medicine. He is the father of one daughter, Sandra, born on March 24, 1968.

John F. Warner (4614 Butte Rd., Richmond, Va. 23235) has been in Richmond since his discharge from the Navy in 1966. He has a two-year fellowship in infectious disease at the Medical College of Virginia.

Jack and his wife Carol—who teaches math at the Collegiate School in Richmond—have two sons, John (9) and David (4).

David T. Watson (1950 Greystone Rd. N.W., Atlanta, Ga. 30318) interned in medicine at the New England Center Hospital and took a two-year residency in medicine at the Boston City Hospital. After a fellowship in cardiology at Grady Memorial Hospital in Atlanta, he served with the U. S. Army at Sandia Base in Albuquerque, N. M. In July, 1968, he began the private practice of internal medicine in Atlanta in partnership with three other internists.

David and his wife Gail have three children, Elizabeth (6), David, Jr. (4), and Katharine (9 months), two dogs and one cat.

1963

Bruce F. Caldwell (502 Cutchin St., Clinton, N. C. 28328) is practicing surgery in Clinton after taking five years of postgraduate training in Augusta, Ga. He says he is "glad to be back in the Old North State."

William B. Deal (1772 S.W. 36th Place, Gainesville, Fla. 32601) is a fellow in infectious diseases at the University of Florida Hospital and Gainesville V. A. Hospital. Beginning in July, 1969, he will be chief resident and instructor in medicine.

Henry W. Gerock, Jr. (402 Brookview Dr., Jacksonville, N. C. 28540) took two years of postgraduate training in internal medicine at the Medical College of Georgia before entering general practice in Jacksonville in July, 1965. His practice was interrupted by two years of Army duty, spent at the Walter Reed Army Medical Center in Washington, doing internal medicine. In April, 1968, he returned to his general practice in Jacksonville.

He was married to Shirley Anne Morgan in 1964 and they have a 2-year-old daughter.

David R. Williams (207 Rockspring Dr., Thomasville, N. C. 27360) began the practice of pediatrics in Thomasville in July, 1968.

Dave and his wife Jane have three children—Robby, Emily, and Burt. He continues a close association with **Neil Bender** ('63) who is an internist in Thomasville.

1964

J. W. David Atchison (1515 Ruffin St., Durham, N. C. 27701) served a year's surgical internship at NCMH before entering the U. S. Air Force

for a three-year tour of duty in England. He is now a resident in radiology at Duke University Medical Center.

David and his wife Jane have two daughters: Heather, age 2, and Laura, age 1.

William Rowell Burleson (3438 N.W. 47th Place, Gainesville, Fla.) is a second-year resident in urology at Shands Teaching Hospital of the University of Florida, where he also served his internship in surgery before spending two years in the Navy.

He married Linda Carol Carter in August 1966.

Clyde M. Gaffney (Jackson Memorial Hospital, Miami, Fla.) is a resident in urology in the University of Miami program.

G. Patrick Henderson, Jr. (2709 Sarah Ave., Durham, N. C. 27707) will finish a residency in otolaryngology at Duke next June and will then have two years in the Army before starting practice.

Pat and his wife Norma have two girls. Wendy Lou was born Oct. 17, 1968, and Zoe Anne is 2 years old.

Donald K. Nelms (7434-A Winter, El Paso, Texas 79920) is serving in the Army Medical Corps as chief of the Pediatric Outpatient Clinic at William Beaumont General Hospital.

The Nelms have two adopted children: James Person, age 6, and Elizabeth, age 1.

James W. Rose (204 B Jupiter, Sheppard AFB, Texas 76311) is starting a two-year tour of duty with the Air Force. His family now consists of his wife Sarah, a daughter Susan, age 4, and a son David, age 2.

Jim plans to practice internal medicine with emphasis on pulmonary diseases.

Wayne B. Venters (405 Overland Dr., Chapel Hill, N. C. 27514) completed a mixed internship and a year of general surgery at the Medical College of Georgia in Augusta before joining the U. S. Public Health Service in 1966. He spent two years in Montana on the Crow and Northern Cheyenne Indian reservations, doing general practice and surgery. The second year he was service unit director in charge of all the Public Health Service facilities and a 34-bed hospital on the two reservations. His wife Carol taught third grade on the reservation, and they both hunted big game as well as pheasants, ducks, and grouse.

Wayne is now in his first year of orthopedic residency at Duke, and will be there for four years.

Clifford R. Wheeless, Jr. (5223 Putney Way, Baltimore, Md.) is in the fifth year of an ob-gyn residency at Johns Hopkins. He has completed a fellowship in gynecologic endocrinology, infertility, and sterility. On March 1, he began a year of training in radical surgery at the Roswell Park Hospital in Buffalo, N. Y. Afterwards he will return to Johns Hopkins as chief resident on the obstetric-gynecology service.

1965

Richard M. Aderhold (271-10 Schucht Village, Gainesville, Fla. 32601) finished two years in the Tuberculosis Branch of the U. S. Public Health Service in July, 1968, and is now a first-year resident in psychiatry at the University of Florida Teaching Hospital.

The Aderholds have a daughter, Leigh, born April 25, 1967.

Richard M. Doughten (605 Walter Reed Dr., Greensboro, N. C. 27403) completed a pediatric internship at NCMH and a two-year pediatric residency at the University of Florida and is now practicing pediatrics with Drs. Harold Spangler and Carl Weatherly. He and his wife Barbara live at Le Mans Apartments with their daughters, Kim (4), and Lisa (1). Their "doors are open to any classmates passing through Greensboro."

Tally H. Eddings left a "very rewarding" general practice to begin an orthopedic residency at Charlotte Memorial Hospital on January 15. He had been practicing in Washington, Ga., since his discharge from the Air Force.

Tally Eddings and son after dove hunt.

Marvin R. Goldstein (8207 E. Bonnie Rose Ave., Scottsdale, Ariz. 85251) is a third-year fellow in cardiology at the Institute of Cardiovascular Disease in Phoenix. He, his wife Jackie, and their three daughters enjoy Arizona and plan to return there for Marvin to practice cardiology after his tour of duty in the Army.

John Benjamin Hammett (3536 Meadow Place, Boise, Idaho 83704) has completed his second year of residency in medicine at the University of Washington and is doing a two-year tour of duty in the Epidemic Intelligence Service of the U. S. Public Health Service. He is assigned to the Idaho Department of Health.

Howard Holderness, Jr. (225 Scott Ave., Universal City, Texas 78148) is serving at Randolph Air Force Base. At the end of his two-year tour of duty he plans to return to Stanford to complete a residency in plastic surgery.

Howard and his wife have a daughter, Laura Fortune, born on May 29, 1968.

Donald D. McNeill (8010 Dunsmore Rd., Richmond, Va. 23229) is a third-year resident in pathology at the Medical College of Virginia. In 1970 he will begin his tour of duty in the Army.

Hugh Wayne Mayhue (3120 Pomeroy Dr., Louisville, Ky. 40220) served two years in the Air Force, stationed at Chanute Air Force Base in Rantoul, Ill. On August 15, 1968, he began a three-year residency in obstetrics and gynecology at the University of Louisville Medical School.

Two weeks before his discharge from the Air Force (on July 16, 1968) Hugh's wife, the former Judith Elaine Hornbeck, gave birth to a daughter, Kristine Elaine.

Jesse R. Peel (Apt. 400, 1329 Lombard St., Philadelphia, Pa. 19147) will complete a residency in psychiatry on July 1, and will then enter the Navy for two years.

Williamson B. Strum (125 Florence Rd., Branford, Conn. 06405) took three years of postgraduate training at the University of Florida Hospital before going to Yale University, where he has a two-year fellowship in gastroenterology. When this is completed (in 1970), he plans to spend two years in the Air Force and then return to academic medicine.

He married the former Faye Young in 1966.

1966

James Curtis Abell (210 Lowry Lane, Lexington, Ky. 40503) is in the second year of his residency in family practice at the University of Kentucky Medical Center. Recently he began work with a partnership in Midway, Ky. (20 miles from Lexington) where he sees patients daily with consultation and supervision.

William H. Bowers (5B Abercorn Apt., Savannah, Ga. 31406) completed a surgical internship at NCMH before entering the Army as a flight surgeon. While serving a year in Vietnam with the First Air Cavalry Division, he received two Purple Hearts, eight Air Medals, an Air Medal with **V** device for valor, and a Bronze Star. He is now at Hunter Army Airfield and plans to return to NCMH as a resident in orthopedic surgery in the fall of 1969.

John Robert Crawford, III (Rt. 3, Box 151, Old Lystra Rd., Chapel Hill, N. C. 27514) is a resident in ophthal-

mology at NCMH and at McPherson Hospital in Durham.

Robert C. Gibson (21 Chester St., Ballard Vale, Mass. 01810) completed his first year's residency in medicine at Western Reserve in Cleveland in June, 1968 and is now serving with the U. S. Navy aboard a destroyer in the Mediterranean. His home port is Norfolk, Va.

Stanleigh E. Jenkins, Jr. (842 Country Club Dr., Morgantown, W. Va. 26505) will finish a two-year mixed residency in medicine and pediatrics in June, 1969. He is married and has a daughter, born on September 10, 1968.

Thomas J. Koontz (112 Davenport Ave., New Haven, Conn. 06504) is in the second year of a surgical residency at the Yale-New Haven Hospital. He has just completed a three-month period of service at the Albert Schweitzer Hospital in Deschapelles, Haiti, which he describes as "the most memorable experience of my life."

Elliott W. Stevens, Jr. (8050 Maple St., Fairchild Air Force Base, Wash. 99011) will finish his two-year tour of duty in the Air Force in September, 1969, at which time he plans to begin a clinical fellowship in pulmonary disease and allergy at Duke. He and his wife Blanche are considering Greensboro as their future hometown and place of private practice.

1967

Charles L. Clarke, Jr. (FV3218010, CMR #3361, APO San Francisco, Calif. 96235) completed his internship at the University of Washington in Seattle before beginning a 30-month tour of duty as a captain with the Air Force in Okinawa in August. He is assigned to the 51st U.S.A.F. Dispensary at Naha. His wife Karen and twin daughters, Robin and Gray, joined him in September.

After completing his service in the Air Force, Chuck hopes to return to a residency in obstetrics and gynecology.

Howard D. Homesley (744 Bresslyn Rd., Nashville, Tenn. 37205) has begun a three-year residency in obstetrics and gynecology at Vanderbilt University Hospital. After serving two years in the Army, he hopes to begin the practice of obstetrics and gynecology in North Carolina in 1973.

Linda G. Hall Jackson (10391 Luke St., El Paso, Texas 79908) interned in pediatrics at St. Christopher's Hospital for Children in Philadelphia, the pediatric department of Temple University. She is now married to Howard P. Jackson, a UNC graduate (zoology) from Fayetteville, who is a second lieutenant in the Army Air Defense, stationed at Fort Bliss, Texas. Since no residencies are available in El Paso, Linda is postponing her residency in pediatric psychiatry for two years, until her husband is out of the Army and back in graduate school. Meanwhile, she is working in the outpatient department of Thomason General Hospital, a municipal hospital serving predominantly Mexican Americans.

Robert H. Keiter (I-8 Colony Apts., Chapel Hill, N. C. 27514) is a first-year resident in psychiatry at NCMH.

Scott G. Kleiman (1130 S. Michigan, Apt. 2613, Chicago, Ill. 60605) is in a four-year orthopedic residency at the University of Chicago. He will enter the Air Force for two years of active duty after completing his residency program.

Scott was married in March, 1968.

Joseph T. McLamb (3601 Richard St., Nashville, Tenn. 37215) is in the first year of a residency in general surgery at Vanderbilt after which he plans to enter the Air Force.

J. M. Morton (910 Hanover St., Aurora, Colo. 80010) is taking his postgraduate training in military service, and is beginning a pediatric residency at Fitzsimons General Hospital.

When he wrote, he and his wife were expecting their second child "any time now." He reports that "Army life is good, training excellent."

Gerald Pelletier, Jr. (2791 USAF Hospital, Hill AFB, Utah 84401) completed an internship in surgery at Parkland Memorial Hospital in Dallas, Texas, and is now a flight surgeon at Hill Air Force Base.

Albert L. Roper II (Box 495, U. S. Naval Hospital, Balboa, San Diego, Calif. 92134) is a lieutenant in the Navy Medical Corps and a first-year resident in otorhinolaryngology.

Joel E. Rothermel (345 West 58th St., New York, N. Y. 10019) is taking a one-year residency in general surgery at the Roosevelt Hospital in New York City. Next July he will begin a residency at New York Orthopedic Hospital at the Columbia-Presbyterian Medical Center.

In February, Joel presented a paper at the New Orleans meeting of the Southern Medical Association on "The Changing Prognosis in Hemophilic Arthropathy," co-authored by Dr. R. B. Raney.

1968

James C. Little, Jr. (2835-B Teakwood Ct., Winston-Salem, N. C.) is taking an internship in medicine at the North Carolina Baptist Hospital. He plans to return to NCMH next July as a first-year resident in obstetrics and gynecology.

James M. Nesbitt, Jr. (1743 Mohawk Ave., Charleston, S. C. 29407) is taking a medicine-pediatrics internship at the Medical College of South Carolina. Next July he plans to go to Charlotte Memorial Hospital for a two-year residency in family practice (one year in medicine and one in pediatrics) before his two-year tour of duty with the Air Force.

Rutherford B. Polhill, Jr. (2144 Hillside Circle, Birmingham, Ala. 35209) plans to stay at the University of Alabama for the first year of his pediatric residency. Rud and his wife, the former Martha Witt, have two children: R. B., III (Ruddy), age 4, and Martha Scoville (Scotty), age 2.

David M. Rubin (20 Bogardus Place, Apt. 3H, New York, N. Y. 10040) will stay in New York for one year of residency at Babies and Childrens of Columbia Presbyterian before entering the Army.

In Memoriam

ROBERT LINDSAY BUGDEN '68
1941-1968

Bob was born in New York City on April 13, 1941, and died there on November 12, 1968. The span of time between these two dates was regrettably brief but sufficient, nevertheless, to reveal clearly a man and a developing career in medicine of outstanding proportions.

Bob grew up in Fayetteville, New York, where his father is a highly respected thoracic surgeon. Following a year at Hamilton College, 1959-60, he transferred to the University of North Carolina where three years later he was awarded an A.B. degree in Zoology. During his college years, Bob was diligent and developed scholarly disciplines that when coupled with his exceptional talents led to his achieving honor status in mathematics and the sciences. Summertime jobs as a hospital orderly and later an operating room technician strengthened his interest in medicine.

Upon entering medical school here in 1964, he had a clearly defined goal. He wished to become an excellent surgeon and was enthusiastic about working as hard as necessary to achieve this aim. But it would be a mistake to speak only of Bob's high standards of personal performance and his disciplined scholarship. His extraordinary vigor spilled over into all his activities; for example, skiing, swimming, and travel. Bob was outstandingly debonair. His gentlemanly instincts and social graces made him a joy to his associates. Friends recall the pleasure Bob derived from quietly offering, in his well-modulated voice, the well-turned compliment which often encouraged a shy person to enjoy more fully a social occasion.

Bob continued to develop his talents during medical school and quickly gained the respect of his classmates. His cultural and medical backgrounds were enriched in the summers by first, a European tour

and subsequently, special work in psychiatry and pathology. His academic excellence, outstanding personal attributes and promise for future accomplishments were recognized by his election to Alpha Omega Alpha.

His excellent record led to his being selected for an internship in surgery at the Roosevelt Hospital in New York City. Bob's father had been closely associated with the Roosevelt Hospital staff when it served as a unit in the Armed Forces overseas during World War II. During his internship, Bob was highly effective, appearing to enjoy surpassing the expectations of his teachers and colleagues.

Bob is survived by his parents, Dr. and Mrs. Walter Bugden, a brother, Wallace F. Bugden, and a sister, Lee Bugden.

John T. Sessions, Jr., M.D.

HOUSE STAFF ALUMNI NEWS

1955

Joseph D. Corpening (720 Grove St., Salisbury, N. C. 28144) practices pediatrics at the Children's Clinic in Salisbury, in association with two other pediatricians.

1956

Sheldon Oscar Burman (Route 1, North Hatley, Quebec, Canada) is Professor and Chairman of the Department of Thoracic and Cardiovascular Surgery at the University of Sherbrooke School of Medicine in Sherbrooke, Quebec and is "trying frantically to learn French." The Burmans have three children, Allison Beth (4), Jocelyn Holly (3), and a baby, Harrison Emory Guy.

1958

Robert W. Whitener (1024 Professional Village, Greensboro, N. C. 27401) is president of the Southeastern Group Psychotherapy Society, a regional affiliate of the American Group Psychotherapy Association. He presided over a group therapy institute held at Grove Park Inn in Asheville in August, 1968.

1959

Faith N. Ogden (Star Route, Sharon, Vt. 05065) writes that she "moved to the hinterlands in 1965 in order to acquire leisure," but that "professional demands are intruding." She serves as a psychiatric consultant to three mental health agencies, two private child-oriented agencies, an institution for retarded adolescents, a state prison, and a child-care center under the Office of Economic Opportunity. When she is not traveling in connection with her professional activities (within a radius of 50 to 90 miles), she enjoys the 40 acres on her mountainside, the garden, her sister's lunch counter and thrift shop, and "thoughts of enough leisure time to revisit former habitats and friends."

1960

W. Morris H. Noble (3095 Pacific Ave., San Francisco 94115) was in the Army Medical Corps from 1960 to 1962. From 1962 to 1964 he served assistant residencies at San Francisco General Hospital and the University of California Hospitals. Since 1964 he has been practicing internal medicine in San Francisco and teaching at the University of California School of Medicine, where he is now Assistant Clinical Professor of Medicine. He was certified by the American Board of Internal Medicine in 1965 and is on the active staff of the Children's Hospital and St. Francis Hospital in San Francisco. He enjoys the combination of teaching and practicing.

Morris married Winifred Brady in 1962, and they have a son, Morris H., Jr., born in January, 1968. Their first son, Christopher Coleman, died of meningitis in July, 1968, at the age of 4.

1961

Richard P. McClintock, Jr. (555 S. Dora St., Ukiah, Calif. 95482) is a dermatologist in private practice. He was certified by the American Board of Dermatology in September, 1968.

1962

Herbert F. Johnson (847 S. Newport, Tampa, Fla. 33606), served as a radiologist on the teaching staff of Fitzsimons General Hospital for three years and then spent a year in Vietnam with the Third Evacuation Hospital. After spending another ten months as chief of the Radiology Service at the U. S. Army Hospital Specialized Treatment Center at Ft. Gordon, Ga., he left the Army having attained the rank of lieutenant colonel. He is now engaged in the group practice of radiology in Tampa.

1963

Warren D. Carter (John Umstead Hospital, Butner, N. C. 27509) was promoted from Director of Rehabilitation to Assistant Superintendent of John Umstead Hospital on July 1, 1968. His home address is 2507 Wilson St., Durham, N. C. 27705.

1964

Branch L. Fields, Jr. (114 E. Perimeter, Lackland Annex Air Force Base, Texas 78227) is a member of the staff of Wilford Hall U.S.A.F. Hospital at Lackland Air Force Base. He is in the Section of Infectious Disease of the Department of Medicine.

1965

Charles P. Nicholson, Jr. (Box 746, Morehead City, N. C. 28557) was admitted into the American College of Surgeons on October 17, 1968.

1968

James E. Collins (822 N. Elm St., Greensboro, N. C. 27401) opened his office for the private practice of psychiatry in Greensboro on July 1, 1968.

Vasiliki Moskos (3 Dana St., Apt. 12A, Cambridge, Mass. 02138) is in the first year of a residency in child psychiatry at Children's Hospital Medical Center and Judge Baker Guidance Center.

Annual Medical Alumni Association Meeting

Charles A. Speas Phillips ('44).

The annual meeting of the Medical Alumni Association's Officers, Councilors, District Chairmen, Fund Committee, Visiting Committee, Advisory Committee and Nominating Committee, was held on October 19, 1968, at the Faculty Lounge of the Morehead Planetarium. Among the non-officer speakers were **Chancellor J. Carlyle Sitterson**, representing the University administration; **Dr. Christopher C. Fordham, III** and **Dr. John B. Graham** in their capacity of associate deans, and **Dr. George D. Penick**, as Editor of the **Bulletin**.

Julian S. Albergotti, Jr. ('55) and Dean Taylor.

W. Reece Berryhill ('25), John O. Perritt, Jr. ('50), and Lewis S. Thorp, Jr. ('50).

Past-president H. McLeod Riggins ('22) and President Davis ('42).

James H. M. Thorp ('57) and George D. Penick ('44).

Dean Isaac M. Taylor, President James E. Davis, Charles L. Herring ('55), James H. M. Thorp, and H. Haynes Baird ('40).

At the forthcoming Medical Alumni Days to be held in Chapel Hill on April 23-24, 1969, the following classes will also have special reunions:

1919	1933	1939	1959
1929	1934	1949	1964

(Continued from Page 33)

12. Frenk, H.: Analog computer methods and some technical problems in automatic photomicrography, *Am. J. Med. Electronics 1:* 14, 1963.

13. Noe, F. E.: Computer analysis of curves from an infrared CO2 analyzer and a screen-type airflow meter, *J. Appl. Physiol. 18:* 149, 1963.

14. Goldschmidt, H., and Lindgren, P.: An electronic interval recorder for measuring peripheral blood flow and heart rate, *J. Appl. Physiol. 17:* 169, 1962.

15. Cleland, W. W.: Computer programs for processing enzymes kinetic data, *Nature 198:* 463, 1963.

16. Benchimol, A., Akre, P. R., and Diamond, E. G.: Clinical experience with the use of computers for calculation of cardiac output, *Am. J. Cardiol, 15:* 213, 1965.

17. Borum, E. R., Chapman, J. M., and Massey, F. J.: Computer analysis of Frank-lead electrocardiographic data recorded in an epidemiological study, *Circulation 32:* 55, 1965 (Part Two).

18. Berson, A. S., Stallmann, F. W., Broders, J. H., and Pipberger, H. V.: Telephone transmission of electrocardiograms and on-line computer diagnosis, *Am. J. Med. Electronics 4:* 35, 1965.

19. Finney, D. J.: The design and logic of a monitor of drug use, *J. Chronic Dis. 18:* 77, 1965.

20. Bluestone, R., and Harris, A.: Treatment of heart-block with long-acting isoprenaline, *Lancet 1:* 1299, 1965.

21. Cooper, J. K., McGough, T., Ostrow, B., and Caceres, C. A.: Role of a digital computer in a diagnostic center, *J.A.M.A. 193:* 911, 1965.

22. Corday, E., Bazika, V., Lang, T. W., Pappelbaum, S., Gold, H., and Bernstein, H.: Detection of phantom arrhythmias and evanescent electrocardiographic abnormalities. Use of prolonged direct electrocardiorecording, *J.A.M.A. 193:* 417, 1965.

23. Criscitiello, M. G., and O'Rourke, R. A.: Documentation of transient arrhythmias by constant cardiac monitoring, *Am. J. Cardiol. 16:* 779, 1965.

24. Kurland, G. S., and Pressman, D.: The incidence of arrhythmias in acute myocardial infarction studied with a constant monitoring system, *Circulation 31:* 834, 1965.

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26. Talbott, G. D.: The hot-line to the heart. Prototype of a specific inquiry system in coronary artery disease literature, *J.A.M.A. 196:* 964, 1966.

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THE BULLETIN
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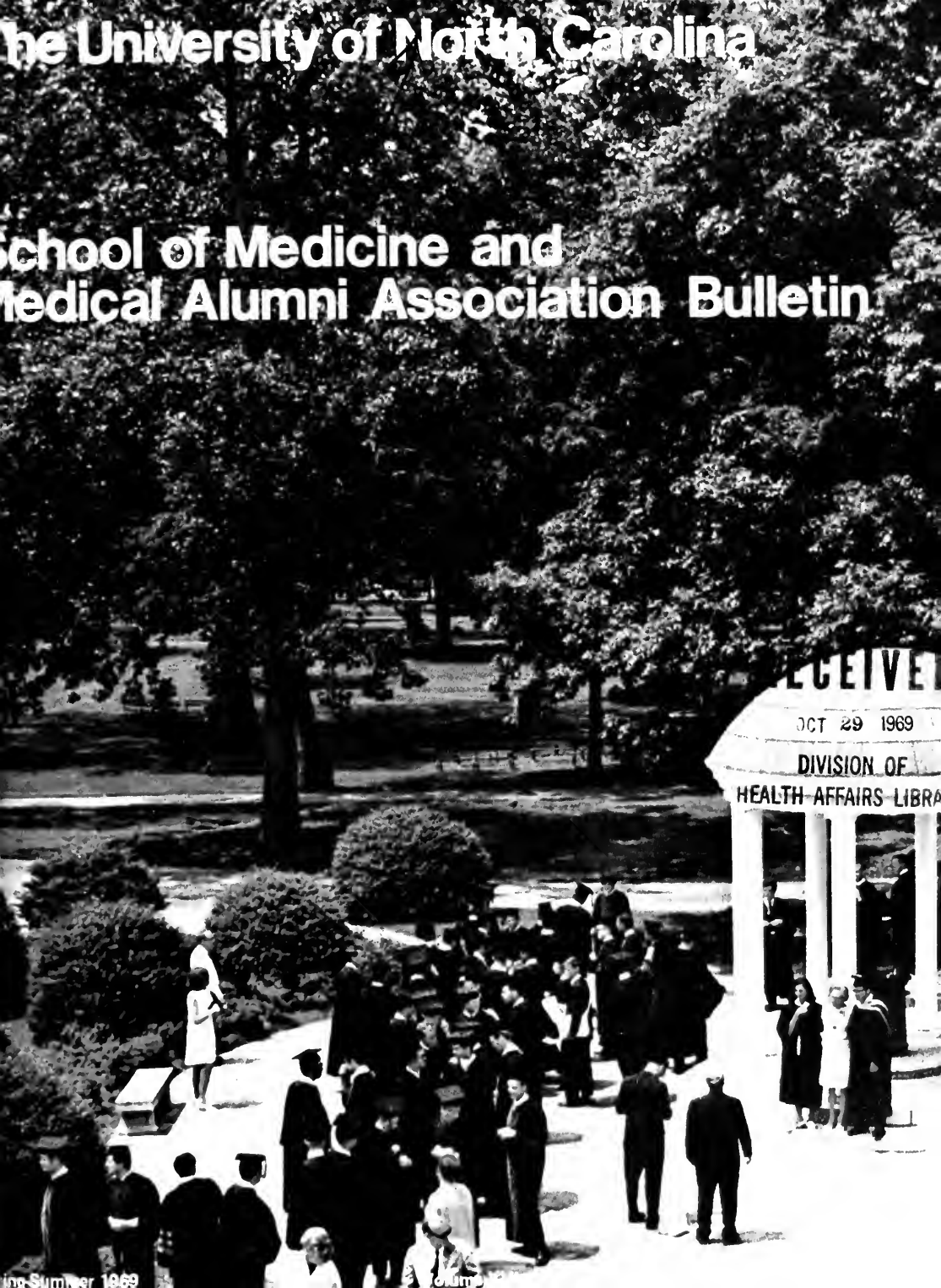
The University of North Carolina

School of Medicine and Medical Alumni Association Bulletin



ing Summer 1969

 (see p. 74)

The University of North Carolina

School of Medicine and Medical Alumni Association Bulletin

Spring-Summer 1969 Volume XVI No. 2

IN THIS ISSUE

TO THE CLASS OF 1969:

Commencement each year is a rewarding time for all of us because it marks completion of the medical school phase of the professional careers of another medical class. Thus the Class of 1969, to whom this issue of **The Bulletin** is dedicated, has left us. But like all classes, it is, in a real sense, still with us because in its years here it has contributed to the structure and form and spirit which constitute this school's real essence. The contributions of the Class of 1969 are many and unique. Of particular note I think is the leadership the class has given to the trend towards greater involvement of students in phases of the school's work other than the prescribed courses of study. This move, profound and wholesome, will make the school a different place in the future, and a better one. The Class of '69 goes with our best wishes and highest expectations.

two-thirty o'clock in the afternoon

monday, june the second

nineteen hundred and sixty-nine

Presiding: ISAAC MONTROSE TAYLOR, M.D., Dean, School of Medicine

Graduation

PRELUDE: Rhosymedre
Ralph Vaughn Williams

PROCESSIONAL: Hippocrates' March
Rudolph Kremer
Professor Rudolph Kremer, Organist

INVOCATION
Fred William Reid, Jr.
Chaplain, North Carolina Memorial Hospital

A WORD TO THE GRADUATES
Dr. Floyd W. Denny, Jr.

PRESIDENT OF THE SENIOR CLASS
Charlie Richard Fleming

PRESENTATION OF HOODS
AND ALUMNI CERTIFICATES

THE HIPPOCRATIC OATH
The Graduating Class in Unison

BENEDICTION—THE PRAYER OF MAIMONIDES
The Graduating Class in Unison

RECESSIONAL: Maimonides' March

POSTLUDE: Chorale Prelude on "In dir ist Freude"
J. S. Bach

Honoring the graduates, their families and friends, tea was served in Graham Memorial immediately following the ceremony.

By FLOYD W. DENNY, M.D.
Professor and Chairman, Department of Pediatrics

President Fleming, Dean Taylor, Dr. Baird, graduates of the Class of 1969, wives, parents, families, and friends:

I feel honored that Dick Fleming asked me to make this presentation, and I want you to know that I am pleased to be here. I consider it a privilege to be able to share with you at this most important time some of the thoughts that I, as chairman of a Department of Pediatrics, have about medicine in this country. I should like to speculate with you about what medicine will be like tomorrow, who will do it, where it will be done, and what your responsibility to it will be. I must make it clear that these are speculations, my own speculations, and while they may be shared by many I am sure there are a like number who will disagree. In spite of this controversy, I decided to proceed with this subject, because I feel rather strongly about some of the points that I intend to stress. The remarks that I make will be directed to the members of the graduating class. I make no apologies for this, but I hope that they will be of interest to the rest of the audience also.

First, I want to project with you into the future and try to visualize what the practice of medicine will be like 10, 20, or 30 years from now. In my opinion, the next few years are going to see great changes in the patterns of medical practice as we know them today. Changes need to be made, and unless we, as physicians, make these changes it seems probable that our government is going to make them for us. Before I go further, I want to make clear that I do not think that the practice of certain specialties of medicine will change drastically in the foreseeable future. It is obvious that medicine is becoming more complex each year and because of this the job of the consultant becomes more difficult and more important. His training will continue to be long and arduous, his services more and more in demand, and the way he practices probably will not be altered too greatly. The large change that I foresee is the way that health and medical care will be delivered in a primary or first-line way to the people of this country. It seems to me that we are rapidly approaching the time when those of you who are interested in practicing primary medicine must consider ways in which you can provide for the health and medical needs of all of the people all of the time.

Let me explain further what I mean by this. At the present time, when a physician goes into practice in a community, he spends months or years building up his practice, because it takes time for patients to be referred by other physicians or for word to get around the community that Dr. X is a good doctor. There is nothing basically wrong with this except that, in general, the people who seek medical care are those who have the money and the intelligence to get help or are so ill that the optimal time of being treated has passed. Regardless of what the reasons are it is clear that large segments of our population do not get good medical care through the mechanisms that are now provided for them. I am suggesting to you that it will be the responsibility in the future of all of us, but particularly the primary physician, to see that health and medical care is provided to all of the people in this country.

It is obvious that we do not have enough doctors to take care of all the people of this country by conventional means. Logically, the next question then is, how will the job get done? I believe this responsibility is going to fall the lot of the pediatrician, the internist, and the family physician, who by my definition combines the practice of pediatrics and internal medicine. It seems appropriate to separate the roles that the pediatrician and the internist will play in the future. It is clear that some internists and pediatricians will continue to be consultants in their respective fields and their training and practice will be directed toward this end. On the other hand, I foresee that some pediatricians, some internists, and the family physician will assume a role which today is found far too infrequently—that of assuming the responsibility of seeing that every person is given proper health and medical care. Since there will not be enough of these physicians, the problem is how they will provide this care. I question seriously that the methods of practice as we know them today are necessary. I believe that there will arise shortly new methods for the delivery of medical care and new people to deliver it, so that it might be possible to give good health and medical care to many more people with the number of physicians who are being trained. It seems to me that we must decide quickly what jobs must be done by physicians themselves and what can be done by people who are less well trained or are trained in other disciplines. I think the roles of the nurse, the social worker, the psychologist, the speech therapist, the educator, the administrator, and others, are going to become more important in the day-by-day practice of medicine. In addition, the development and use of new health workers, such as nurse practitioners or physicians' assistants show promise and should continue. I would be most reluctant to think that the physician would not continue to be the hub of the wheel around which all of these revolve, because I think he alone should have the understanding of how all of these disciplines can work to the greatest benefit of his patients. Furthermore, unless the physician coordinates all the care of his patient and remains the person with whom the patient relates primarily, the fragmentation that plagues medical care today will continue. Precisely how these people can be used in concert to deliver health and medical care to more people must be learned. It is here that we in the medical center should play the greatest role. As we develop better methods for the delivery of medical care, you as physicians just beginning your careers should adopt these new methods. The most important

concept that I believe must permeate our thoughts in all of these endeavors is the need to develop better ways of providing medical care to more people of this country.

Although I believe that the patterns of practice of some consultants will not be changed greatly, the practice of others must be altered. I predict that the obstetrician and the psychiatrist must and will change the way that they deliver care in the future. Until we have enough obstetricians to deliver personally every baby in this country, some alternative must be found. I believe quite strongly that every woman who bears a baby should have the advantage of being under the care of an obstetrician. I do not know how this can be accomplished or what the exact relationship of the obstetrician to the actual delivery of the baby should be. I would guess, however, that the obstetrician can develop assistants who will work under his supervision, so that expert care can be provided for more mothers. Many of the same concepts apply to the delivery of psychiatric care to larger numbers of people.

The next area of speculation is where the medicine of tomorrow will be practiced. I have only two points that I would like to discuss with you in this regard. The first is the necessity for taking front-line or primary medicine closer to the consumer. Since it seems certain that there will not be enough doctors for each community to have its own physician, a possible solution would be to put offices or clinics manned by physicians' assistants, nurse practitioners, or some other comparable medical person close to the patient. When this is done, it should remain the responsibility of the physician to supervise these people and see that good medicine is delivered. An important aspect, however, is that there should be medical facilities and care within easy access of the people. The second point that I want to speculate about is the changing character of hospitals. I would guess that some hospitals as we know them today will change greatly in the future. The complexities of medical care will force this change. It would seem inevitable that large referral hospitals, such as North Carolina Memorial Hospital, will become more and more specialized and the physical layouts of the hospital will reflect this change. Already there are some specialized areas in our hospital such as the intensive care unit, the cardiac monitor unit, and the infant acute care unit, and I will be disappointed if some of the new additions to our hospital do not include even more areas of specialized care. Such areas, however, will be far too expensive and not necessary for many hospitals. There will be developed, I would guess, hospitals which will be adapted to the needs of a particular area. The smaller community hospital would not be too different from what it is today, larger community hospitals should be built to handle patients with more complex diseases or operative procedures and referral hospitals will handle the still more difficult patients. Because the building of large and complex facilities takes such a long period of time, I hope very much that we can begin to think now of what is going to be necessary for the future so that the lag between the idea and the reality would not be too great.

I should like to turn now to your responsibilities in this ever-changing and complex profession. I am going to list your responsibilities as follows: to medicine, to your patient, to yourself, and to your family. These are not listed in order of priority, because I am not able to do that for you. First, I want to talk about your responsibility to medicine. In thinking about this subject I looked up the meaning of the word **medicine** in Webster's **New International Dictionary.** According to this source, medicine is "the science and art dealing with the maintenance of health and the prevention, alleviation or cure of disease." This is an all-encompassing profession, then, that you have entered. If you have chosen to be a consulting specialist, I encourage you to get the very best training available, so that you can do the best possible job. I hope that most of you have chosen the specialty of being a primary physician. If you have, remember that this is probably the most difficult and important specialty of all. I beg of you too to prepare yourselves thoroughly to do this job and do it well. In my estimation, you must be prepared to take a minimum of three years' training, or possibly four, and this should be done within the framework of departments of pediatrics and internal medicine. I hope very much that you will not slight the scientific aspects of medicine which receive so much stress today, but I also hope that you will give enough consideration to the art of medicine and to better ways of delivering medical care.

The next responsibility that I want to mention is to your patient. This seems quite obvious because if people did not need physicians for health and medical care there would be no such profession as medicine. Unfortunately, in this era of scientific discovery and technical detail, the patient is frequently forgotten. I hope you will remember that patients are the reasons we are physicians and the reasons we have practices and hospitals. As Sir William Osler wrote, "We are here not to get all we can out of life for ourselves, but to try to make the lives of others happier." Hippocrates, known best to us by his Hippocratic oath, had this to say about the physician's responsibility to his patients:

> Sometimes give your services for nothing, calling to mind a previous benefaction or present satisfaction. And if there be an opportunity of serving one who is a stranger in financial straits, give full assistance to all such. For where there is love of man, there is also love of the art. For some patients, who conscious that their condition is perilous, recover their health simply through their contentment with the goodness of the physician. And it is well to superintend the sick to make them well, to care for the healthy to keep them well, but also to care for one's own self, so as to observe what is seemly.

This last part of Hippocrates' statement introduces the next aspect of your responsibility, which is to yourself. As you prepare to enter the next phase of your career, satisfy yourself that you are doing what is best and right for you. One of the real tragedies that I have observed in medicine is the physician who is trying to do a job that he doesn't really want to do. In addition, once you have your future plotted take mind

of your physical and emotional health and pace yourself so that you get the most out of life.

Finally, you must consider your responsibility to your family—your parents, as well as your wife and children. Don't ever forget what they have meant to you in the past and and what they can mean to you in the future. In many instances your mothers and fathers have made tremendous sacrifices to see that you have gotten this education and that you are well prepared to face the life ahead of you. Let them enjoy your trials, your successes, your family, and you in the future. Regarding your wives, I have some very special words. I am continually amazed at what they do for you during your years of medical school and what they are prepared to do for you during your years of house-staff training. Many of them have supported you, raised your children—yes, even tolerated you—during these trying years. To your wives, then, I think you have extra and important responsibilities.

Before I stop this afternoon, I want to address myself to the importance of the graduate of the University of North Carolina School of Medicine. To those of us who have worked with you over the years, you are indeed very special people. Experience with students of our medical school has shown us that you possess those qualities which place you in great demand in medical circles all over the country. You are excellently prepared to face the medical problems of today and tomorrow, and you will do well. Remember as you leave us that you represent not only yourselves, but also the University of North Carolina School of Medicine. The special place that I expect you to hold as physicians has been described by Robert Louis Stevenson:

> There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarelier still the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization . . . Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a thousand embarrassments; and what are more important, Heraclean cheerfulness and courage.

With this I wish you good luck and Godspeed.

SENIOR CLASS PRESIDENTIAL ADDRESS

By C. RICHARD FLEMING, M.D.

Dean Taylor, Dr. Baird, faculty, parents, and friends:

I would like to join in welcoming you to our hooding ceremony and at the same time thank you for sharing this memorable day with us.

It was on another memorable day, September 15, 1965, that the members of this graduating class walked through the doors of MacNider Building and into another world called "medical school." As we convened for the first time it became obvious that, surprisingly enough, not all medical students are of the same breed.

We were soon to discover just how different we were in so many ways.

Our backgrounds ranged from engineering to teaching school in Africa; our ages from 19 to 27. We came from ten different states, but—for the benefit of any money-appropriating legislators here today—56 of 67 in this graduating class are Tar Heels born and bred. Our reasons for coming to medical school were numerous. Some of us had been prematurely exposed to hospitals and were intrigued by the art and science of medicine. Others probably came in an attempt to pattern their lives after an admired physician. Still others probably considered a career in medicine as an opportunity to aid the suffering. But I honestly believe that, if the truth be told, most of us did not know our exact reasons for choosing medicine as our profession.

Well, there we were on the first day in 1965, so different in many ways, yet all with one objective in mind—to be deemed worthy of an M.D. degree on this day in 1969. I am sure we all sat nervously as Dean Taylor rose and said, "Welcome, students," and then turned to the professors and said, "Work 'em, faculty." And work us they did! Day after day for two years we attended lectures and laboratories and took quizzes in an attempt to master a seemingly never-ending barrage of facts. During our first year we were constantly reminded, but never quite realized, that the tremendous amount of scientific minutiae we were learning was to make us better physicians. Dr. Louis Welt, Professor and Chairman of the Department of Medicine, must have sensed our anguish when, during the 1966 Whitehead Lecture, he said:

> Be assured that your studies of the basic sciences are, in fact, basic to your care of the ill, and as you proceed in clinical medicine you will simultaneously have to reexamine the knowledge of the basic sciences. Medicine will become more of a science, not less. If you are to achieve skill in the art of medicine you then, must be more of a scientist, not less. If the basic premise of this argument is intact, there is no room for a dichotomy between the science and art of medicine, because they are woven into a single cloth which can be yours to wear.

Encouraged by these words of wisdom, we dove enthusiastically into our second year and, in our pathology course, our first confrontation with the disease process. At the year's end, we first sensed the art of medicine as we watched our clinical preceptors at the bedside. Some of us will never forget our first patient work-up: our preceptors wrote more corrections than we did history, and it was a sad beginning to a happy ending.

During the third year we donned our fresh white uniforms and joined the ward teams in caring for patients. Physically, this was to be the hardest year in medical school. We were all awkward as we stumbled through our initial procedures; but as the year progressed our tasks became less cumbersome. We now know the wet palms and knocking knees that are synonomous with presenting a patient at professor rounds under the critical eye of a departmental chairman. After each such experience, however, our confidence would rise a notch; and by the year's end we felt the pride and sense of accomplishment that follow hard work. After rotating through medicine, surgery, pediatrics, and psychiatry, most of us began considering our future specialties.

Last year the Curriculum Review Committee, made up of both students and faculty members, concluded that by the time a student completes his third year in medical school, he usually knows what his career goals in medicine will be. Hence they raised the question, "Why then shouldn't the students be allowed to pursue these goals during their senior year in medical school?" As a result of this committee's work our class has been the first to experience an elective senior year. This program allows the student to concentrate on subspecialty rotations and, if he wishes, to take courses for credit at other medical centers, both in this country and abroad. One may also take courses in the UNC undergraduate school or in other graduate schools here in Chapel Hill. Fourth year students have always had a reputation for running low in adrenalin; but, thanks to this curriculum change, we have remained genuinely interested in pursuing our future goals at this early age.

The Curriculum Review Committee, which was responsible for this change, was created our freshman year in order to give students and faculty an opportunity to work together in deciding how medical education could be bettered. At a time when student-faculty relationships on the undergraduate level seem to be at a low ebb, this committee represents only one example of the excellent student-faculty relationships that exist in our school. Here, the faculty has encouraged the students to become partners in the enterprise of medical education, and the students have responded. The enthusiasm of the students who are serving on many important committees in the medical school complex is proof enough that students today can be constructively rather than destructively active.

Just this past month, the medical school announced that students would be included on the Admissions Committee next year. These students will interview candidates for medical school and will have a voice in the committee's decisions. Now if we could just get students on the Student Promotions Committee, Medical School would really be a breeze!

Regardless of what a person brings with him to medical school in the way of knowledge, character, and desire, a lot of what happens to him depends on what the school offers him and asks of him. This school has offered us a dynamic institution which is constantly expanding and one whose reputation and contributions to medicine are widely recognized. The faculty has asked a lot of us by setting the extremely high standards which I hope we can live up to.

For four years now the members of this class, who seemed at the beginning to have so little in common, have been facing the same hurdles—and today is proof that we made it to the finish line. In achieving this goal we have become a closely knit group and have developed a great deal of mutual respect. Later this month, the members of the class will disperse to all corners of the United States to begin another leg of our journey. Thirteen of our class members, however, are remaining in Chapel Hill next year for internships. I am sure that they will continue to convince people that the Class of 1969 is the best this school has ever produced.

Illustrated by Ernest Craige, M.D., Professor of Medicine.

SENIOR HONORS AND AWARDS FOR THE YEAR 1968-1969

The Isaac Hall Manning Award
THEODORE HYDE KIESSELBACH

The James Bell Bullitt Award
CHARLIE RICHARD FLEMING

The Roche Award
HENRY MOORE MIDDLETON III

The George C. Thrasher, Jr., Award
DAVID SAMUEL SHEPS

The Upjohn Award
CARL ELLIS FISHER

The Mosby Book Awards
JOHN HUGH BRYAN
WILLIAM THOMAS ROWE

The Lange Awards
THOMAS RUSSELL GRIGGS
GEORGE PATRICK GUITERAS

The Merck Awards
STEWART LANE ELLINGTON
CHARLES DAYTON KIRK

Alpha Omega Alpha Honor Medical Society*
STEWART LANE ELLINGTON
THOMAS RUSSELL GRIGGS
GEORGE PATRICK GUITERAS
THOMAS CAMERON MacCAUGHELTY
JESSE FRANKLIN SANDERSON, JR.
DAVID SAMUEL SHEPS

The Student Research Paper Awards

The Deborah C. Leary Memorial Award
THEODORE HYDE KIESSELBACH
"Fluorescent Antibody Demonstration of Coagulation Factor XIII in Human Megakaryocytes"

National Foundation Second Award and Student Research Day Second Award
PAUL EUGENE BROWN
"Genetic Variants in Hemophilia B"

American Society of Clinical Pathologists Meritorious Student Research Award and Sheard-Sanford Award
THEODORE HYDE KIESSELBACH
"On the Effect of Thrombin on Factor XIII"

Tenth Annual National Student Research Forum Grand Award
THEODORE HYDE KIESSELBACH
"Localization of Coagulation Factor XIII (F.XIII) in Human Bone Marrow Megakaryocytes by Fluorescent Tracing"

Tenth Annual National Student Research Forum Honorable Mention
PAUL EUGENE BROWN
"Genetic Variants of Hemophilia B: Characterization by Means of a Specific Factor IX Antibody and the Ox Brain Prothrombin Time Test"

The W. R. Berryhill Merit Scholarship
HENRY MOORE MIDDLETON III

Alumni Merit Scholarships
JOHN HUGH BRYAN
STEWART LANE ELLINGTON

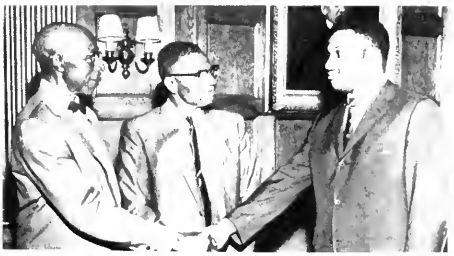
* Elected Junior Year: John Hugh Bryan, Theodore Hyde Kiesselbach, Henry Moore Middleton III, William Thomas Rowe.

CLASS OFFICERS

President	CHARLIE RICHARD FLEMING
Vice-President	JAMES GILBERT WALLACE
Secretary	KAREN CAMPBELL SORRELS
Treasurer	HARRY STATON LATHAM

SENIOR BANQUET

Sponsored by the
Medical Alumni Association
Carolina Inn
May 30, 1969

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THE CLASS OF 1969

1.
Frederick Patterson Avis (Southboro, Mass., age 29) received his A.B. degree from Brown University in 1964, with a major in biology. He and his wife, the former Maureen Ryan of White Plains, N.Y., have two sons: Frederick Patterson, Jr., and Christopher Sean. Fred plans to specialize in surgery and is taking his post-graduate training at NCMH.

2.
Edward Doy Aycoth (Charlotte, N.C., age 26) is a 1964 graduate of N.C. State University, with a B.S. in chemical engineering. After an internship at Spartanburg General Hospital in Spartanburg, S.C., he plans to take a residency in radiology.

3.
H. Wallace Baird (Charlotte, N.C., age 26) is a 1965 graduate of UNC, where he received an A.B. in zoology. Wallace and his wife, Phyllis Jean (also of Charlotte), have a daughter, Teresa Lee. They will remain in Chapel Hill while Wallace serves his internship in pathology at NCMH. Wally is the son of alumnus H. Haynes Baird ('40), the current president of the Medical Alumni Association.

4.
Edward H. Brenner (Brooklyn, N.Y., age 25) received his A.B. from UNC in 1965, with a major in chemistry. He is married to the former Annette Faith Appel, also of Brooklyn. After a rotating internship at Walter Reed Army Hospital in Washington, Ed plans to specialize in ophthalmology.

5.
John G. Briggs, Jr. (Hendersonville, N.C., age 26) graduated from Carson-Newman College in 1964, with a B.S. in biology, then took a year of graduate study at the University of Tennessee. John is interning in plastic surgery at Baptist Memorial Hospital in Memphis, Tenn.

6.
Paul Eugene Brown (Huntersville, N.C., age 25) completed a premedical course at UNC in 1965. His wife, before their marriage, was Patricia Benfield of Charlotte. After a year's surgical internship at the University of Kentucky Hospitals in Lexington, Gene plans to take a residency in orthopedic surgery. This year, Gene received the National Foundation Second Award, the Student Research Day Second Award and the Tenth Annual National Student Research Forum Honorable Mention for his research on hemophilia B.

7.
John Hugh Bryan (LaGrange, N.C., age 25) majored in English at UNC, receiving his A.B. in 1965. He is a member of Alpha Omega Alpha, having been inducted in his junior year; in addition, he was granted Alumni Merit Scholarships in his junior and senior years and the Mosby Book Award in his junior year. Hugh and his wife, the former Nancy Bennett of Shelby, will remain in Chapel Hill while Hugh is serving a pediatric internship at Memorial Hospital. He plans to specialize in pediatric hematology.

8.
Walter Woodrow Burns, Jr. (Charlotte, N.C., age 31) attended Davidson College and is a graduate of the U.S. Naval Academy, where he received a B.S. degree in 1960. Woody and his wife Mary Jane (also of Charlotte) have one son, named for his father. They are

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living in San Diego, Calif., while Woody is serving an internship in surgery.

9.
Nassif John Cannon, Jr. (Farmville, N.C., age 26) received his A.B. from the University of Notre Dame in 1965. Nass spent the summer of 1968 in Scotland, studying at the University of Edinburgh under the tutelage of Dr. Richard Scott, chairman of General Practice. After an internship at the University of Alabama, in Birmingham, Nass plans to take his residency training in internal medicine, specializing in cardiology.

10.
Don Clarence Chaplin (Columbia, N.C., age 25) is a 1965 graduate of UNC, with an A.B. in chemistry. On June 8 Don was married to Jeneane Surratt of Burlington, N.C. After an internship in medicine at the University of Alabama Medical Center in Birmingham, he plans to take special training in medical oncology.

11.
William Dallas Clark (Waynesville, N.C., age 26) majored in physics at UNC, receiving his B.S. in 1965. He and his wife, the former Paula Stanford of Winston-Salem, have a daughter named Jennifer. Bill is interning in pathology at NCMH.

12.
Bertram Watts Coffer (Sanford, N.C., age 27) took a premedical course at N.C. State University, graduating with a B.S. degree in 1964. He is married to the former Jeanne Gardner of Portsmouth, Va., and they have one child, Bertram Watts, Jr. After completing his internship in surgery at Duke Hospital, Bertram plans to remain in Durham for a general surgical residency at Duke.

13.
Robert Samuel Cromartie III (Fayetteville, N.C., age 25) is a 1965 graduate of UNC, with an A.B. in chemistry. He and his wife, who before her marriage was Elaine Collier of Fayetteville, have a son, the fourth Robert Samuel Cromartie. Sam is serving a surgical internship at Jackson Memorial Hospital in Miami and plans to specialize in neurosurgery.

14.
Bruce Atwood Dalton, Jr. (Lenoir, N.C., age 25) took his premedical work at Davidson College, graduating with a B.S. degree in 1965. His wife is the former Denise Dentan of Port Washington, N.Y. After an internship in pediatrics at Fitzsimons General Hospital in Denver, Col., Bruce plans to take a residency in pediatrics and to complete twenty years of military service before beginning private practice in western North Carolina.

15.
Andrew Davidson (Chapel Hill, N.C., age 25) received his A.B. from UNC in 1965, majoring in French. He is married to a Chapel Hill girl, the former Mary Fleming, and will remain in Chapel Hill for an internship in surgery at Memorial Hospital. He plans to take his residency training in otolaryngology. Andy is the brother of Alan Davidson, a member of last year's graduating class.

16.
John Lorraine Davis III (Greensboro, N.C., age 26) graduated from UNC in 1964, with an A.B. in political science. His wife, before their marriage, was Mary Kendrick Fisher of Atlanta, Ga. They have a daughter, Lorraine Asbury. John, who is interning at the Univer-


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sity of Alabama Medical Center in Birmingham, plans a career in surgery.

17.
Stewart Lane Ellington (Jacksonville, N.C., age 26) received his A.B. in English from UNC in 1965. He is a member of Alpha Omega Alpha and was chairman of the Honor Council. In his sophomore and junior years, he won Alumni Merit Scholarships and this year won the Merck Award. He and his wife, the former Janet Price of Wilmington, N.C., are living in Salt Lake City while he serves an internship in medicine at the University of Utah Medical Center. After three years in the Navy, Stewart plans a residency in medicine and then to enter community practice in internal medicine.

18.
Eugene Beverly Ferris (Atlanta, Ga., age 26) received his B.S. degree from Davidson College in 1965. He is taking his postgraduate training in surgery at Georgia Baptist Hospital in Atlanta.

19.
Carl Ellis Fisher (Greensboro, N.C., age 26) is a 1965 graduate of Duke University, with an A.B. in chemistry. He was vice president of his class for two years and a member of the Whitehead Council for the same period of time. While a senior, he was president of the Whitehead Medical Society and the recipient of the Upjohn Award. His wife, the former Margaret Hines, is from Tifton, Ga. They are remaining in Chapel Hill while Ellis serves a mixed internship in medicine and pediatrics at NCMH. He plans to obtain joint certification in internal medicine and pediatrics, and eventually to join a group for the practice of family medicine.

20.
Charlie Richard Fleming (Durham, N.C., age 26) majored in English at UNC, graduating in 1965 with a A.B. degree. He was president of the class and a member of the Whitehead Council during his last three years in medical school. During his second, third and fourth years he won—respectively—the William deB. MacNider Award, the Lange Award and the James Bell Bullit Award. Dick and his wife, the former Teresa Ann Tyren of Durham, have one child, Courtney. After completing an internship in medicine at Williams Shands Hospital in Gainesville, Fla., he plans to take further training in internal medicine or possibly radiology. Dick is the son of alumnus Ralph G. Fleming ('34).

21.
Hugh Judd Grant, Jr. (Raleigh, N.C., age 25) received his A.B. from UNC in 1965. His wife, before their marriage, was Annlynn Davis of Grifton, N.C. They are living in Augusta, Ga., while Hugh serves a rotating internship at Eugene Talmadge Memorial Hospital. He plans to take his residency training in obstetrics and gynecology.

22.
Frank Benton Gray (Durham, N.C., age 27) majored in music at Duke University, where he received his A.B. in 1964. He was an organizing member of the Student Health Action Committee and served as its president during the past year; he was also chairman of the Student-Faculty Day Committee for 1969. Frank is married to the former Anna Alligood of Washington, N.C. They will live in his home town while he serves an internship in surgery at Duke Hospital. He then plans to take residency training in general and thoracic surgery, with special interest in transplantation.

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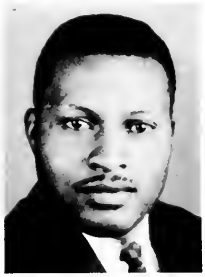

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23.
Thomas Russell Griggs (Churchland, N.C., age 25) graduated from UNC in 1965, with an A.B. in chemistry. He is a member of Alpha Omega Alpha. Tom's wife, who before their marriage was Patricia Deal, is from his home town of Churchland. They are living in Baltimore while Tom is interning in medicine at Johns Hopkins Hospital.

24.
George Patrick Guiteras (Washington, D.C., age 26) received an A.B. degree from the University of the South in 1964, with a major in biology. A member of Alpha Omega Alpha and of the Whitehead Society, Pat served on the editorial committee of the **Bulletin** during his sophomore and senior years and was an organizing member of the Student Health Action Committee. During the summer of 1968 he worked as a clinical clerk at the National Hospitals for Nervous Diseases in London. He was this year's recipient of the Lange Award. Pat is married to a Chapel Hill girl, the former Judy Andrews. He plans an academic career in neurosurgery or plastic surgery and is serving his surgical internship in Canada, at McGill University's Royal Victoria Hospital in Montreal.

25.
Lynous Willard Hall (Raleigh, N.C., age 30) is a 1961 graduate of Shaw University, where he received a B.S. in biology. He and his wife, who was Barbara Morris of Richmond, Va., have two children, Melody and Raphael. His internship in obstetrics and gynecology is at Strong Memorial Hospital in Rochester, N.Y. After completing his residency training in this specialty, he plans to enter private practice in Raleigh or Durham.

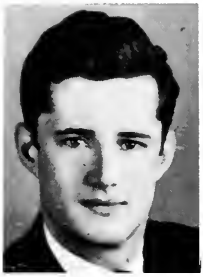
26.
Edward Wheeler Haselden, Jr. (Columbia, S.C., age 25) took his premedical course at Davidson College, where he received the B.S. degree in 1965. His wife, who before their marriage was Katherine Edwards is from Greenville, S.C. They are living in Danville, Pa., while Ed is interning in family practice or pediatrics at the Geisinger Medical Center. He is planning to take his residency training in the field of medicine, pediatrics, or both.

27.
Ada Dorothy Hayes (Chula Vista, Calif., age 26) is a 1964 graduate of Cornell University (zoology and chemistry). Instead of taking an internship, Adadot is serving as a fellow in hematology at the UNC School of Medicine. She plans to enter the new field of neonatology.

28.
Clifford Craig Heindel, Sr. (Signal Mountain, Tenn., age 30) received his A.B. degree from UNC in 1960, with a major in math. In 1962 Makerere College awarded him a diploma in education. Craig and his wife, the former Sally Parks Wolfe of Mt. Olive, N.C., have three children: Christian, Stephanie, and Clifford Craig, Jr. After completing his surgical internship at NCMH, Craig plans to take further training in neurosurgery.

29.
Peter Lawrence Heymann (Asheville, N.C., age 24) received an A.B. in English from UNC in 1965. His internship in internal medicine is at Philadelphia General Hospital.

30.
James Thomas John, Jr. (Laurinburg, N.C., age 25) took his premedical work at Davidson, graduating in 1965 with a B.S. degree. Tom spent the fall quarter of his



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senior year at the Department of Medicine of the University of Queensland, in Brisbane, Australia. After completing a medicine internship at Vanderbilt University Hospital in Nashville, Tenn., he plans to take a residency in internal medicine.

31.
John Gardner Johnston (Charlotte, N.C., age 26) received his A.B. degree from UNC in 1964, with a major in history. John was an organizing member of the Student Health Action Committee and served as its first president. His wife, who was Laurie Hurt before their marriage, is from his home town of Charlotte. Their daughter, named Laurie Paige, is called "Paige." John plans to specialize in pediatrics, and is taking his internship at the Children's Orthopedic Hospital and Medical Center of the University of Washington in Seattle.

32.
Barry Edward Kahan (Chapel Hill, N.C., age 24) finished his undergraduate work at Tufts University in 1965, graduating with a B.S. in chemistry. Barry is married to a Mount Airy girl, the former Ann Kathryn Puckett. After completing his internship in radiology at Meadowbrook Hospital in East Meadow, New York, he hopes to return to UNC for residency training in radiology.

33.
Richard Alan Keever (High Point, N.C., age 27) is a 1963 graduate of UNC, where he received his A.B. in history. He is a winner of the Lange Award. On May 10, 1969, he was married to Sarah Chipman of Winston-Salem. They will live in Chapel Hill while Dick serves his internship in surgery at NCMH. He then plans to take a residency in otolaryngology.

34.
Theodore Hyde Kiesselbach (Bloomington, Ill., age 28) spent two years at Johns Hopkins University before coming to UNC, where he received a B.S. in medicine in 1962. He won an Alumni Merit Scholarship in 1964 and the Mosby Book Award in 1968. A member of Sigma Xi and Alpha Omega Alpha, he served as vice president of AOA in 1968. In addition to his M.D. degree, Ted received a Ph.D. in experimental pathology under Dr. Robert H. Wagner. During his senior year he won three national awards for research papers: the highest award given by the American Society of Clinical Pathologists "for the most outstanding research paper in clinical pathology entered in the 1969 competition among medical students in the United States," and the Sheard-Sanford Award for research in clinical pathology, and the first place in the Mead Johnson Excellence of Research Award Competition in the Medical Student - Attendance Category at the SAMA - Univ. Tex. Med. Branch National Student Research Forum held in Galveston, Texas, April 24-26, 1969. Locally, he also won the Isaac Hall Manning Award and the Deborah C. Leary Memorial Award.

Ted and his wife, who was Nancy Scott from his home town of Bloomington, have two children. When he completes his internship in pathology at the University Hospital of San Diego County in La Jolla, Calif., Ted plans to take postgraduate training in immunopathology. There is a strong possibility that he may return to Chapel Hill for part of this training.

35.
Charles Dayton Kirk (Asheville, N.C., age 25) majored in political science at UNC, graduating in 1965. He won scholastic honors during his junior and senior years in medical school and this year he was also the recipi-


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ent of a Merck Award. Dayton and his wife Kathryn (from Washington, D.C.) have a baby daughter, Dayna Elizabeth, and will live in Gainesville, Fla., while he interns in surgery at the University of Florida.

36.
Harry Staton Latham (Bethel, N.C., age 23) received his B.S. in medicine from UNC in 1965. Harry was class treasurer during each of his four years in medical school. He is serving an internship in pathology at Stanford Medical Center in Palo Alto, Calif., and eventually hopes to practice in pathology or internal medicine at a community hospital in the Southeast.

37.
Edward Huguenin Lesesne, Jr. (Knoxville, Tenn., age 25) graduated from UNC in 1965, with an A.B. in chemistry. He and his wife, who was Jane Dankworth of Arlington, Va., have a daughter named Catherine Piper. Ned is taking a rotating internship this year at the U.S. Naval Hospital in San Diego. He plans to enter private practice after completing his Navy service and residency training.

38.
C. Clement Lucas, Jr. (Lucama, N.C., age 27) is a 1964 graduate of UNC, where he received an A.B. in history and chemistry. During his senior year in Medical School he served as national president of the Student American Medical Association. In this capacity he traveled to London, Moscow, and Helsinki, in addition to attending numerous meetings in this country. Clement plans to specialize in internal medicine and is taking a straight medical internship at the University of Kentucky in Lexington.

39.
Thomas Cameron MacCaughelty (Durham, N.C., age 24) received an A.B. in political science from Duke University in 1965. While at Duke, he was a William Neal Reynolds Scholar, on the dean's list, and a member of Pi Sigma Alpha, national political science honorary society. At UNC, he was inducted into Alpha Omega Alpha. His wife, the former Michelle Hatschek, considers both Greensboro, N.C., and Burlingame, Calif. as "home towns." Cameron plans either a practice or academic career in internal medicine and is taking a straight medical internship at Herbert C. Moffitt Hospital of the University of California Medical Center, in San Francisco.

40.
Henry John MacDonald, Jr. (New Bern, N.C., age 26) majored in zoology at Duke University, graduating with an A.B. degree in 1965. Harry was married in June to Linda Louise Wolff of Miami, Fla. They will live in Chapel Hill while he completes his internship in surgery at NCMH. He plans to specialize in otorhinolaryngology.

41.
Robert James MacNaughton, Jr. (Charlotte, N.C., age 25) received his A.B. degree in 1965 from Johns Hopkins University, where he majored in liberal arts. James married Mary Sandra May of Clinton, S.C., on May 31. He plans to specialize in general surgery and is taking his surgical internship at William A. Shands Hospital in Gainesville, Fla.

42.
Donald Miles MacQueen (Clinton, N.C., age 31) is a 1960 graduate of Davidson College, where he received his A.B. in history. His wife, Lynn, is from Nashville,


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Tenn. Don is interning in pediatrics at the Medical College of South Carolina in Charleston.

43.
James Tift Mann III (Raleigh, N.C., age 27) received his B.S. degree from N.C. State University in 1965. He and his wife Dabney (also from Raleigh) have two children, Billy and Dabney. Tift plans to specialize in internal medicine and is serving his medical internship at NCMH.

44.
Cynthia Ellen Swisher McMillan (Roaring Gap, N.C., age 25) attended UNC-G for two years before transfering to UNC-CH, where she graduated in 1965 with an A.B. in chemistry. Cynthia is married to Robert G. McMillan of Dalton, Ga. Her internship in pediatrics will be served at the University of Tennessee's Memorial Research Center and Hospital in Knoxville, Tenn.

45.
Quentin Alexander Mewborn, Jr. (Farmville, N.C., age 26) received an A.B. in chemistry from UNC in 1965. His wife, before their marriage, was Judith Ann Moore of Walstonburg, N.C. They are living in Norfolk, Va., while Alex serves a rotating internship at Norfolk General Hospital. He is thinking of going into family practice.

46.
Henry Moore Middleton III (Raleigh, N.C., age 26) is another chemistry major who received his A.B. from UNC in 1965. He won the McLeod Riggins Scholarship and the Mosby Book Award and during his senior year was president of Alpha Omega Alpha and recipient of the W. R. Berryhill Scholarship and the Roche Award. He is married to a girl from his home town, the former Dorothy Ingram. After completing his medical internship at Vanderbilt University Hospital in Nashville, Henry plans to take residency training in internal medicine and then practice this specialty as a member of a group.

47.
Walter Dickson Moss III (Mooresville, N.C., age 26) majored in psychology at the University of Virginia, where he received an A.B. degree in 1965. Dick is serving his internship in medicine at the University of Kentucky Hospital in Lexington.

48.
George Edward Newsome (Goldsboro, N.C., age 25) graduated from UNC in 1966 with a B.S. in medicine. While in medical school, he served as honor council representative. George and his wife Carolyn, who is from his home town of Goldsboro, will remain in Chapel Hill while he serves an internship in surgery at NCMH. He plans to specialize in otorhinolaryngology or orthopedics.

49.
David Williams Pearsall, Jr. (Greenville, N.C., age 25) attended Davidson and Dartmouth colleges, receiving his A.B. in English in 1965. On June 14, David was married to Marjorie Baum of Milledgeville, Ga. His internship in general surgery will be served at the University of Wisconsin Hospital in Madison.

50.
Houston Harris Pittman (Whiteville, N.C., age 23) received his B.S. degree in medicine from UNC in 1966. His wife, Brenda Jean, is from his home town of Whiteville; their daughter's name is Hope Adâre. Harris is

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interning at NCMH and is considering a career in neurosurgery.

51.
James Scott Powers (Raleigh, N.C., age 23) is another 1966 graduate of UNC who received his B.S. in medicine. During his freshman and sophomore years in medical school he was a member of the Curriculum Review Committee, and during his junior year was a member of the Student-Faculty Day Committee. Jim and his wife Marianne (also from Raleigh) have one child, Laura Elizabeth. After a rotating internship at Letterman General Hospital, an Army hospital in San Francisco, Jim plans to take residency training in internal medicine (gastroenterology), obstetrics and gynecology, or radiology.

52.
William Thomas Rowe (Asheville, N.C., age 25) majored in chemistry at UNC, receiving his A.B. degree in 1965. Twice a winner of the Lange Award, Tom was inducted into Alpha Omega Alpha during his junior year, and won the Mosley Book award in his senior year. Tom was married on June 21 to Betty Bullard of Belmont, N.C., and is serving a medical internship at Yale-New Haven Hospital in New Haven, Conn. When his three years of Army duty are behind him, he expects to take his residency training in medicine before beginning a career in academic medicine or in private group practice. His chief fields of interest at present are immunology, nephrology, and metabolism.

53.
Joseph Dwight Russell (Kinston, N. C., age 25) graduated from UNC in 1966, receiving a B.S. in medicine. During his third and fourth years in medical school, he served on the Educational Policy Committee. He is married to a girl from his home town, the former Sarah Poole. Joe is serving a mixed internship in pediatrics and medicine at NCMH and plans to take his residency training in these fields, eventually becoming certified by both specialty boards. He wants to enter private practice in North Carolina.

54.
Jesse Franklin Sanderson, Jr. (Morehead City, N.C., age 28) graduated from UNC with an A.B. in English in 1964. He is a member of Alpha Omega Alpha. He and his wife, the former Virginia Morris (also of Morehead City), have two children, Jess and Amy. Frank is serving a mixed internship in medicine and surgery at the U.S. Naval Hospital in Oakland, Calif. He plans to take his residency training in either medicine or surgery and then to enter private practice.

55.
David Samuel Sheps (New Haven, Conn., age 24) was an English major at UNC, graduating with the A.B. degree in 1965. In his second year of medical school he won the Lange Award; in his third year, scholastic honors. While a senior he was inducted into Alpha Omega Alpha and received the George D. Thrasher, Jr. Award. During the summer of 1968 he worked as a clerk in the Department of Medicine at Guy's Hospital in London. David is taking a medical internship at Mount Sinai Hospital in New York City.

56.
James William Snyder (Thomasville, N.C., age 25) is a 1965 graduate of UNC, where he received an A.B. in chemistry. His wife, Caryl Sue, is from Carolina Beach, N.C. Jim is taking an internship in internal medicine at the State University of Iowa Hospitals in Iowa City.


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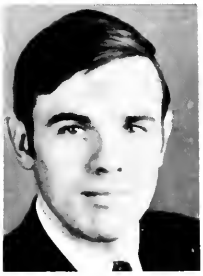
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His present plans are to enter the private practice of internal medicine.

57.
Karen Campbell Sorrels (Spindale, N.C., age 26) spent two years at Indiana University before transferring to UNC, where she majored in zoology, receiving her A.B. degree in 1964. Karen, who is married to Benjamin Sorrels, served as class secretary for four years. She is interning in pediatrics at the Medical College of South Carolina in Charleston.

58.
William Stewart (Salem, Mass., age 29) received a B.S. in biology from Boston College in 1961 and then took further work in biology at the Graduate School of Arts and Sciences of Boston College, receiving his M.S. in 1965. He and his wife Deanna (from Danvers, Mass.) have two sons, John and Mark, ages 5 and 2. After completing his internship at Strong Memorial Hospital in Rochester, Bill plans to specialize in urology and eventually to enter private practice.

59.
Franklin Truett Tew (Clayton, N.C., age 26) received his A.B. degree from UNC in 1965, with a double major in chemistry and English. He is married to a girl from his home town, the former Peggy Flowers. After completing his internship in medicine at the University of Alabama Medical Center in Birmingham, Frank plans to take further training in internal medicine, with a possible subspecialty in cardiology. He would like to participate in a group practice in the Southeast, preferably in North Carolina.

60.
John Glenn Thornburg (Charlotte, N.C., age 26) majored in chemistry at UNC, where he received his A.B. degree in 1965. His wife, who is also from Charlotte, was Sally Wyatt before their marriage; they have one child. They will be living in Augusta, Ga., while John serves an internship in pediatrics at Eugene Talmadge Memorial Hospital.

61.
John Chester Triplett (Roxboro, N.C., age 26) was a chemistry major who received his A.B. degree from UNC in 1965. He and his wife, the former Gloria House of Hobgood, N.C., have a daughter, Chandra Michelle. After completing his internship in medicine at Geisinger Medical Center in Danville, Pa., John plans to take residency training in internal medicine and eventually to establish a practice in North Carolina.

62.
Wade Robert Turlington (Jacksonville, N.C., age 30) received the B.S. degree from UNC in 1961, with a major in business. His wife Rita is a Canadian from Tillsonburg, Ont., and they have one son, Wade. Bob's internship will be served at Mercy Hospital in Springfield, Ohio; when this is completed, he plans to take residency training in general surgery.

63.
James G. Wallace (Charlotte, N.C., age 26) took his premedical work at Davidson College, graduating with a B.S. degree in 1965. During his second and third years at medical school Jim served as treasurer and vice president of the student body; during his fourth year, he was class vice president. He is married to the former Monte Hyatt Nicholson from his home town of Charlotte; he and his wife have one child, Monte N. Jim is taking an internship in surgery at the University of Florida in Gainesville.

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64.
Nelson Barnett Watts (Asheville, N.C., age 24) is a 1966 graduate of UNC, with a B.S. in medicine. His wife, who before their marriage was Bettie Ann Griffin, is from Asheville. They will be living in Augusta, Ga., while Nelson serves an internship in internal medicine at Eugene Talmadge Memorial Hospital.

65.
Carl Thomas Whiteside (Greensboro, N.C., age 26) was a psychology major at UNC, graduating with an A.B. degree in 1965. He and his wife Sandra (also from Greensboro) are the parents of Cass and Jennifer. After completing a medical internship at Touro Infirmary in New Orleans, Tom plans to take residency training in psychiatry and eventually to practice in North Carolina, perhaps in a group. He also hopes to teach part time.

66.
Russell Everett Williams, Jr. (Robersonville, N.C., age 26) graduated from UNC in 1965, receiving his A.B. degree in chemistry. During his fourth year in medical school, he was a member of the Honor Council. Russ will be in Lexington, Ky., serving an internship in medicine at the University of Kentucky Hospitals. His present goal is to practice internal medicine in a group.

67.
William Faison Wilson (Clinton, N.C., age 25) received his B.S. degree from Davidson College in 1965. He is married to the former Carol McCormick of Hollywood, Fla. After an internship in family practice at Letterman General Hospital in San Francisco, Bill plans to take a residency in internal medicine.

THE 1968 WHITEHEAD LECTURE*
A DIBBLE FOR MEDICAL EDUCATION

By JAMES A. BRYAN, M.D.
Assistant Professor of Medicine

The Whitehead Lecture, named in honor of the first dean of the University of North Carolina School of Medicine, is ordinarily given by a member of the faculty well established in the community of scholars—senior in rank, mature in philosophy, and influential in shaping the policies of the medical school and University. This lecture traditionally reflects an understanding of the collective roles to be played by the students and the teachers in this school, and some of the goals of medical education to be sought by the segment of humanity bound together here. Possessing none of the attributes of previous Whitehead lecturers, I was overwhelmed by the invitation to deliver the address this year.

At about the same time that I received the invitation, there occurred in my life two "happenings" which, though completely unrelated, will both help me to "tell it like it is" at the School of Medicine in 1968.

The first happening was the gift of a **dibble.** This object of utility, which I had never encountered before, was identified for me by several friends with agricultural connections. Webster defines it as "a small hand implement used to make holes in the ground for plants, seeds, or bulbs." My farmer friends tell me, however, that the term is no longer reserved for hand implements but is also applied to improved models using foot power to break the ground. In other words, a **dibble** is a ground breaker.

The second "happening" was some action this past summer by a group of students within the Schools of Medicine, Nursing, and allied health sciences. This action involved me, involved some of you, will (I hope) involve more of you, and perhaps will lead to some changes in the way things medical happen in Chapel Hill and Durham, in NCMH, and even in the medical school and University.

* Delivered on September 18, 1968

During the past school year, there was formed a group which is now known as the Student Health Action Committee (SHAC). The first meetings of this group were devoted to talking about medicine and society in general, voicing dissatisfaction with the failure of medicine to take leadership in meeting the needs of the sick poor, and to wondering how the members of the group, as students now and later as professionals, could provide some curative action. From observations in the clinics and wards, and from studying the "health" statistics, these students deduced that something was wrong with the **way** the poor were receiving medical care—something which might explain why medical care is ineffectual in improving their health. They deduced further that bad health might have something to do with poverty. This latter deduction, of course, is an old one, and one which has led to much political turmoil from the time of ancient Greece. It also has led to feelings of guilt, defensiveness, and withdrawal by the medical profession—including that part of the profession that stands in the shade of the university.

After several months of very frustrating talk and of carrying out several small "feeler" projects, the group this summer launched programs among medically disadvantaged people in Durham and Chapel Hill. In Durham, weekly question-and-answer sessions concerning health problems were held in the Edgemont community; then, at the community's request, several clinics for pre-camp physicals were conducted. The money thus saved enabled the United Fund to send more children to camp.

In Chapel Hill, members of the group attended the meetings organized in the Northside community by community workers paid through the Office of Economic Opportunity. In these meetings the students offered to act as "health advocates" for the people in the community—that is, to help these people find a way to get health care here in Chapel Hill. As you may or may not realize, obtaining such care in the tangle of clinics held at NCMH can be a major task.

As an example, one problem which came to light through these contacts was that of impetigo in the children. This of course is a minor illness, and few parents feel justified in sacrificing a day's pay in order to take one or more of their children to a clinic for treatment of "dew sores." On the other hand, as you who have been through pediatrics know, these sores can harbor strains of streptococci and lead in some instances to acute glomerulonephritis. In response to requests for help with this problem, night dermatology clinics were organized by the students, who recruited preceptors and obtained drug supplies through the detail men of the drug companies. Many children were treated at these clinics.

The students working in Durham and Chapel Hill have come to the consensus that continuing medical contact in these communities is important. Pediatric and adult screening clinics are being set up for both communities. These clinics will meet at regular intervals and feed patients into the hospital and clinic facilities at

Duke and NCMH as necessity, reality, and good medical care dictate. I am sure that as much effort will be required to carry out the function of seeing that patients receive needed medical attention through existing systems as in getting the neighborhood clinics off the ground.

During the past few months, SHAC has had to establish itself, declare its aims, write a constitution, and look for money. I would like to quote the first part of their constitution, which expresses the beliefs of this organization as follows:

> The Student Health Action Committee (SHAC) believes quality health care should be available to all individuals with respect for the human dignity of all men regardless of financial ability, social standing and race. SHAC maintains that health science education should promote opportunities for health science students to develop those skills and understanding necessary to achieve our stated objectives.
>
> To this end SHAC establishes the following goals and principles:
>
> 1. Development of an awareness and understanding of the varied aspects of one's environment, including financial, social and cultural mores and how they relate to individual health, family health, and community.
>
> 2. Improvement of health services for the medically indigent population by making more efficient use of the existing health care delivery system and, where indicated, the establishment of new programs and the replacement of old programs that have failed to meet the health needs of the community.
>
> 3. Promotion of an awareness of vocational opportunities in the health science professions.
>
> 4. Promotion of a more meaningful relationship between the community and the health professions through mutual understanding, mutual endeavors, and mutual accomplishments.

These lofty and liberal desires could be subscribed to by any man of good will; in fact, on first reading the document, it sounds like Old Glory, motherhood, and the heavenly kingdom rolled into one. Careful thought, however, will bring to light some of the potential demands of such noble aims.

How is such social action relevant to medical education, and how can all this activity, with its emotional, intellectual, and physical requirements, be reconciled with the definition of university ("a body of persons gathered at a particular place for the disseminating and assimilating of knowledge in advanced fields of study")? How does it fit into a system of medical education overwhelmed by the rapid accumulation of new information and techniques in the fields of basic science and clinical medicine? How can it fit in with a discipline struggling with the ethical issues and economic realities of applying all of this new scientific knowledge for the highest good of the individual patient and of humanity in general?

Medical education, here as elsewhere, is an interaction between persons already recognized as physicians and scientists, and persons who desire recognition as being able to fulfill the responsible role of physician.

Society's machinery for identifying certain of its members as physicians involves testing, licensing, taxing and certification, but hinges fundamentally on the granting of a medical degree by a university. The key variables in deciding who the future healers are and what their orientation will be then settles down to questions of who is admitted and what is the general orientation of the university (the community of scholars) with which the medical school is affiliated.

Both the University and the School of Medicine represent part of the "establishment"—just as the Department of Defense and its program for Viet Nam, Mayor Daley, the Democratic Party, the Fort Dietrick laboratories for chemical and biological warfare, and policies of the NCMH clinics represent part of the "establishment." In our democracy we have operated under the assumption that our collective wills are reflected in what is done by the established organization. The business of reflecting wills, however, is carried out by complicated administrative machinery which moves very slowly, not only at the national level but also in the structures known as universities. The built-in frictions in this machinery lead sometimes to overheating and explosion.

The bit of social machinery to which we are most intimately related is this school and its hospital. This particular medical school is located in a village. Dean Berryhill tells me that the question of its location, decided in the late 1940's, aroused many strong feelings, and that the strongest argument for its being located in Chapel Hill was the desirability of its being geographically contiguous to the community of people known as the University of North Carolina. In other words, patients should come to Chapel Hill—at least enough of them to provide a sound background for the teaching of medicine. The decision thus far has proved sound. Being located in a village in the South has not interfered with the University's making significant contributions to society in general, and to the problems of medicine in particular.

What now is the collective will for the aims of medical education here, and how can this will be tempered by wisdom? Our location has, perhaps, given us some freedom to deal abstractly with the problems future physicians will face. The problems are closing in on us, however, and the relative power position of those determining the direction of medical education has changed. The power of the student should not be underestimated.

The UNC medical student today is better educated than he was in 1952. The student body represents a broader cross section of the people, not only of this state but of the nation as a whole. The student's understanding of who he is and who he is to be has been colored by the realities of the draft, the hydrogen bomb, the student riots, the Black Power movement,

and the materialistic orientation of America. All of these realities are emotion-packed and require his attention, thought, and energies. When he gets here, he enters a community whose values revolve in general about the intellect but whose members are absorbed in such nonintellectual pursuits as jousting with legislative bodies for money, sitting on commissions advising governmental agencies as to what should be done with our money, and going out into the established channels of power in the world.

Nevertheless, as the chancellor of this university, Dr. J. Carlyle Sitterson, pointed out last spring,[1] it is generally considered most important that the base of the university reside in those who maintain their aloofness from the realities of society and from its power, so that the traditional role of the intellectual—that of creator and critic—can be sustained.

The appealing and powerful argument by Dr. Sitterson for protection of the **university** from **society** requires the consideration of certain philosophic questions. Is there any difference between being a member of the university and being a member of the medical school?

What stance toward social reality should be taken by the teacher in the medical school?

What contact with the world should the medical school make?

After his tenure as professor of medicine at Johns Hopkins, the new model school in Baltimore, Dr. William Osler wrote the following evaluation of the clinical teachers of the school. See if it is applicable to the teachers here at UNC.

> "Cabined, cribbed, confined," within the four walls of a hospital practising the fugitive and cloistered virtues of a clinical monk, how shall he, forsooth, train men for a race the dust and heat of which he knows nothing and—this is a possibility! Cares less? I can't imagine anything more subversive to the highest ideals of a clinical school than to hand over young men who are to be our best practitioners to a group of teachers who are **ex officio**, out of touch with the conditions under which these young men will live.[2]

This letter, written in 1911 by one of the most famous of the full-time clinical teachers, voiced misgivings about the relevancy and appropriateness of the medical teaching performed at the dawn of the knowledge explosion. Since that explosion, the dilemma of the schools has been compounded.

The peculiar requirements for maintaining validity and relevance of a university and the medical education it purveys are, however, related to fact as well as to philosophy. Current facts include:

1. A national Health Manpower Act that delivers only part of the moneys promised the medical schools.

2. The fact that federal research grants are being cut 15 per cent.

3. The fact that costs for patient care in the United have increased four times in the years that this hospital has been in operation, and that there are serious questions as to whether the nation is getting it's money's worth.

4. The fact that hospital beds are almost impossible to get at NCMH, even though a 35-bed unit has been closed for more than a year because of inadequate nursing staff.

5. The fact that there are no night or Saturday clinics at NCMH and that an emergency room visit costs $8.00; furthermore, a follow-up visit to a clinic for one member of a family of five making $50.00 a week would cost $5.00, exclusive of lab fees (which, by the way, range from $2.00 for a simple white cell count and $5.00 for a throat culture to approximately $100.00 for the studies generally considered essential for proper evaluation of a person with moderate hypertension—a disease affecting perhaps 20% of the Negro adult population of Chapel Hill and Carrboro).

Memorial Hospital with its clinics, the teaching base for the applied science known as medicine, is in a real squeeze—not only in terms of the source and disbursements of the funds that make it move, but also in determining the directions in which it is going to move. It must respond to communities which include not only students and teachers — intellectuals and activists alike — but patients of the Chapel Hill and Carrboro community who look to the hospital and its physicians for primary and consultative medical care, as well as the patients and physicians from Manteo to Murphy who look for delivery on the technological promises listed in the daily press.

In the midst of all these pressures on the system that has been established for the teaching of medicine comes a group of students, asking for themselves and for all of us—of all things—deeper social involvement and action. What in the world could have led these students to such a position? The medical school is ordinarily the school in the university with the least social awareness. Becoming a physician has, through the traditions of 3000 years, aimed the individual toward high technical competence, emotional neutrality, and orientation toward the welfare of his individual patient.[3] The demands on the person who is to achieve these goals, who is to become accepted and protected by society as a physician, have usually pulled him out of the firing line of social involvement. Is SHAC suggesting that this withdrawal is inappropriate for the times in which we live?

The established system has chosen the students in this school, including those already involved in SHAC, on the basis of what they have done as measured by various established yardsticks—including conformity to certain codes of behavior and measures of intellectual capability. The students who are here have the capability, right, and duty to examine what the established system has and has not done, to interpret what they find, and to bring pressure for change by their words and actions where change should take place.

I think that those of us already deep in the system of medical education and medical care found in the United States may not have had the vision, energy, intelligence, or courage to separate the trees of possible corrective action from the rapidly growing forest of social needs. In defense of our profession, it can be said that medical leadership is examining the inadequacies of those of us currently in the action and is taking a new look at medical education. The curriculum changes that are occurring, slowly and painfully, at this school are an example of some of the results. Elsewhere medical pundits (many of whom, I might add, are of the variety who sit in ivy-covered buildings or attend conferences in beautiful retreat centers) write about **The Coming Revolution in Medicine,**[4] analyze the **Trends in New Medical Schools,**[5] and give **Views of Medical Education and Medical Care**[6]—all books reflecting the frustrations brought about by the realization that medical science has mushroomed and the health of the people has not improved.

As has been pointed out, the place where our school touches the people is our hospital and its clinics. A physician and a sociologist have recently collaborated on a book called **Sickness and Society,**[7] which looks at a situation similar to ours and describes what happened during the hospitalization of 161 patients at a great eastern university and medical school. Dr. Franz Ingelfinger, editor of the **New England Journal of Medicine,** described the study as "an indictment—a revealing, dismaying, and sensational expose,"[8] which is the result of a hard look at the interactions between the people found in the hospital—particularly the doctors —and their patients. Although he characterized the book as an exposé and not as a scientifically performed study, he admitted that weaknesses in the system and in our own actions as physicians had been highlighted.

Sensational exposés are going to create increasing concern for the sickness in the social process called medical care, and the result will be pressure from outside the medical establishment for change in medical education. All of us recognize, of course, that medical care is not the only social process that is sick. The various means taken in various places such as Berkeley, Columbia, and Chicago to call attention to the sickness in society in general are **bona fide** symptoms of a serious underlying disorder in our country, and I, for one, am anxious that appropriate therapy be promptly applied.

As indicated by the sweeping generalities just used, my own understanding of society, social processes, and social interaction is so naive that I have to express myself in vague, medically oriented words. This is the reason I am hopeful that a new vine can grow in the garden of medical education—a vine that perhaps can be called **preparation for social relevance.**

I believe that the medical students in this school, in organizing SHAC and in pushing its goals, will be the **dibble** for planting the vine at this school. While we are waiting for the vine to grow and to grace this place with a setting for preparing some future physicians for roles as social leaders and for exposing others to life as it is, perhaps we can all, by observing and participating, learn to understand ourselves and our world a little better.

A lecture of this type should always be closed by relevant sayings. Two aphorisms come to mind. The first is connected with the A in SHAC; for actions **do** speak louder than words. The second derives from the physical fact that when a dibble is pushed into the ground, there is bound to be some resistance, which results in **friction** or **heat.** The heat which we will encounter will be in trying to choose between competing causes. The competition has become keen and the ground is very tightly packed with demands on your time and mine; therefore the heat will be fierce. I sincerely believe, however, that we at this medical school will (to mix metaphors) either have to "stand the heat or get out of the action."

The new action is going to be where the people are and where the people **hurt.** The medical school as part of the University should be the intellectual servant to the needs of the people, and SHAC's move to become part of the health action in Durham and Chapel Hill is forcing the school to follow. I hope we can follow with wisdom and effectiveness.

In 1957, Dag Hammarskjold wrote for all of us:

> Do not look back, and do not dream about the future either. It will neither give you back the past, nor satisfy your other daydreams. Your duty, your reward—your destiny—are here and now.[9]

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By C. CLEMENT LUCAS, JR. ('69)
President of the Student American Medical Association

Student activism has been present in all societies since beginning of time. Socrates, Aristotle, and Jefferson were active as students, and played vital roles in the founding of new societies. With the founding of societies, students have been a major force in causing a swing in the pendulum of history. Whenever a society has lost its student activism, it has failed. Not only did the ancient Greeks and Romans decay from without, but they became stolid and withered from within. They lost the ideas and zeal of their youth.

Our society has never really lacked students who assumed activist roles. In the early pilgrimages from Europe to North America, ships were filled with students who were seeking a new world in which to make their fortunes. From the rapid migration toward the Northwest Territory to the depression of the 1930's, students have been actively involved in many areas of our society.

Then what is so different about today? The difference is that the students who are assuming activist roles today number, not in the tens, but in the thousands. One has only to look at last year's success of Senator McCarthy in New Hampshire to realize that the student community is organized and is a potent force to be reckoned with.

With the growth of thousands of universities and community colleges since the end of World War II, students have been stimulated to find their role in determining the future of our society. The activism and energy of the student movement today are not confined to our own country but have developed in virtually every country in the world. To be sure, the students alone are not responsible for all this activity. They have had the support and sympathy of various segments of society in their endeavors.

It is well-known that this activism is rapidly spreading through the ranks of all students in the U.S. This has, perhaps, been more clearly articulated by students in the humanities, but today with the more enlightened and well-rounded basic preparation of medical students, the changing of medical curricula, and the increasing elective time, some medical students are finding time for deep reflection and to involve themselves in the very active expression of their ideas and beliefs.

Some students come from communities in which there is not effective delivery of health care, there is high infant mortality, and there are few physicians. They go to medical school emblazoned with a fervor to try to find some answers to getting health care to the people. Upon entering the medical school—providing he is that fortunate, and that either his MCAT scores or his color does not keep him out—the student is subjected to a rigorous disciplinary training which—as Martin Gross has pointed out—changes him "from a societal leader, intellectually and humanly . . . to a man of mediocre intellect, tradeschool mentality, limited interests, and incomplete personality—the contemporary Non-Renaissance Man."[1] As Arthur Douville recently noted "medical schools seem expressly organized to stifle independent thought, limit student contact with the outside world, and channel the interests of their increasingly restless inmates through the application of a kind of intellectual straight-jacket of poorly-balanced expectations . . . utilizing values which employ the practice of isolation and rigid social control."[2]

The medical student is therefore transformed into a technician with an instant recall of facts, but he is not the sensitive, effective, educated person who has compassion and believes in justice nor is he concerned for the local problems of health care based upon the concept that it should be available to every individual regardless of his social, economic, or cultural background. John W. Gardner has pointed out that "individuals who have been made to feel like cogs in a machine will act like cogs in a machine. They will not produce ideas for change."[3]

The enlightened medical student is not only concerned about educational processes that deny him his development as a total physician; he is also chagrined at the negation of responsibility by the medical school complex in reaching out into the community to deal with problems of health care. He sees the medical school, not as a force in the improvement of health care in this country, but as the "establishment" which seeks to perpetuate itself by adding another research project and another professor in order to get more funds from the government. He sees the medical school as trying to institute the new division of community medicine with no real understanding of what the total community consists of, or what total medicine is. He hears his professors saying in the halls of the medical school that there is no longer any need for the family practitioner, while he may, in fact, be taught by those who have never practiced medicine.

The medical student then, is torn between his experience in the medical school and his real knowledge of

what health care is like in his community. Bergner and Yerby recently noted "many of our medical schools are as out of step with contemporary problems and understanding of the social mechanism and impact of disease as they were out of step with modern scientific medicine at the time of the Flexner Report."[4]

These are the thorns of irritation that cause medical students concern and lead to the creation of new organizations and new methods for attacking these very real problems. McGarvey, Mullan, and Sharpstein expressed it this way: "The authoritarian tradition in medical education has systematically separated the medical student from the patient, from the community, from the allied professions and from those who determine his education. Unwilling to accept their traditionally passive role, many students have expressed their concern and have become involved with current health issues through the development of a new national coalition . . ."[5] of student activists. This coalition has developed because for years the medical school has denied its responsibility to the total community and in turn the development of the total physician.

For many years SAMA (Student American Medical Association) had the reputation of being a benign organization that offered little to its members except insurance. Deans, organized medicine, and students expressed contempt for it. Approximately 18 months ago, as a result of increasing concern and activism on the part of medical students, SAMA was rebuilt on the principles of concern, commitment, and action. Today, with new leadership and new enthusiasm, SAMA is moving forward into many areas, both on the national and on the local level.

To attain its objectives, SAMA has focused attention on three broad areas: (1) medical education, (2) community health, and (3) international health.

We believe that the development of a "compleat" physician begins early in his secondary school years and continues throughout his period of formal education, training and eventual practice as **leader** of the health team. The fundamental characteristics of the compleat physician of the future should be given more emphasis in the process of selecting students for admission to medical schools. Medical education itself should, in addition to supplying students with scientific skills, deepen and broaden their knowledge of human ecology, especially as it pertains to health.

This implies that medical education cannot reside solely in the halls of the medical school and the hospital. The student must obtain knowledge of the individual within the context of his family and community —and such knowledge can be acquired only if the student receives part of his education in the community. Through direct involvement he would become better acquainted with the people who need service, their reasons for seeking care, the ways in which they make entry into various subsystems of delivery of health care, the agencies which support them, their availability and accessibility, and the varying qualities and costs of the services needed. As a corollary, we believe that the future of American medicine is predicated upon the philosophy of family practice, and we cannot agree that the family practitioner will be as extinct as a dodo.

Further, this education should be extended beyond the borders of our country. We must not deceive ourselves into believing that the United States has all the answers, the best skills, and the most complete knowledge in seeking solutions to health problems. Other countries provide examples of health care from which we can learn much. For more adequate evaluation of our system of delivering health care and for suggestions as to ways to solve existing problems, it would be helpful for selected students to become involved in the systems of other countries. To be effective, this involvement requires both the exchange of information and on-the-site study and participation for our students.

The first National Student Conference on Medical Education was held early in February 1968 in cooperation with AMA (American Medical Association) and AAMC (Association of Americal Medical Colleges). Students from throughout the United States and some European countries came together to discuss the basic problems and philosophy of medical education. The Joint Commission on Medical Education has been appointed and includes 12 students and eight professionals (Paul Sanazaro, George E. Burket, Robert M. Hutchins, George E. Miller, John S. Millis, Daniel Funkenstein, Hayden C. Nicholson, and Robert C. Berson). This commission will hold meetings over a two-year period for the purpose of evaluating medical education and suggesting new philosophies, trends, and patterns.

The standing Committee on Medical Education and the **ad hoc** Committee on Medical Education have begun efforts to develop with JCAH (Joint Commission on Accreditation of Hospitals) a new definition of the educational extern to insure full participation in the Residency Matching Program; to increase minority recruitment in all schools; to develop new courses on community medicines; to stimulate activity in the areas of course evaluation and student participation on admission and curriculum boards as voting members.

The area of community health has been integrated into a new concept of **medicine and society,** and we have moved from the successful, AMA-supported Kansas City project to new evolutionary steps. We have identified a new entity known as the **community action leader.** This summer we will hold the first Annual Institute on Community Action. We will select, on a competitive basis, 50 medical students from throughout the United States and will bring them together for a 10-week seminar in which they will receive intensive training in law, sociology, economics, labor, mass-media communications, and organizational theory. These students will participate in student medical clinics in Washington, D.C. and its surrounding communities, and will work in group practices and with general practitioners. Preceptorship activities will be

set up in the U.S. Congress, as well as in various executive branches of the government, such as HEW (Health Education and Welfare). There will be a Brookings Institute and Rand Corporation approach to the development of new ideas for strengthening the community and systems for delivery of health care. The institute will be held annually for five years, and from the graduates of all these seminars a new organization will be created. There is a possibility that this seminar will evolve into a permanent school.

We now have a full-time coordinator for community health in SAMA's national office, and we are compiling a compendium of all student projects for the Secretary of HEW. We have initiated plans for 50 medical students and 20 nurses to work in Appalachia this summer and for another 50 medical students to work in programs supported by Title XIX. We are developing a contract with HEW to evaluate student attitudes toward community medicine and toward the relevance of the activities of departments of preventive medicine in the medical schools of the country.

SAMA is now sponsoring 45 active community health projects, organized on an interdisciplinary basis, and we are assisting in the organization and funding of others. Regional community health conferences are being held throughout the United States. We are in the process of organizing a new division within SAMA: Operations and Research Analysis. This will set up a Rand Corporation approach toward present student projects of all types and will suggest ideas for new projects. It will be in operation for at least five years.

In the fall of 1969, SAMA, in cooperation with the Conference of National Student Professional Organizations—which represents more than 900,000 professional students—will hold a national conference on "Man and His Environment."

In response to a request by SAMA's 1968 House of Delegates, we are working in the halls of Congress to secure the passage of a federal scholarship program for all health students. SAMA representatives have appeared before the House Subcommittee on Governmental Operation to develop plans for medical legislation.

We have moved into the area of mass-media communications and are working with several organizations in developing high-quality, high-impact films such as **Beware of the Wind** and **Distant Drummer.** These films will point out the problems and failures of our present system of delivering health care.

In the area of international health, SAMA has clearly moved ahead. We have rejoined the International Federation of Medical Student Associations, and this summer we are offering more than 500 externships in a bilateral arrangement with 20 foreign countries. We are developing a program of aid to the student clinics in Bolivia. Our booklet on International preceptorships will be reprinted this year in a much larger edition.

It is SAMA's belief that individuals of all viewpoints should be given the opportunity to speak before medical students in order that each student can decide for himself upon the validity of his ideas on the basis of a reasoned and informed consideration of the issues. With this purpose in mind, **The New Physician** has become a journal edited entirely by students. We are also publishing a national newsletter that is issued six times each year.

We are making room in SAMA for full participation by all interns and residents. House officers now serve on several committees.

It should be clear to all that SAMA has begun to assume a new and significant role in many areas. To be successful, however, we need to have the help of all deans. In order to improve dialogue between SAMA and AAMC and to prevent rumors and misconceptions as to student intent, SAMA has requested that one of its members be appointed to serve in an ex-officio capacity on AAMC's Group on Student Affairs division. SAMA has had a long and rewarding relationship with AAMC and we hope to continue receiving its support both on the local and national levels.

Medical education, community health, international health, political concern, and community action: these are our priorities. To be relevant and effective is our ambition. Peace, prosperity, and a just society for all, with health care as a basic right, are our goals. Responsibility is our dedication.

We in the Student American Medical Association have pledged to the American society our sincerity in translating our ideas into action in order that we might light the paths of the future and be more than blurred footsteps in the sands of time. At the same time we challenge members of the AAMC to direct their endeavors toward the problems which are facing every community in terms of health care delivery. With the help of the AAMC and many others, we can build a just society and effectively treat its ills. We do not have all the answers, but we intend to take a positive step forward in trying to find some solutions.

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OBSERVATIONS ON MEDICAL PRACTICE

By ARTHUR B. CROOM, M.D.

The practice of medicine is now, as it always has been, a complex and often frustrating discipline. It is also a challenging and rewarding way of life, bringing joy and satisfaction as well as anxiety and despair.

The complexity of the problem begins with the long period of training required and the forced decisions for long-range goals that must be made before all of the facts are known. It extends into periods of post-graduate training, where constant revaluation is necessary. Then the ever-changing material requires a lifetime of study, discard, and adjustments.

Students in their academic environment question methods of instruction. Practitioners seek adequate means of delivering medical care. Teachers search for modalities to ensure improvement in both areas. Through dissatisfaction can come healthy solutions; complacency leads only to a dead-end of mediocrity.

C. Clement Lucas, Jr., president of the Student American Medical Association, finds the town-and-gown gap unpalatable, since the campus-based physician could be in the position of giving advice without having the experience to back up his philosophy. The busy practitioner either is not welcome in medical schools or, if he is, finds little opportunity in the academic atmosphere to challenge the young and eager for the world of service outside the marble halls.

What has become of the dedicated, compassionate physician interested in service, growth, and fulfillment of the Christian ideal? He is still in our midst, both inside and outside our teaching centers, but why has he become so difficult to recognize? Probably he hasn't —but the pressure of economic necessity and scientific endeavor, as well as the intervention of third-party participants in the doctor-patient relationship, cause people to see their own physician as this type of dedicated person, but to view the medical profession with distrust.

In the not-too-distant past there was no argument as to the right of all our citizens to first-rate medical care. Medical services were dispensed with little concern for the patient's ability to pay. As the population has increased and the costs of delivering medical care have soared, as the more affluent have placed heavier demands on their physicians and the ratio of doctors to population has decreased, it has become humanly impossible for the conscientious physicians to meet all the demands upon him. Welfare, Medicare, Medicaid, private grants, and government grants have continued to provide funds for care of the indigent and for research, while insurance dollars have reduced the mass of the medically indigent (regardless of the criteria used to define this nebulous state). Ease of communication has placed burdens on the present-day physician that were undreamed of in earlier days. What would the horse-and-buggy doctor have done with 70 phone calls per day, when a single call used to require two or more hours of his time?

We do not claim that all physicians are dedicated, any more than we accuse all lawyers of being mercenary. Human beings were never intended to fit a fixed pattern, and we probably will never satisfy even our most optimistic fellows that all is right with the medical world. The art and the science are still separate and are not joined as one.

What shall we say to our students of medicine? How can we challenge them to recognize the practitioner's concern for the future of medicine and to see in the private practice of medicine an opportunity for service and for a rewarding life dedicated to the welfare of all men?

We need to begin with students on the high-school level. Many local high schools have career days, which offer medical practitioners a ready-made opportunity to talk to the students. Let us take advantage of this opportunity to discuss frankly with them the rewards and challenges of a life in medicine. Let us not fail also to point out to them the opportunities in the fields of nursing, technology, medical administration, and pharmacy. Then we must make ourselves available to these young people for more detailed and personal consultation.

Medical educators are continually working to find new ways of making present knowledge available to students. Research continues to uncover new facts, to prove some of the old knowledge, to disprove some of the mass of information that we have come to accept as basic truth, and to shed its light into the dark corners of our ignorance. We must continue to be dissatisfied with the present state of our knowledge and to seek new truth—but doctors have a responsibility in the area of research to assess their studies carefully. The philosophy of undertaking meaningless projects that serve no purpose other than the acquisition of a grant can not only dry up the wellspring of economic supply; it also ties our young men to a treadmill and deprives them of the rewarding life they so nobly sought in embarking on a career in medicine. I beseech our academic brethren to forsake the philosophy of the grant dollar, as I beseech my fellow practitioners to be motivated primarily by concern for their patients rather than by love of money.

We must find some way to bring to the attention of student physicians the need for improvement in methods of delivering medical care. A great hue and cry has been raised as to the future of general practice. At the risk of being involved in semantic arguments and accused of oversimplification, I believe that it is probably true that few physicians in this country are actually engaged in general practice, as it was once known. Rare is the man who dares to take on all the health needs of a family, from pediatrics to geriatrics and including surgery and obstetrics. **Someone,** however—whether he is known as a generalist, an internist, a family physician, or possibly something else in the future—must provide the basic medical care required

for the less complicated diseases or psychic problems that form the bulk of general practice. What a hero is the man or woman who can dedicate his or her life to this demanding type of practice and retain a cheerful demeanor, a kind word, a bit of friendly advice, or a wise solution for the problems of everyday living! These qualities are important if we are to fulfill the needs of the world. How sad will be the day when the medical profession is made up entirely of cold and calculating scientists without the artful compassion that was once the most we had to offer!

It may well be that the needs of people for routine medical care can be met by paramedical personnel with less training than is now given our young physicians. As this question is being studied, physicians already in practice or in training must be the ones to provide this type of care, no matter how difficult it seems. We cannot stop working while we seek solutions.

Lastly, I would beg my academic colleagues, as well as my fellow practitioners, to work out a method of bringing together the student and the practicing physician for the express purpose of exchanging ideas relevant to the problems of delivering medical service. It is true that medical schools have a visiting faculty, but they need to go a step further. Time should be allowed for discussions between the L.M.D. and the student, not so much for the purpose of instructing the student as for the purpose of **listening** to him. How can we possibly interest him in the good life of a practicing physician if we do not first listen to his cry of anguish for the things he sees which disappoint him and turn to bitterness the sweet taste of his own success even before he can start? These bright young men and women have something to say to us, my friends, and we would do well to listen—and to listen well.

Even as our youthful enthusiasm dims with the passing years, even as we become more satisfied with the comfortable world of status quo, even as our thoughts turn to another generation and away from our own ambitions, we must maintain a sense of responsibility to patients, to knowledge, and even more to self-understanding. Let us not allow complacency to deprive us of the bright horizons of future growth, health, service, dedication and, above all, love for our fellow man.

W. R. Straughn ('70)

SHAC—STUDENT ACTIVISTS AT THE UNC SCHOOL OF MEDICINE

By WILLIAM R. STRAUGHN III ('70)

Increasingly across the country, students at all levels of higher education are seeking and finding constructive ways to use their talents and energies for social and educational improvement. This search is being conducted both inside and outside the university community. Last year medical students at UNC, along with other students in the allied health sciences, organized the Student Health Action Committee (SHAC). With a membership of more than 100 students, SHAC has as its motivating philosophy a deep concern for the health and well-being of all people. This philosophy is expressed in the preamble to SHAC's constitution:

> The Student Health Action Committee believes quality health care should be available to all individuals with respect for the human dignity of all men regardless of financial ability, social standing or race. SHAC maintains that health science education should promote opportunities for health science students to develop those skills and understanding necessary to achieve our stated objectives.

One of SHAC's objectives is for its members to develop an awareness of their environment which will enable them to evaluate the present system for delivering health care and work for its improvement. SHAC is also interested in promoting among high school students, especially those who belong to a minority group, an awareness of vocational opportunities in the health sciences and in bringing about a more meaningful relationship between the community and the health professionals that serve it.

SHAC began early in 1968 as an informal group of medical and nursing students who were dissatisfied with the approach to medical education at UNC. In particular, we felt that within the teaching-hospital environment we were not given the opportunity to explore the relationship of medicine to the community and to the individuals and families of that community. We were also concerned with the failure of the medical profession, and of the UNC School of Medicine, to respond to what we felt were inequities in the delivery of health care.

By the late Spring of 1968 our dissatisfaction had led us to organize the Student Health Action Committee. From the basement of the Medical School, the organization spread into action in the communities of Chapel Hill and Durham and within the medical school itself. By the end of the term, three projects were in formative stages: We began exploring the health needs of underprivileged neighborhoods in (1) Chapel Hill and (2) Durham and the connections their residents had with the health care facilities in these towns. (3) We began contacting high schools in North Carolina, offering to help them with medically oriented programs and with the recruitment of students into the health sciences.

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1. JIM POWERS ('69)
2. Frank Gray ('69) and Dr. Robert Shaw.
3. Lynn Kluge (Phys. Therapy '70), Richard Kaplin (Sch. Pub. Health '70), President John Allcott ('71), Bob Jones ('70), Debbie Delefield (Sch. Nursing '70), Don McLeod (grad. student Pharm.), Tom Cannon (Sch. Dentistry '71), Toby Atkins ('71), Charles Richman ('71), Mary Lyn Field (Sch. Nursing '70), and Bill Straughn ('70).
4. Jim Powers, Frank Gray and Dr. Shaw.
5. Peggy Breckenridge (Sch. Nursing '69), Bill Straughn ('70), and Dr. James A. McFarland (Duke).
6. James Cutcliffe (Sch. Dentistry '72), Mark McCall (Sch. Dentistry '71), and Bob Jones ('70).

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The Summer of 1968 was spent in further organization, and we were encouraged to find that the faculty and administration of the medical and nursing schools were not only sympathetic but were interested in helping us further the aims of SHAC. Meeting with community councils, golden-age clubs, and other organizations in which we could talk with residents of low-income areas, we found that the contacts between these people and existing systems for the delivery of health care were grossly inadequate and were often personally degrading making health care even more inaccessable. This discovery led us to establish, with active community support, clinics for the delivery of primary health care within these communities.

In Chapel Hill we found that many children needed preschool physical examinations. To answer this need, several clinics were held to give preschool exams and to treat children with skin diseases; more than 100 children in the Chapel Hill-Carrboro area attended these clinics. In Durham we found that a number of children who were being sent to summer camp by the United Fund might not be able to go because their parents could not pay for the physical examination required for each camper. In three clinics, more than 80 children were given pre-camp physicals.

By the end of the summer, SHAC had grown to include students in medical technology, physical therapy, dentistry, public health, and pharmacy. In addition, medical and nursing students from Duke were participating in the Durham project. We had drawn up a constitution, selected officers, and embarked upon our three projects.

Under the leadership of Frank Gray ('69) as president, John Allcott ('71) as treasurer, and Becky Green, senior nursing student, as Secretary, SHAC started the 1968-69 school year running and has yet to slow down. The organization and its growing projects now required both money and faculty participation. The faculty responded by donating time as well as money to further our projects. With contributions of more than $400 from the faculty, $200 from the Whitehead Society, $2,500 from the undergraduate student government, and $1,000 from the Durham-Orange County Medical Society, the projects were under way.

Last October the Chapel Hill project headed by John Johnston ('69) began operating a general medical-pediatric clinic every other Monday at the old Chapel Hill-Carrboro Multipurpose Center. Beginning with 5 to 10 pediatric patients an evening, attendance at this clinic has grown to 20 to 30 pediatric and adult patients an evening. The students working there began to see something never seen in the hospital clinics: children and adults **enjoying** a visit to the doctor. Within these clinics the participating students found that they were better able to understand the problems of their patients—social and economic, as well as medical. They could and did see the total patient in his community.

In addition, the participating students learned how to relate interprofessionally in a manner not possible with present curricula. A real "team approach" to medical practice was developing both in patient care and in post clinic evaluations. In working with the patients in the community the students had to learn to relate to and use the health-care facilities existing in the community. "Public health" was no longer a phrase uttered in contempt.

Clinic organization had to be learned by both the students and the community. To this end a board of directors was established for the clinic. This board, made up of interested community members and students in the project, is incorporated as tax-exempt corporation in the state of North Carolina. In establishing the clinic operation, the students had to use existing community organizations; and because the black community in Chapel Hill was not organized well enough to meet the clinic's needs, the students had to engage in community organization.

The Chapel Hill-Carrboro Family Health Clinic., Inc. is now run by a community-controlled board of directors selected from and by existing members of the community. There are also two health science students selected by the board to sit on the board. The participating students, by becoming involved in community medicine in an underprivileged area, are able to see the relevance of health care delivery to the community and to get a truer perspective on many of the problems facing the health professions today.

The Durham project, headed by Bob Jones ('70) is a joint effort with the health-science students at Duke University, and the clinic draws on both Duke and UNC for faculty and student participants. This clinic differs from the Chapel Hill clinic chiefly in the racially mixed population it serves. Whereas the patients attending the Chapel Hill clinic are primarily from the rural black population, the clinic in Durham serves an urban ghetto area in which the ratio of white to black population is about 6:4.

The Durham clinic began operating in a donated store front in the Edgemont area last November and has been open every Monday evening since then. More than 200 patients have been seen in over 500 clinic visits. Additional financial support for the Durham project has come from the Davidson Society of the Duke University School of Medicine, from the Duke Hospital Women's Auxiliary, and from other contributions by people served by the clinic.

Both projects, now well established, are in the process of expanding their facilities. With the present loads, the clinics need to be operated more than one night a week; it is hoped that this can soon be done. The clinics are looking for additional sources of financial support, so that they can not only continue operation but expand their services. In addition to providing better facilities, we hope to develop a paid staff of community health aides working under the direction of a public-health nurse.

The health education project, headed by Dave McFadden ('72), has presented several programs on health

careers to high-school groups throughout the state. At the recent state convention of the Health Career Clubs, attended by more than 200 high school students, 25 health-science students presented a panel discussion on "Involvement in Health Care Delivery," followed by "sensitivity" sessions with small groups of teen-agers. In a post-convention survey, this was voted the best presentation made during the convention.

Participants in this project have also been studying the problems of admission of black students to the health-science schools. They are engaged in meaningful dialogue with faculty and administration on this matter, and at the same time are trying to find ways of recruiting qualified black students at the high-school and college levels.

SHAC holds monthly general meetings at which formal presentations are made on topics of interest, as well as more frequent informal meetings of students involved in the projects. SHAC is a growing and active organization, which we hope will reflect credit on the health professions and, in particular, on the health-science schools of the University of North Carolina.

EDITOR'S NOTE

On Sunday night, June 29, the building housing the Edgemont Community Clinic was destroyed by two fires. The first, at 11:00 p.m., extensively damaged the back of the building; the second, at 4:00 a.m., completely gutted the structure. The new dental operative equipment and most of the medical equipment and supplies were a total loss. Only the medical records and a few supplies could be saved. Neither the building nor its contents were protected by insurance.

Firemen who are investigating the cause of the fire have not yet determined its origin, though the possibility of arson has not been ruled out. Plans are under way to continue the clinic operations in the Edgemont Community Center across the street from the old clinic building, until new permanent facilities can be found.

(Photos W. G. Owen and W. R. Straughn).

John Allcott ('71) and Barney Lewis (Duke '70).

PARENTS AS COTHERAPISTS—NEW DIMENSIONS IN CHILDHOOD PSYCHOSIS

ERIC SCHOPLER, Ph.D.

Associate Professor of Psychology in Psychiatry and Associate Professor of Psychology

We are living in a period when rapid advances in scientific knowledge on many fronts are taking place in a context of social change. It is sometimes difficult to distinguish between the effects of changing social values or attitudes on the one hand and increasing scientific knowledge on the other. This difficulty is especially apparent in the behavioral sciences and their applications in psychiatry and education. In recent years, for example, such changes have occurred in our study and treatment of autistic children and their families. Theories and assumptions which appeared true only a decade ago are no longer relevant.

Ever since Kanner first identified infantile autism in 1943,[1] it has been believed that the primary cause of this condition was the parents' rejecting attitudes, aberrant thinking, and emotional aloofness. Kanner described these parents as "schizophrenogenic" or "refrigerator parents." Although some clinicians recognized that the influence of the disturbed offspring may produce disturbed family relationships, psychodynamic theories of psychosis have considered parental attitudes primary in the child's development of autism or psychosis. In recent years parents have begun to express their indignation against such biases,[2-4] and their views have been supported by the scientific literature.[5-8]

In short, we have become aware that the primary causes of autism were often attributed to parents. There is accumulating evidence that psychotic children suffer from a predisposing impairment of biochemical or organic origin.[9] It is probable that a variety of lesions can give rise to similar patterns of behavior disorder, and that "autism" and "psychosis" may turn out to be blanket terms for a number of different conditions. Parents of autistic or psychotic children generally have other normal children and function within normal limits in other aspects of their lives. Parental perplexity and ineptness in the management of their psychotic child appear primarily in their reaction to a difficult and unresponsive child. This statement is true even of parents who have other adjustment problems.

In light of these trends, the program of the Child Research Project has been undertaken as a new approach to the study and treatment of childhood psychosis. In this program parents are trained as cotherapists to work with members of our staff in the management of their own psychotic child.

Criteria for Admission

Because of the project's research design, admission is limited to children and parents who meet the following criteria:

1. The child must be in the preschool period, either because of his age or because he has not been able to attend school.

2. The child must be part of an intact family, living at home with his natural parents. The family must live within a reasonable commuting distance from Chapel Hill, and the parents must be willing and able to participate on a biweekly basis.

3. The child must have had a psychiatric diagnosis of autism or childhood psychosis, based on a combination of at least five of the nine criteria given by Creak:[10]

a. Impairmen in his relationship with people and in his attachment to his parents.

b. Repetitive use of the same toy or object without learning.

c. Signs of abnormal perceptual experiences such as hypersensitivity or hyposensitivity to certain visual, auditory, or tactual stimuli.

d. Peculiar motility patterns such as rocking, spinning, and toe-walking.

e. Abnormal activity levels, either hyperactive or hypoactive.

f. Failure of speech to develop normally.

g. Excessive anxiety with temper tantrums or self-destructive behavior.

h. Resistance to environmental changes, with a striving to maintain sameness.

i. Uneven intellectual functioning, including both retarded and normal or precocious behavior.

When a child and his family meet these three criteria for admission, he can be accepted in our project. In most cases a complete diagnostic work-up has been made before the child is referred by a private physician or by a child psychiatric or developmental evaluation clinic.*

Program of Treatment

When a child is being considered for admission, he and his parents participate in a psychoeducational evaluation. During this time, the child is observed in a standard play situation. His psychosis, his strengths and weaknesses, and his learning potential are evaluated. A careful study is made of the child's perceptual deviations, and the sensory and learning modalities by which he can be reached are distinguished from those in which he is blocked. From this evaluation the staff obtains ideas for the initial approach to management of the child. During this period each of the parents is asked to play with their child, so that the staff can observe any difficulties in the parent-child interaction.

* Inquiries about referrals may be directed to the Director of the Child Research Project, Department of Psychiatry, Memorial Hospital, Chapel Hill, N.C. 27514. The telephone number is 966-4270.

During the initial period of treatment, the child is seen by a psychoeducational therapist for one-hour sessions twice a week. The first few sessions are used for getting acquainted and for determining the child's level of functioning in both cognitive and emotional areas. Various approaches for reaching the child are tried, and suitable ones are selected.

Parent consultants meet with the parents regularly. After the first few sessions with their assigned consultant, the parents observe the treatment sessions through a one-way screen. The consultant calls their attention to significant aspects of the observed interaction between the child and the therapist, and answers any questions the parents may have. On the basis of home observations made by the parents and from direct experience with the child, the psychoeducational therapist works out a program for use at home and demonstrates it to the parents. The parents follow this program in daily sessions at home with their child, working for approximately 30 to 45 minutes each day.

Parents keep daily written logs on their observations and their work with the child. Periodically they demonstrate to the staff the work they are doing at home. This plan provides the basis for a continous dialogue and for adapting the home program to the changing needs of the child. Parents also attend group meetings. These meetings enable the parents to become acquainted with the parents of other children under treatment and allow them to discuss their common problems and to share experiences.

At the end of the initial extended diagnostic period, findings and recommendations of the staff are discussed with the parents. A new program for the collaboration between the parents and the Child Research Project is designed, one which can extend throughout the preschool period of about two years.

The treatment emphasis is focused within four interrelated areas:

Increasing her daughter's attention span by using puzzles.

Eric Schopler, Ph.D., Director, Child Research Project.

1. **Human relatedness.** Methods geared to the individual child are developed for motivating him to increased awareness of the adult. This involves understanding the special ways in which each child can experience pleasure in human interaction and can understand expectations and limitations. Improvement in this area is basic to effective development in other areas.

2. **Competence motivation.** This includes child's motivation and ability to explore his environment and to attain pleasure from the capacity to have an increasingly complex effect on his environment. Approaches are worked out for enabling the child to respond to structure and to practice his own ways of using the structures he has learned. In order to develop a sense of mastery, the child has to be able to seek help from adults when he has difficulty and to play on his own when he is able. Improvement in this area plays an important part in replacing or reorganizing psychotic behavior patterns.

3. **Perceptual motor processes.** This encompasses coordination between eye and hand, awareness of the body, and its use in both fine and gross motor activity. On the basis of his understanding of the child's special sensitivities, perceptual distortions, and coordination difficulty, the therapist uses play exercises and phys-

ical activities to help the child overcome or cope with his impairment in this area.

4. **Cognitive development.** Uneven development of intellectual functions characterizes all the children in our project. Although there is great variation in the children's symptoms and communication problems, it is not surprising that our patients also show some evidence of mental retardation. In this area the therapist analyzes the lack of perceptual integration underlying the deficit and fosters motivation to learn. Exercises and games are evolved in developmental sequences. These are aimed at enlarging receptive awareness signals for mental representations, words, and concepts evolving towards greater complexity.

The parents continue to observe treatment sessions with their consultant, to work at home with their child in the role of cotherapists, and to demonstrate this work to the staff. The dialogue between parents and project staff continues as the child develops. One of the aims of the project is to work out a special education program for each child, a program in which parents and teacher work in a productive partnership after the child begins to attend school.

Although our project has been in operation for less than two years, the results have been most encouraging so far. Some of our children are able to attend regular school classrooms without difficulty. For others, development proceeds at varying rates. In every case, however, there has been visible improvement in the child's development and in the family equilibrium. Our research involves longitudinal evaluation of each child and his family, as well as of ways in which our approach may profitably be applied to other problem children.

Psychoeducational therapist teaching color distinction.

Mother working with her child on affective development.

Father showing his son that building with blocks can be fun.

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News from the Hill

In March, the Burroughs Wellcome Fund of Tuckahoe, N.Y., announced a grant of $125,000 to the school to support teaching and research in clinical pharmacology under the direction of DR. HAROLD J. FALLON, Jr. Dr. Fallon, who is chief of the Division of Clinical Pharmacology, Toxicology and Environmental Health and vice chairman of the Department of Medicine, thus becomes the sixteenth Burroughs Wellcome Scholar in Clinical Pharmacology, and his work will be supported by the fund for the next five years.

This pioneering scholarship program of the Burroughs Wellcome Fund was established in 1955 "to assist medical schools in setting up and developing a division of Clinical Pharmacology where students may learn under a first-class scientist and teacher to apply basic scientific knowledge and techniques to the study of clinical pharmacology."

Through aid from the new grant, the Division of Clinical Pharmacology will participate in various teaching programs at the school, including the basic pharmacology course for medical students, elective clinical and research courses in pharmacology and biochemistry, and clinical clerkships in internal medicine. New faculty members are being recruited to participate in this program.

Dr. Fallon's chief research interests include the mechanisms by which alcohol injures the liver, and the mechanisms of action of drugs which reduce blood lipids. Research in both these areas will be expanded, and additional projects will be started.

On March 8 the Admissions Committee held an open house for advanced premedical students and their advisors. ASSOCIATE DEAN CHRISTOPHER C. FORDHAM, DR. JAMES A. BRYAN **(Medicine & Preventive Med.),** Director of Admissions DR. WILLIAM R. STRAUGHN, JR. **(Bacteriology),** and C. ELLIS FISHER ('69) spoke to the visitors on medicine as a career and on admissions procedures in our school.

Student-guided tours of the school and hospital were conducted and faculty members presented special demonstrations **(**DR. FREDERIC G. DALLDORF [**Pathology**]—"Pathology of Heart Diseases"; DRS. BENSON R. WILCOX and ROBERT D. CROOM [**Surgery**] — "Heart-Lung Machine"; DR. ORLANDO F. GABRIELE [**Radiology**]—"Radiological Diagnosis of Heart Disease"; DR. ERNEST CRAIGE [**Medicine**] — "Listening to Hearts"; and DRS. HERBERT S. HARNED, JR. and ROBERT T. HERRINGTON [**Pediatrics**]—"Heart Disease in Children.")

DR. GEORGE D. PENICK **(Pathology),** Chairman of the Admissions Committee, made concluding remarks. Committee members DRS. STRAUGHN and CLIFFORD B. REIFLER **(Psychiatry)** were the official hosts. Visitors and participating faculty and students had lunch at the hospital cafeteria.

This year's Spring Lecture Series on Neoplasia began on March 5 with a lecture on "Mechanisms of Metastases" by DR. SUMNER WOOD, JR., from the Department of Pathology at the Johns Hopkins University. The following week, DR. DAVID PRESCOTT, from the Institute for Developmental Biology of the University of Colorado, lectured on "Biology of Cell Division."

Admissions Open House

Dr. Frederic Dalldorf showing a diseased heart to premed students and advisors.

Dr. Robert Croom explaining the heart-lung machine.

Director of Admissions Straughn speaking to open house attendants.

As part of the series, a dedication conference to celebrate the opening of the new Division of Radiation Therapy was held on April 10 and 11.

Five guest speakers discussed cancer diagnosis and treatment each of the two conference days: DR. VINCENT T. DeVITA, chief, Solid Tumor Service, National Institutes of Health; DR. ROBERT J. LUKES, professor of pathology, University of Southern California School of Medicine; DR. M. VERA PETERS, Department of Radiation Therapy, Princess Margaret Hospital (Toronto, Canada); and two Stanford Medical Center faculty members—DR. HENRY S. KAPLAN, professor and executive, Department of Radiology, and DR. SAUL A. ROSENBERG, Department of Medicine, Division of Oncology.

Faculty members JAMES F. NEWSOME **(Surgery),** JAMES A. BRYAN **(Medicine & Preventive Med.)** and GERALD E. HANKS **(Radiology)** spoke on "State-Wide Tumor Registry," "Cancer Information Service," and "How to Improve University Community Oncology Relationships," respectively.

Open house was held in the new center located in the basement of the Ambulatory Patient Care Building. A social hour and a banquet followed.

Dr. Hanks is director of the division which is expected to become the largest and best equipped x-ray therapy center for cancer in the southeast.

DR. KARL MENNINGER, chairman of the board of the Menninger Foundation and co-founder of the Menninger Clinic (Topeka, Kan.), was a guest of the Department of Psychiatry late in March. The Menninger Foundation was created in 1941 as a nonprofit training, research and public health institution in psychiatry and psychology. The Clinic has also been concerned with the training of psychiatrists and psychologists and with developing new techniques in working with patients.

While visiting the school, Dr. Menninger participated in departmental grand rounds and on March 28 delivered an academic lecture to faculty and students. On the previous evening he was honored in a banquet at the Carolina Inn.

Participation of faculty and students in the 53rd Annual Meeting of the Federation of American Societies for Experimental Biology was, as usual, numerous and well received. The following are some of the presentations:

"The Role of Immunity in Tumor Development." G. HAUGHTON, J. WAGNER, and E. SIGMON.

"Effects of Adjuvant and Antigen on Immunogenicity of Macrophage Associated BSA." J. K. SPITZNAGEL.

"The Dissociation of Plasma Antihemophilic Factor By Succinic Anhydride." E. M. BARROW and J. B. GRAHAM.

"Purification of Fibrin Stabilizing Factor (FSF)." M. KAZAMA and R. D. LANGDELL.

"Origin of Platelet Factor XIII (Fibrin Stabilizing Factor)." J. McDONAGH, T. H. KIESSELBACH and R. H. WAGNER.

"Three Dimensional Aspects of Platelet Aggregation: Scanning Electron Microscopic Studies." N. F. RODMAN and J. C. PAINTER.

"Prepartum Alterations in Equine Serum Protein, Copper and Iron." H. D. STOWE.

"Blood Compatibility of Some Polymeric and Nonpolymeric Materials." R. G. MASON, L. D. IKENBERRY, and J. KEARNEY.

"A Scanning Electron Microscopic Study of Morphologic Changes in Platelets Adhering to Glass." E. E. SCARBOROUGH.

"Synthesis of Monoacylglycerophosphate From sn-Glycerol-3-P by rat liver microsomes." R. G. LAMB and H. J. FALLON.

Honoring Dr. Menninger.

Dr. Menninger, Vice Chancellor Miller, Dr. Ewing, and Dean Taylor.

"Two Forms of Intranuclear Inclusions in Renal Tubules of Lead-Poisoned Rats." P. B. MAY, M. R. KRIGMAN, D. CRANE, and M. CATES.

"Effects of Prostaglandin E_1 on the Hypothalamo - Hypophyseal - Adrenal Cortical Axis of Rats." T. C. PENG, M. M. SIX, and P. L. MUNSON.

"Interrelations Between the Adrenal Cortex, Parathyroid Hormone and Thyrocalcitonin in Rats." K. NISHINO and P. L. MUNSON.

"Effect of Aluminum Phosphate on Neuramic Acid Concentration in Rabbit Brain." R. E. EXSS and G. K. SUMMER.

"Transcellular Permeability in Experimental Cholera." F. E. DALLDORF and G. T. KEUSCH. Dr. Dalldorf was co-chairman of the session on "Tissue Response; Inflammation."

"Interactions Among Lysosomal Constituents of Polymorphonuclear Leukocytes." H. I. ZEYA.

"Further Observations on the Morphology and Biochemistry of Mitochondria Isolated from Kidneys of Normal and Lead Intoxicated Rats." R. A. GOYER and A. R. KRALL.

"Cromatin Fractions of Liver as Templates for DNA Synthesis." J. T. BELLAIR, K. K. KUMAROO, and J. L. IRVIN.

Several other members of the faculty, as well as trainees in different departments, also attended the meetings at Atlantic City.

W. RAY GAMMON ('71), J. RONALD HUNT ('72, class president), WILLIAM D. KASSENS ('71, class vice-president), and RICHARD C. TAFT ('72) represented the school at the National Convention of the Student American Medical Association in Chicago on April 1-4. Bill Kassens is a member of the organization's Committee on Medical Education. The students also attended the SAMA-sponsored symposium on "Man and Society" held concommitantly with the convention. C. CLEMENT LUCAS ('69) presided and presented his report to the Convention before stepping down as national president of the student association.

DR. HARVEY L. SMITH, Assistant to the Vice-Chancellor for Health Sciences, discussed the "Health Resources and Needs in North Carolina" at NCMH on April 2.

Findings of studies done by DRS. ROYCE L. MONTGOMERY **(Anatomy)** and MICHAEL K. BERKUT **(Biochemistry)** on the response of adrenal glands to lesions in the limbic area in brains of non-stressed female rats were presented by Dr. Montgomery to the American Association of Anatomists in Boston, Mass. (April 3-5).

DR. ARTHUR J. McBAY, who was appointed Associate Professor of Pathology this spring, is a native of Medford, Mass. He graduated from Massachusetts College of Pharmacy where he also won his M.S. degree. He received his Ph.D. degree from Purdue University. He has taught at the Massachusetts College of Pharmacy and Harvard Medical School; prior to joining our faculty he was teaching at the Boston University Medical School. His primary appointment is as Chief Toxicologist of the N. C. State Board of Health.

Whitehead Society members cast their votes last March and elected T. REED UNDERHILL ('70), president; JAMES S. FULGHUM, III ('71), vice president; RICHARD C. TAFT ('72), treasurer, and MARY SUSAN FULGHUM ('71), secretary to steer the student body during the 1969-70 academic year.

DR. GEORGE K. SUMMER **(Biochemistry)** participated in the Regional National Science Foundation Symposium on Human Genetics for High School Biology Teachers held in Chapel Hill on April 3-5.
Dr. Summer has been elected Treasurer of the N.C. Chapter of the Society of the Sigma Xi for a two-year term beginning in May, 1969.

DR. SYLVANUS W. NYE **(Pathology)** spoke on "Eosinophilic Meningitis" to the attendants of the course on "The Geographic Pathology of Tropical and Infectious Diseases" held

SAMA CONVENTION

At SAMA National Convention: Ray Gammon, Bill Kassens, Richard Taft and Ron Hunt in the lobby of the Conrad Hilton Hotel. Hunt and Kassens attending a session of the House of Delegates.

The Whitehead Society

Dr. H. L. Smith

at the AFIP in Washington, D.C. on April 8.

DR. COLIN G. THOMAS, JR. **(Surgery)** reported to the American Surgical Association meeting in Cincinnati (April) on his new diagnostic procedure to detect thyroid cancer. The method is expected to increase accuracy of diagnosis by up to 150 percent.

On April 10, DR. BENSON R. WILCOX **(Surgery)** addressed the South Carolina Heart Symposium held in Florence, S.C. on the "Present State of Cardiovascular Surgery."

Actively carrying out his duties as state medical examiner, DR. W. PAGE HUDSON **(Pathology)** has spoken on the medical examiner system to the Medical Society of the State of North Carolina, the North Carolina Public Health Association and several county medical societies, as well as to hospital staffs and civil organizations.

On April 24, he was the guest speaker in the forensic pathology series held at Duke University where he lectured on the medical examiner system and on the identification of human remains. In June he traveled to Toronto, Canada, to participate in the Fifth International Meeting of Forensic Sciences and presented a paper on "The Conception, Gestation, Delivery and Growth of a State Medical Examiner System."

Late Somatic Effects of Ionizing Radiation is the title of the recently published book written by DR. CHARLES D. VAN CLEAVE **(Anatomy)** at the request of the U.S. Atomic Energy Commission. Dr. Van Cleave was commissioned for this task in 1965 . . . (U.S. AEC Division of Technical Information, Oak Ridge, 1968. 310 pp. Available as TID-24310 from Clearinghouse for Federal Scientific and Technical Information, U.S. Department of Commerce, Springfield, Va. 22151.)

In his capacity as Officer of State Committee, DR. LEONARD PALUMBO **(Ob. & Gyn.)** participated in the meetings of the Southeastern OB-GYN Society held in Atlanta on April 10-13. He was also a panel discussant at the North Carolina OB-GYN Society meetings in Southern Pines, N.C., on May 3-4.

At the American College of Obstetricians and Gynecologists meeting (Bal Harbour, Fla., April 27-30) both Dr. Palumbo and DR. JAROSLAV F. HULKA **(Ob. & Gyn.)** took active part, Dr. Palumbo as member of the Advisory Council and section chairman of North Carolina, and Dr. Hulka with his presentation on "Local Antibody Production in Cervical Mucus."

The UNC Medical Parents' Club celebrated its 13th Annual Parents' Day on April 12. The program was as follows:

8:30 a.m.—Registration—Clinic Lobby, N.C. Memorial Hospital.

9:00-10:00a.m.—Tours of the Medical School and Hospital.

11:00 a.m.—General Meeting, Clinic Auditorium.

Presiding—Dr. Robert D. Croom, Jr., President, U.N.C. Medical Parents' Club.

Greetings — William Clyde Friday, President, University of North Carolina.

Remarks—Dr. Isaac M. Taylor, Dean, U.N.C. School of Medicine.

Annual Meeting of the Parents' Club.

General Business Session:

The Charles H. Burnett Scholarship Fund, Berryhill Scholarship Fund, and the Student Emergency Loan Fund.—Dr. Mitchell Sorrow, Jr., Associate Professor of Medicine and Assistant Dean.

Remarks—Carl Ellis Fisher '69, President, Whitehead Society.

"Studies of the Effect of Altered Thyroid Function on Experimental Breast Cancer" — Andrew Davidson '69.

"Student Participation in Community Health"—John Volney Allcott III '71.

"Student Participation in the Medical School Curriculum Revision"—Thurlow Reed Underhill '70.

"The Senior Elective Program"—Charlie Richard Fleming '69, President, Senior Class.

"Problems of Cadaveric Organ Transplantation" — Charles F. Zukoski, M.D., Department of Surgery.

Report of Nominating Committee.

Other Old or New Business.

Dr. Van Cleave

Comments of the President.

1:00 p.m.—Buffet Lunch at Chapel Hill Country Club.

Medical parents steering the Club during the present term are:

President: Mr. L. O. Branch, Durham

First Vice President: Dr. Don R. Printz, Asheville

Second Vice President: Dr. Key Lee Barkley, Raleigh

Secretary: Mr. C. C. Harmon, Greensboro

Trustees of the Student Emergency Loan Fund, Reece Berryhill Scholarship Fund and Charles Burnett Scholarship Fund:

Mr. Donald S. Menzies, Hickory

Dr. H. Haynes Baird, Charlotte

Mr. W. T. Harris, Charlotte

REGION I
Chairman: Mr. V. J. Spivey, Chadbourn
Vice Chairman: Dr. Alan Davidson, New Bern

REGION II
Chairman: Mr. J. Thomas John, Laurinburg
Vice Chairman: Mr. Erwin B. Pittman, Wilson

REGION III
Chairman: Mr. John T. Manning, Greensboro
Vice Chairman: Mr. John V. Allcott, Chapel Hill

REGION IV
Chairman: Mr. Allen W. Huffman, Hickory
Vice Chairman: Mr. Bertram Finch, Charlotte

REGION V
Chairman: Mr. F. D. Hamrick, Jr., Rutherfordton
Vice Chairman: Mr. Lawrence Mills, Asheville

Mr. Hale Johnson

DR. K. M. BRINKHOUS **(Pathology)** has been appointed to the National Advisory Heart Council of the National Heart Institute. He will serve from October 1, 1969 to September 30, 1973. The Council is a 15-member advisory body which evaluates NHI's research and training activities and makes recommendations concerning current and future NIH programs in the cardiovascular field.

Dr. Brinkhous is also to continue as secretary-treasurer of the American Association of Pathologists and Bacteriologists. He was re-elected for this position at the annual meeting of the association in San Francisco in March of this year.

This spring, Dr. Brinkhous was twice honored for his numerous contributions to medicine. On May 21st he received the North Carolina Award for distinguished achievements in science. The award, presented by Governor Robert Scott at a special dinner, was created by the 1961 General Assembly to recognize individuals whose achievements in public service, fine arts, literature and science have brought honor to North Carolina throughout the nation and the world. Two days later in Washington, D.C., he and Dr. Walter H. Seegers—of Wayne State University—received the 1969 International Award for Heart and Vascular Research given annually by the James T. Mitchell Foundation for Medical Education and Research. The foundation sponsored an all-day symposium on "Blood Coagulation and Lung Pathology" for the occasion; the awards were given at the luncheon. Dr. Brinkhous delivered a paper at the scientific sessions on "Lung Extract and Blood Clotting. Retrospection 1934-1969: From Iowa City to Chapel Hill."

"Effects of Bisulfite on Cation Transport and Metabolism in Human Red Blood Cells" was DR. JOHN C. PARKER's **(Medicine)** address to the Red Cell Club at their Atlantic City meeting in April.

DR. CHARLES C. MEHEGAN **(Medicine)** addressed the American Academy of Neurology in Washington, D.C. He spoke on "Hyperlexia: A

Dr. and Mrs. Robert Croom

Drs. Oscar Goodwin, Robert Croom, Key Lee Barkley, and Mr. L. O. Branch.

Mr. Gary M. Underhill

Dr. William N. Hubbard, Jr. ('43M)

W. Ray Gammon ('71)

Messrs. J. L. Phillips, L. O. Branch

Study of Exceptional Reading Ability in Brain Damaged Children."

DR. A. T. MILLER **(Physiology)** lectured on "Cell Metabolism in Hypoxia" at Howard University School of Medicine on April 22.

DR. ROBERT A. ROSS **(Ob. & Gyn.)** was installed April 30 as president of the American College of Obstetricians and Gynecologists during the College's annual clinical meeting at Bal Harbour, Fla. Dr. Ross is a member of the N.C. Governor's Commission on Family Planning and Environmental Health.

Special seminars sponsored by the Department of Pharmacology were:

April 10: "Studies on the Mode of Biological Oxidation of Pyrazolopyrimidines," DR. DAVID JOHNS, Departments of Pharmacology and Medicine, Yale University.

April 28: "Steps in the Reproductive Process Susceptible to Regulation," PROF. EGON DICZFALUSY, Reproductive Endocrinology Research Unit, Swedish Medical Research Council.

May 7: "Structure-Activity Relationships of Inhibitors of Uptake of Norepinephrine by Adrenergic Nerves," DR. ROBERT MAXWELL, Wellcome Research Laboratories.

On April 28 DR. JOHN K. SPITZNAGEL **(Bacteriology)** conducted a seminar on "Killing of Bacteria by White Blood Cells (Polymorphonuclear Leukocytes)" at the University of Cincinnati. In May, he attended the Annual Meeting of the American Society of Microbiology held in Miami Beach, Fla.

"Differences in the Capacity of the Sympathetic and Endocrine Systems of Depressed Patients to React to a Physiological Stress" was DR. MARIO PEREZ-REYES's **(Psychiatry)** contribution to the Workshop on the Psychobiology of the Depressive Illness held in Williamsburg, Va., from April 30 through May 2.

In April, DR. WILLIAM L. FLEMING **(Preventive Medicine & Medicine)** participated on the meetings of the Public Advisory Committee on Venereal Disease Control at the National Communicable Disease Center (Atlanta) and of the Board of Directors of the American Social Health Association (Los Angeles).

Dr. Fleming is chairman of the Committee on the American Medical Association Education and Research Foundation of the Medical Society of the State of North Carolina. In this capacity, he presented AMAERF checks to representatives of the three North Carolina medical schools at the annual meeting of the society (May 21).

DR. MARIO C. BATTIGELLI's **(Prev. Medicine & Medicine)** spring activities included participation in professional meetings: "Experimental Studies on the Mechanism of Pulmonary Injury from Air Pollutants," presented at the "Man in His Environment," 15th Annual Technical Meeting of the Institute of Environmental Sciences, Anaheim, California, April 21; "Physical Factors in Respiratory Infections" presented at the Annual Meeting of the N. C. Thoracic Society, Durham, April 25; "Coal-workers Pneumoconiosis" presented at the Annual Meeting of the Kentucky Academy of General Practice, Louisville, Kentucky, May 8.

On April 30 seven operating room technicians received diplomas certifying their special training at NCMH. DR. JOHN W. MADDEN **(Surgery)** and MR. STEVE BAUGHN, New Careers Coordinator of the Durham branch of Operation Breakthrough, spoke at the graduation ceremony. Receiving diplomas were: MR. RONALD BEST, MRS. MARY DIXON, MRS. SANDRA FARRINGTON, MISS IRMA FERRELL, MRS. SHIRLEY FOUSHEE, MISS MARGIE SHAMBERGER, and MRS. PARTHENIA SPEIGHT.

A joint radiology conference was held last April for Duke and UNC. DR. ARTHUR R. CLEMETT, Associate Clinical Professor at New York University, spoke on "Lymphomas of the G.I. Tract."

MR. RONALD H. HUTTON. who had served as assistant director of the hospital since his arrival at NCMH in November, 1965, has been promoted to associate director.

A member of the graduating class, THEODORE H. KIESSELBACH, was the winner of two national first-place awards in research competitions held this spring. The Awards Committee of the American Society of Clinical Pathologists selected him to receive its highest award "for the most outstanding research paper in clinical pathology entered in the 1969 competition among medical students in the United States." For this achievement and for being one of ten winners of the Sheard-Sanford Award for research in clinical pathology, he received a check for $350, a certificate from the American Society of Clinical Pathologists, and a medal from Bausch & Lomb, Inc. The paper that won this honor for Ted is entitled "The Effect of Thrombin on Factor XIII."

At the National Student Research Forum held in Galveston April 24-26 and sponsored jointly by the Student American Medical Association and the University of Texas Medical Branch, School of Medicine, Ted and two other UNC medical students received one third of the awards offered. Ted's paper on "Localization of Coagulation Factor XIII in Human Bone Marrow Megakaryocytes by Fluorescent Tracing" won first place in the Mead Johnson Excellence of Research Award in the Medical Student - Attendance Category. Honorable mention went to second-year student John T. Cuttino for his paper entitled "Studies on Hyperlipemia and Eruptive Xanthomata in Glycogen Storage Disease" and to fourth-year student P. Eugene Brown for his paper "Genetic Variants of Hemophilia B." More than 60 papers from 40 medical schools were entered in this competition.

DR. PHILIP SIEKEVITZ (Rockefeller University) was specially invited by the Department of Biochemistry to lecture on "The Biogenesis of Membranes" on May 1st. The department also sponsored three spring seminars: "Alteration of Lipid Composition of Cultured Cells" (DR. ROBERT DELL'ORCO, Dept. Microbiology, University of Kansas); "Cell-Free Synthesis of Clavine Alkaloids" (DR. FINIS L. CAVENDER, Dept. Biochemistry, Texas Technological College); and "Characterization of Red Cell Acid Phosphatases" (DR. MARILYN

R. FENTON, Dept. Physiological Chemistry, Ohio State University).

DR. HUBERT C. PATTERSON **(Surgery)**, president of the N.C. Surgical Association, presided over the meetings of this organization held at The Homestead, Hot Springs, Va., on May 15-17.

DRS. JAMES F. NEWSOME and CHARLES F. ZUKOSKI **(Surgery)** also participated in the scientific reunion. Dr. Newsome, besides being program chairman, was the moderator of the panel on "Ethical Consideration of Organ Transplantation." Dr. Zukoski gave a paper on "Organ Transplantation."

Dr. Newsome was also program chairman for the general session of the North Carolina Medical Society meeting (Pinehurst, May 21) and presented a paper on "Needs to Improve Traffic Safety and the Care of Traffic Victims."

Fifty occupational and physical therapy specialists from the United States, Canada and Sweden participated in a five-day course at the Hand Rehabilitation Center on May 12-16. UNC medical and therapy staff and guest lecturers discussed and demonstrated current techniques used for traumatically injured hands. The course was first offered in 1967 and has been held every year since then.

Among the school's presentations at the 66th Annual Meeting of the North Carolina Academy of Science held in Wilmington, N.C. on May 2-3, were: "Protein Biosynthesis in Mammalian Cell Cultures" by DRS. BOYD SWITZER and GEORGE K. SUMMER **(Biochemistry)**; "The Influence of Amygdalectomy on the Spleen of Stressed and Non-Stressed Rats" by DRS. MICHAEL K. BERKUT **(Biochemistry)** and ROYCE L. MONTGOMERY **(Anatomy)**; "The Behaviour of Rats Following Bilateral Ablation of Septae and Amygdalae" by Drs. Montgomery and Berkut; and "Pathophysiology of Blood Coagulation" by GEORGE D. PENICK **(Pathology)**.

DR. MILTON L. MILLER **(Psychiatry)** chaired the Section 6 of the scientific meetings of the American Psychoanalytic Association held at Miami Beach, Florida on May 3.

Ten papers in the program of the 69th Annual Meeting of the American Society of Microbiology held in Miami Beach, Fla. last May were the results of research studies conducted in our Department of Bacteriology by DRS. HARRY GOODER, KWANG SOO KIM, D. GORDON SHARP, DENISE D. DALTON, G. PHILIP MANIRE, AKIRO MATSUMOTO, and WILLIAM R. STRAUGHN, MRS. PRISCILLA B. WYRICK, and MESSRS. PETER M. McGUIRE and CHRISTOPHER FIELD.

By invitation of the National Audio Visual Center, DR. HAROLD R. ROBERTS **(Pathology & Medicine)** has been taping special television programs on platelet disorders. The taping is being done in Atlanta, Ga., and will be completed this summer. Last March Dr. Roberts spoke on these disorders and methods to diagnose them to the staff of the Medical College of South Carolina.

DR. HARRY GOODER's **(Bacteriology)** presentation at the Symposium on Cell Wall and Membrane Structure in Bacterial Taxonomy (Virginia Polytechnic Institute, Blacksburg, Va., May) was entitled "Cell Wall Composition in the Classification of Streptococci."

DR. MARGARET C. SWANTON **(Pathology)** spoke on "Problems in Hormonal Cytology" at the meeting of the North Carolina Society of Medical Technologists (Charlotte) on May 3. In June, she was UNC-CH delegate to the American Association of University Women Convention held in Chicago. During her stay in that city, she also participated in the conjoint meeting of pathologists and gynecologists of the National Committee for Reproducibility of Diagnosis, an USPHS Cancer Control Uterine Cancer project. DR. HUGH M. SINGLETON **(Ob. & Gyn.)** also attended the latter meeting.

The local chapter of the Alpha Omega Alpha National Medical Honor Society held their annual ceremonies on May 9. The Adam T. Thorp III Memorial Lecture, established in memory of the class of 1956 alumnus to honor the new members of AOA, was delivered by DR. FRANK J. DIXON. Dr. Dixon, chairman of the Department of Experimental Pathology at the Scripps Clinic and Research Foundation in La Jolla, Calif., spoke on "The Etiology and Pathogenesis of Glomerulonephritis."

The lecture was followed by a social hour and banquet at Blair House where the new members were initiated.

DR. and MRS. JAMES A. BRYAN **(Medicine)** gave a reception at their residence for the guest speaker and the AOA members and their wives.

AOA Guest speaker Dixon and President Middleton

Chief Justice Earl Warren and Dean Taylor at the inauguration ceremonies of the new Law School building on May 3.

Dr. Dixon, Dr. Brinkhous and students

Newly elected AOA members: (Front row, left to right) Daniel L. Crocker ('70), Thomas R. Griggs ('69), J. Franklin Sanderson, Jr. ('69), Robert B. Jones ('70), T. Cameron MacCaughelty ('69), and David S. Sheps ('69). (Back row, left to right) Stewart L. Ellington ('69), H. Grey Winfield III ('70), George M. Oliver, Jr ('70), G. Patrick Guiteras ('69), J. Patterson Browder III ('70), and Dr Harold R. Roberts ('55) (**Pathology and Medicine**).

STUDENT-FACULTY DAY

Saturday, May 10

10:00 Memorial Hall—Skits & Awards

12:30 Storybook Farm — Barbecue dinner & Softball

9:00 American Legion Hut—Combo Party

THEM CULTURE LOVERS

How 'bout them culture lovers, ain't they vultures

Drool, slobber, slurp, eating them cultures

Culturing cocci, culturing yeast

Mix 'em with red cells, have a little feast

Look at them culture lovers, ain't they great

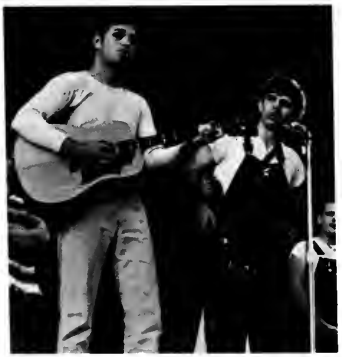
Smelling them pseudomonas, streaking them plates

Them superstitious culture lovers, ain't they neat

Hunting for treponema on the johnny seat

How to be a culture lover if I may suggest it

Find an old culture, eat it and digest it.



THEM PILL PUSHERS

How 'bout them pill pushers, ain't they great

Prescribe you a pill for 'most any ache

If your complaint is not specific

They'll give you an aspirin or a soporific

Lock at them pill pushers ain't they hip

Hide behind the lab door, take a little trip

Them acid head pill pushers, ain't they meanies

Charge you through the nose for just a few bennies

How to be a pill pusher, get a legal cushion

Find a few goof balls, haul off and push 'em.

THEM SCOPE PEEPERS

How 'bout them scope peepers, ain't they wise

Peeping all day at their microscope slides

Peep a slice of liver, peep a slice of heart

Peep a slice of cake, can't tell 'em apart

Look at them scope peepers, ain't they spastic

Trying to tell the normal cells from the anaplastic

Them academic scope peepers, ain't they crocks

Lurking in the laboratory, cursing at the docs

How to be a scope peeper, don't need a ticket

Find an old slide, stoop down and peep it.

MY FAVORITE THINGS

Midnight stool bennies, and crits in the morning

Professor rounds and trolls without warning

Ten page write ups that never get read

These are a few of the things that I dread

Smart yankee interns and verbose attendings

Journal clubs residents with rounds never ending

Mealy mouthed consults—5 days too late

These are a few of the things that I hate.

Chorus:

When the phone rings and my heart stops

Then I feel so bad

Then I just think of the money I'll make

And then I don't feel so bad.

The Henry C. Fordham Award—Edgar C. Garrabrant, M.D. ('66) (Resident, Surgery)

The William deB. MacNider Award—Don A. Gabriel ('71)

The Professor Award—Robert L. Ney, M.D. (Medicine)

The Outstanding Intern Award—Peter M. Zawadsky, Jr., M.D. (Intern, Medicine and Pediatrics)

The Medical Basic Science Teaching Award—Carl W. Gottschalk, M.D. (Medicine and Physiology)

Where are you going, my Kinny boy,
Kinny boy?
Where are you going, my Kinny, my
own?

The Department of Medicine sponsored three conferences during April-May: DR. STANLEY E. BRADLEY, Professor and Chairman, Department of Medicine, College of Physicians and Surgeons: "Studies of Hepatitis in Man and Dog."

DR. GRANT W. LIDDLE, Professor and Chairman, Department of Medicine, Vanderbilt University School of Medicine: "Ectopic Hormones."

DR. GILBERT GLASSER, Head, Section of Neurology, Department of Internal Medicine, Yale University School of Medicine: "Cerebral Ionic Environment and Epilepsy."

DR. CARL E. ANDERSON **(Biochemistry)** participated in the International Symposium on The Chemistry and Metabolism of Sphingolipids held at the Michigan State University in May, and in the American Red Cross Conference on The Structure and Function of the Red Cell Membrane, at the Pan American World Health Organization (Washington, D.C., May 8-9).

Dr. Anderson is planning to attend the VIIIth International Congress of Nutrition in Prague, Czechoslovakia on August 28-September 6.

DR. ERNEST CRAIGE **(Medicine)** has been elected to the Board of Examiners for the Subspecialty of Cardiovascular Disease of the American Board of Internal Medicine.

SECOND ANNUAL STUDENT RESEARCH DAY, MAY 7

Welcome — Dean Isaac M. Taylor, M.D.

Introductory Remarks — Enser W. Cole III ('71)

"Genetic Variants in Hemophilia B"—P. Eugene Brown ('69)§

Sponsor: Harold R. Roberts, M.D. **(Pathology and Medicine)**

"The Treatment of Pseudomonas Corneal Ulcer with Betadine"—James B. Sloan ('70)§

Sponsor: Samuel D. McPherson, Jr., M.D. **(Ophthalmology)**

"The Role of Fibrinogen in Platelet Aggregation—A Study of Congenital Afibrinogenemia" — David E. Sharp ('71)§

Sponsor: Nathaniel F. Rodman, M.D. **(Pathology)**

"An Example of Fragmentation and Obsession" — Harold R. Roberts, M.D., Guest Speaker

"Fluorescent Antibody Demonstration of Coagulation Factor XIII in Human Megakaryocytes"—Theodore H. Kiesselbach ('69)*

Sponsor: Robert H. Wagner, Ph.D. **(Pathology and Biochemistry)**

§ Student Research Day Awards
* The Deborah C. Leary Memorial Awards

"Adenosine 3'-5' Monophosphate as the Mediator of ACTH-induced Ascorbic Acid Depletion in the Rat Adrenal"—H. Shelton Earp III ('70)*

Sponsor: Robert L. Ney, M.D. **(Medicine)**

"A Morphologic Study of Granulocyte Induced Hemolysis"—Daniel L. Crocker ('70)*

Sponsor: Richard I. Walker, M.D. **(Medicine)**

Organizing Committee and Judges:

Enser W. Cole III ('71), Chairman
Carol Ann Aschenbrener ('71)
C. Ellis Fisher ('69)
Christine O. Suberman ('70)
J. Fred Wolfe ('72)

Enser W. Cole III

P. Eugene Brown

James B. Sloan

David E. Sharp

Harold R. Roberts, M.D.

Theodore H. Kiesselbach

H. Shelton Earp III

Daniel L. Crocker

ROBERT B. JONES ('70), received a Student Travel Award from the American Gastroenterological Association to attend the organization's meetings held in Washington, D.C. on May 14-17. Bob, who has taken a year off from the regular medical school program to pursue graduate studies in the Department of Biochemistry, will begin his fourth medical school year next fall and expects to obtain his M.D. degree in 1970.

On May 1st Associate Dean JOHN B. GRAHAM was the guest lecturer for the Student Research Day at the Medical College of Alabama. His topic was "Biomedical Research in the Coming Age."

On May 15-16 he lectured at Cornell University Medical College in the capacity of Visiting Professor of Medicine. He spoke on "Human Overpopulation" and "Biosynthesis of the Antihemophilic Factor." On the subject of overpopulation he had previously addressed the members of the Rotary Club of Concord, N.C.

A seminar on "Ventilatory Mechanics of the Thorax in Emphysema" was conducted by DR. PAUL VAN LITH of the Department of Medicine of the University of Florida on May 12.

DR. JOSEPH S. PAGANO **(Bacteriology and Medicine)** spoke on infectious mononucleosis to the N.C. State Medical Society in Pinehurst, N.C. on May 20.

DR. CLAYTON E. WHEELER, JR. **(Medicine)** reported results of his work on herpes simplex infections to the Dermatology Section of the Illinois Medical Society (Chicago, May 21) and to the Seaboard Medical Association (Nags Head, June 20).

On May 21, DR. MARY ELLEN JONES **(Biochemistry)** conducted a symposium on "Bacterial Aspartate Transcarbamylases" at the Department of Biochemistry and Nutrition of the Virginia Polytechnic Institute.

DR. GEORGE JOHNSON, JR. **(Surgery)** attended meetings of the Medical Society of the State of North Carolina (Southern Pines, May 21) and of the North Carolina Heart Association (Charlotte, N.C.). At Southern Pines he spoke on "Training of Ambulance Attendants" and in Charlotte he was moderator of a panel on peripheral vascular disease and also spoke on this subject.

In June, Dr. Johnson participated in the Fourth Annual Rescue Institute held in the UNC campus. He has helped in the organization of the institute for the past three years.

On May 27, DR. JANET J. FISCHER **(Medicine and Bacteriology)** lectured on "Antibiotic Usage" to physicians and staff of the Mountain Home Veterans Hospital in Johnson City, Tenn.

DR. PAUL F. WHITAKER, Clinical Associate Professor of Medicine and Preceptor in Psychiatry from Kinston, N.C., is the author of a book of poetry entitled **More Than Medicine** (New York, The Carlton Press, 1968). Many of the poems deal with medical and psychiatric subjects. Included in the volume is an essay on the use of poetry in therapy which Dr. Whitaker gave to our freshman class in Human Ecology in the spring of 1968.

Quoted comments about the book will serve our readers far better than our own review:

". . . This book of verse offers not only some excellent reading for the physician, but also gives him a ready available therapeutic aid for some of his patients . . . We have read all of these unusual poems and recommend them strongly to our colleagues . . ." (Bull. Am. Coll. Phys. **10:** 185 [April] 1969.)

". . . Both physicians and patients can read it with personal profit and benefit . . . shows most convincingly that the physician can 'cure sometimes, relieve often, prevent frequently, but comfort always'. . ." (Dr. Richard Proctor, Professor and Chairman, Department of Psychiatry, Bowman Gray School of Medicine.)

". . . is an enduring credo for all who would face life with dignity and forbearance. This collection I heartily recommend . . ." (Dr. Warner H. Wells [Surgery].)

. . .'Lament for America' and 'Art of Medicine' particularly appealed to me. I would like to see the latter included in the curricula of every medical school . . ." (Dr. Wilburt C. Davison, Dean Emeritus, Duke University School of Medicine.)

DR. JAMES W. WOODS **(Medicine)** participated in the scientific session of the North Carolina Heart Association meetings held in Charlotte in May. His presentation was entitled "Newer Facets of Renovascular Hypertension."

"Recent Advances in Pharmacology as Applied to Dental Practice" was

Bob Jones

the title of DR. WILLIAM L. DEWEY's **(Pharmacology)** address to the Coastal Dental Study Club in New Bern, N.C. (May 29).

Results of studies carried out by Department of Medicine members DRS. CHARLES H. WALLAS, JOHN C. PARKER, HILLEL J. GITELMAN, and LOUIS G. WELT on relationships between erythrocyte active transport of sodium, lactate production and erythrocyte sodium concentration were presented by Dr. Wallas at the meetings of the American Federation for Clinical Research held in Atlantic City in May.

WAYKIN NOPANITAYA, from Thailand, received a Bachelor's degree in Zoology this spring. Waykin has been in the Department of Pathology since 1967 working under the tutelage of Dr. Sylvanus W. Nye and is currently a candidate for the M.S. degree in Experimental Pathology.

At the Third Hepatoma Symposium sponsored by the Fels Research Institute (Philadelphia, June 2-3) DR. J. LOGAN IRVIN **(Biochemistry)** reported his and DR. HENRY STROBEL's findings on the "Synthesis and Degradation of Tryptophan Pyrrolase and Tyrosine Transaminase in Liver and Morris Hepatoma 5123TC."

On June 10, Dr. Irvin lectured on "Effects of Histones Upon the Induction of Enzymes in Liver of Adrenalectomized Animals" at the M. D. Anderson Hospital and Tumor Institute of the Texas Medical Center, in Houston.

DR. RAYMOND F. SCHMITT, JR., is a new Instructor in Psychiatry. Born in New Orleans, he attended Loyola University (B.S. 1956) and Louisiana State University Medical School (1959). He spent two years with the Air Force and served residencies at the Mental Health Institute in Cherokee, Iowa, and at Tulane University. His primary interest is child psychiatry.

DR. DONALD D. WEIR **(Medicine)** spoke on "Management of Rheumatoid Patients by Physicians in a Southern State" to the American Rheumatism Association at meetings held in Boston in June.

On June 14 DR. CHARLES F. ZUKOSKI **(Surgery)** lectured to the staff of the Moses H. Cone Memorial Hospital on "Organ Transplantation."

Genetics trainee RAYMON J. KELLEHER and DR. HARRY GOODER **(Bacteriology)** presented their work on genetic linkage in the pyrimidine biosynthetic pathway in **B. subtilis** at the Transformation Meeting, held in Estes Park, Colo., in June 13-18.

The Orange-Person Mental Health Center has established headquarters in Chapel Hill with DR. JOHN A. EWING **(Psychiatry)** as its clinical director. The center, founded last October, has clinics in Chapel Hill, Hillsborough and Roxboro. Most of the staff members are from the medical school, NCMH and UNC departments of Psychology and Social Work. In-patient service will be provided at Memorial and Umstead hospitals.

DR. ROBERT L. TIMMONS **(Surgery)**, Secretary-Treasurer of the Forum of University Neurosurgeons, attended the group's meeting in Dallas, Tex., on June 18-22. On April 11, Dr. Timmons presented a paper on "Water and Salt Metabolism Following Pituitary Stalk Section" at the Edgar Kaha Neurosurgical Meeting in Ann Arbor, Mich.

DR. K. M. BRINKHOUS **(Pathology)** lectured on "Blood Coagulation—An Overview" at the summer course on Recent Advances in Biomedical Sciences Pertinent to Oral Surgery offered by the Department of Nutrition and Food Sciences of the Massachusetts Institute of Technology.

DRS. GEORGE K. SUMMER **(Biochemistry)** and EDWARD L. HOGAN **(Medicine)** participated in the Regional Lipid Conference held at Oak Ridge, Tenn. on May 8-9. Dr. Summer spoke on "Studies on Hyperlipemia in Glycogen Storage Disease" and Dr. Hogan reported on his work on sphingolipid composition in murine genetic leukosdytrophy.

On June 21, Dr. Hogan presented to the Annual Meeting of the American Association of Neuropathologists (New Haven, Connecticut) findings of studies carried out by him and DRS. JOE P. HURT and MARTIN R. KRIGMAN **(Pathology)** on "Subacute Necrotic Myelopathy: Isolation of a Virus."

MR. DONALD S. BUCKLEY, appointed Instructor in Hospital Administration, comes to Chapel Hill from Norfolk, Va., where he had been assistant administrator at the Norfolk General Hospital since 1965. Mr. Buckley was born in Charlotte, N.C., received his B.S. degree from UNC in 1959 and the M.H.A. degree from the University of Minnesota in 1961.

DRS. JAMES H. SCATLIFF **(Radiology)** and CLAYTON E. WHEELER **(Medicine)** spoke at the 74th Annual Meeting of the Seaboard Medical Association held June 19-22. Dr. Scatliff's topic was "Newer Advances in Radiological Diagnoses" and Dr. Wheeler's was "Herpes Simplex Infections."

DR. WILLIAM E. BRENNER, recently appointed Instructor in Obstetrics and Gynecology, was born in Dayton, Ohio, and received his degrees from Case Western Reserve University. Before coming to Chapel Hill he was a teaching fellow at the University Hospitals of Cleveland.

To professor: DRS. BILLY BAGGETT **(Pharmacology),** THOMAS E. CURTIS **(Psychiatry),** WILLIAM G. HOLLISTER **(Psychiatry),** GEORGE JOHNSON **(Surgery),** WILLIAM R. STRAUGHN **(Bacteriology),** MARGARET C. SWANTON **(Pathology),** LUTHER M. TALBERT **(Obstetrics & Gynecology),** CHARLES F. ZUKOSKI **(Surgery).**

To associate professor: DRS. JOHN I. BOSWELL **(Psychiatry),** JAMES A. BRYAN II **(Medicine & Preventive Med.),** FREDERIC G. DALLDORF **(Pathology),** ROBERT B. DUKE **(Psychiatry),** JAMES E. ETHERIDGE, JR. **(Preventive Med.),** FRANK S. FRENCH **(Pediatrics),** HILLEL J. GITELMAN **(Medicine),** WILLIAM P. GLEZEN **(Pediatrics),** EDWARD L. HOGAN **(Medicine & Biochemistry),** MARTIN R. KRIGMAN, REGINALD G. MASON, and SYLVANUS W. NYE **(Pathology),** JOSEPH F. PATTERSON, JR. **(Surgery),** CLIFFORD B. REIFLER **(Psychiatry),** HUGH M. SHINGLETON **(Obstetrics & Gynecology),** MARY C. SINGLETON **(Anatomy & Phys. Therapy)** and ROGER F. SPENCER **(Psychiatry).** MR. HAROLD P. COSTON **(Hospital Administ.)** and MISS MABEL M. PARKER **(Phys. Therapy).**

To assistant professor: DRS. CARY W. COOPER and WILLIAM L. DEWEY **(Pharmacology).**

To clinical assistant professor: DR. DONALD B. REIBEL **(Surgery).**

PHILIP FREDERICK SPARLING, who has joined the faculty as Assistant Professor of Medicine, was a research and teaching fellow at Massachusetts General Hospital. A native of Evanston, Ill., he is a graduate of Princeton University and Harvard Medical School. He has also worked in the Venereal Disease Research Laboratory of the USPHS Communicable Disease Center in Atlanta, Ga.

DR. HERBERT J. PROCTOR, Assistant Professor in Surgery, has returned to the Hill after two years with the U.S. Navy. A native of Glen Cove, N.Y., he is a graduate of Princeton University who received his M.D. from New York University in 1967. He served as chief resident here for a year prior to joining the Navy.

DR. GLENN E. HAIR **(Surgery)** has left the Hill to go to Lexington, Ky., where he will create and chair the Division of Otolaryngology of the University of Kentucky School of Medicine. Dr. Hair, who pursued his education at UNC (B.S., '55; M.D., '59; residency, '62-64) was appointed to our faculty in 1963.

DR. WINFRED L. SUGG ('57), Associate Professor of Surgery, had been teaching for three years at the University of Texas Southwestern Medical School in Dallas prior to joining our faculty on June 1. A Carolinean from Snow Hill, he served as lieutenant commander for two years at the U.S. Naval Hospital in Bethesda, Md. (See Alumni News).

DR. THOMAS W. FARMER **(Medicine)** presented a paper co-authored by DR. JAMES N. ALLEN **(Medicine)** at the meetings of the American Neurological Association held in Los Angeles in June. The paper was entitled "Hereditary Proximal Amyotrophic Lateral Sclerosis."

DR. JOHN HENRY KNELSON, now an assistant professor in our Department of Pediatrics, is a native of Martin, N.D. He is a graduate of Manchester College, received his M.D. from Northwestern University Medical School and his M.P.H. from the University of Michigan, where he had been teaching.

The school's Continuation Education Program has been accorded full accreditation by the Council on Medical Education of the American Medical Association. The accreditation system, which is about three years old, was developed to assure physicians of the quality of the presentations being offered by medical schools, hospitals, professional societies and other agencies.

This accreditation is recognition of the excellence of the programs of the school. UNC inaugurated circuit courses for the physicians of the state in 1916, and was the first institution in the United States to undertake to meet the needs of doctors for refresher education on a statewide basis.

At the Fourth Conference on Blood Platelets held in Oak Ridge, Tennessee on June 24, DR. SOTIRIOS G. IATRIDIS presented the results of studies conducted in the Department of Physiology by him and DR. JOHN H. FERGUSON on "Platelet Adhesiveness and Thrombosis Induced by Alkaline Phosphatase in the Rabbit."

DR. EDWIN T. PRESTON, appointed Instructor in Surgery this summer, comes from Kingsport, Tenn. He received his medical training at Duke University School of Medicine and was a teaching fellow at Harvard University through this spring.

DR. CLOVIS W. FRANCISCONI of Porto Alegre, Brazil, visited NCMH under a W. K. Kellog Foundation fellowship to study developments in U.S. hospitals. Dr. Francisconi is consultant to, and member of, the implementation committee of the newly-constructed University Hospital in Porto Alegre which is scheduled to open within the next year and will have a capacity of approximately 1,000 beds. During his two-week stay in Chapel Hill he worked with the staffs of both NCMH and Duke.

DR. STANLEY R. MANDEL has been appointed Instructor in Surgery. Born in New York, he received the B.A. degree from Columbia University, and M.D. and M.S. (surgery) degrees from the University of Virginia. In June he completed his residency at the University of Virginia Medical Center, where he also

participated in research studies on organ preservation.

JAMES B. SLOAN ('70) has been awarded a $3,000 scholarship by Seeing Eye Inc. of Morristown, N.J. Jim is the first of our students to receive this award.

A native of Wilmington, N.C. and a 1962 UNC graduate, he served four years in the Navy before entering the school to pursue a medical career. His special area of research is corneal infections in which he became interested last summer while working under the guidance of DRS. SAMUEL D. McPHERSON and L. MORGAN HALE **(Ophthalmology).** He is currently carrying out related investigations.

Seeing Eye is a nonprofit organization which originally dealt only with providing guide dogs for the blind. It now awards scholarships to individuals who demonstrate outstanding potential or who are doing valuable research in opthalmology. The scholarships are awarded with the stipulation that the recipient spend the free quarter of his senior year in opthalmology and that he continue to do research in this specialty.

Assistant Dean for Continuation Education DR. WILLIAM P. RICHARDSON participated in the meetings of the Residency Review Committee for Preventive Medicine held in Chicago last April. Dr. Richardson, who is a liaison member of the committee, represented the American College of Preventive Medicine at the reunion.

On June 23-25, he attended the annual meeting of the American Board of Preventive Medicine.

DR. W. PAUL BIGGERS **(Surgery)** has returned to the Hill after spending five months at the Scripps Institute and Research Foundation carrying out special studies in immunology.

DR. FRANCIS DeWITT PEPPER ('56) **(Radiology)** has entered the private practice of radiology in Winston-Salem.

DR. GEORGE M. HIMADI has joined the Department of Radiology as Associate Professor. Previously, he was in private practice in Ft. Lauderdale, Fla. Born in Ridgewood, N.J., he is a Duke University graduate who has taught at Columbia-Presbyterian Medical Center, and has served as director of radiology at Overlook Hospital in Summit, N.J., and at the Valley Hospital in Ridgewood.

DR. I. DAVID GOLDMAN has joined our faculty as Assistant Professor of Medicine. Born in Jersey City, N.J., he is a graduate of New York University and the University of Chicago School of Medicine. Dr. Goldman was a research associate at the National Cancer Institute before coming to UNC.

DR. CARY W. COOPER **(Pharmacology)** attended the 51st Meeting of the Endocrine Society held in New York City on June 27-29. He presented a paper on measurement of **in vivo** secretion of pig thyrocalcitonin by radioimmunoassay as results of studies carried out by him and DRS. LEONARD J. DEFTOS and JOHN T. POTTS, JR. "Fractionation of LH-Responsive Adenyl Cyclase of the Rabbit Ovary" by DRS. WILLIAM R. HUBBARD, JENNIFER H. DORRINGTON and BILLY BAGGETT was another presentation from the Department of Pharmacology. DR. T. C. PENG, from the same department, also attended the meetings.

DR. WILLIAM A. NEBEL ('62), N.C. born (Charlotte) and educated (UNC), has rejoined our faculty as Instructor in Obstetrics and Gynecology after completing his military service.

DR. DAVID A. ONTJES, who has been appointed Assistant Professor of Medicine and Pharmacology, is a native of Lyons, Kan. He graduated from the University of Kansas, received his M.A. degree from Oxford University in 1961 and his M.D. degree from Harvard Medical School in 1964. For two years he was a research associate with the National Institute of Arthritis and Metabolic Disease.

DR. SVEIN U. TOVERUD has joined our faculty as Associate Professor of Pharmacology and of Preventive Dentistry and Dental Science. A native of Oslo, Norway, he attended the State University of Iowa and Harvard School of Dental Medicine (D.M.D., 1954), and returned to Norway to receive his doctorate in dentistry from the University of Oslo in 1964. Since 1954 he has done extensive research in pharmacology and dentistry, both in United States and Norway. Prior to coming to Chapel Hill he was an associate professor at the Department of Physiology and Biochemistry of the University of Oslo Dental Faculty.

DR. BILLY BAGGETT **(Pharmacology and Biochemistry)** has been appointed Chairman of the Department of Biochemistry of the Medical College

James B. Sloan ('70)

Dr. Billy Baggett

of South Carolina. Dr. Baggett joined our faculty in 1957.

DR. BENSON R. WILCOX **(Surgery)** has been appointed chief of the Division of Cardiac and Thoracic Surgery effective July 1. Dr. Wilcox, a Markle Scholar, is chairman of the senior electives program. In both positions he succeeds DR. RICHARD M. PETERS who will join the staff of the University of California at San Diego as Professor of Surgery in charge of thoracic surgery. Dr. Peters had been a member of our faculty since 1952.

DR. WILLIAM H. PEARLMAN has been appointed Professor of Pharmacology. Born in New York, he was educated at Brooklyn College (B.S., 1934) and Columbia University (Ph.D., 1940). He comes to UNC from Harvard University where he had been for the past 10 years; previously he taught at Princeton and Jefferson Medical College. Dr. Pearlman was a visiting investigator at University of London for three years, associate scientific director of the Waldemar Medical Research Foundation for two years and consultant in surgery at Peter Brent Brigham Hospital for nine years.

Some of the North Carolina physicians who participated in the Continuation Education workshop on modern contraception. The workshop, programmed for the family physician, was sponsored by the Department of Obstetrics and Gynecology and held on June 6.

DR. ROBERT JAY REICHLER, Assistant Professor of Psychiatry since July 1st, taught the past year at the Medical College of South Carolina. A New Yorker from Bronx, he is a graduate of the University of Chicago and the Albert Einstein College of Medicine. He has also taught at the University of Rochester Strong Memorial Hospital.

DR. RALPH W. STACY **(Surgery and Physiology),** who had been a member of the faculty since 1963, resigned on June 30 to accept a position at Cox Coronary Institute.

A large scale, double-blind controlled trial of live attenuated rubella vaccine ((Merck-Sharp & Dohme, West Point, Pa.) has been carried out through the collaborative efforts of DRS. RICHARD P. LIPMANN and JOSEPH S. PAGANO of our departments of Medicine, Bacteriology and Pediatrics, RONALD H. LEVINE (N.C. State Department of Health), MILLARD B. BETHEL and JANE H. WOOTEN (Wake County Health Department), and many pediatricians, general practitioners and civic and professional groups in Wake County. The results of this study were reported to the International Conference on Rubella Immunization in Bethesda, Md. (February 19) and to the American Medical Association Meetings in New York City (July 14). This study was one of the most extensive and conclusive trials of rubella vaccine and was instrumental in the licensure of the product by the Merck Institute.

Department of Medicine participation in the IVth International Congress of Nephrology (Stockholm, Sweden, June 22-27):

DRS. WILLIAM B. BLYTHE, DOMINGOS O. D'AVILA, HILLEL J. GITELMAN and LOUIS G. WELT: "Evidence for a Humoral Natriuretic Factor."

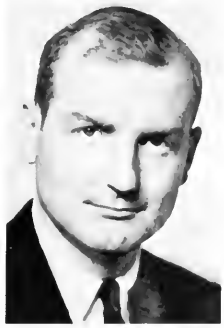
DRS. CRAIGE COLE, Blythe and Welt: "Lack of Correlation Between Diuretic Action and Inhibition of Ouabain Sensitive ATPase."

Dr. Welt: "Erythrocyte Transport Defect in Uremia."

DR. LEWIS N. TERRY, JR., recently appointed Assistant Professor of Radiology, had been chief resident in Radiation Therapy at Yale University Medical Center for the last two years. A native of Selma, Ala., he is a 1962 graduate of Duke University School of Medicine.

DR. WILLIAM HERZOG **(Public Health)** has been named the University's first director of Continuing Education in Health Sciences to coordinate, expand and evaluate all health science programs in continuing education.

Dr. Peters



Dr. Wilcox

MR. LOCHLIN M. WARD (UNC Sch. Commerce '38) was recently named Assistant Director of NCMH. Prior to joining the hospital staff, Mr. Ward was Vice-President of Cardinal Products, a Durham-based scientific supply company. His duties will involve supervision of several operating departments, including the selection, requisition, and cost control of all materials, supplies and equipment used in patient care and in technical areas.

The establishment at UNC of a 16-project program in the space sciences has been insured by a grant of $250,000 from the National Aeronautics and Space Administration. This represents the first installment in a total grant of $1.6 million, to be given the University over the next five years.

DR. ROBERT G. FAUST **(Physiology)** heads the committee which proposed the program. This group, representing at least 12 University departments and known as the UNC Space Sciences Committee, devised the program to cover three general areas of the space sciences: (1) the origin of life and the universe, (2) life-support systems needed in space, and (3) the social and economic implications of advanced space technology. The program includes, in addition to research projects, the establishment of a public lecture series at the Morehead Planetarium.

The program is expected to play an important role in contributing information to the government's space program. It will establish a center for space-sciences research at the University and will strengthen the research capabilities of many departments in the University.

The school and the New Hanover Memorial Hospital in Wilmington, N.C., have established a visiting professors program for the summer months under which seven members of our faculty will spend two weeks each at NCMH. DR. LOUIS G. WELT **(Medicine)** and DR. LOCKERT MASON, director of medical education at the Wilmington hospital, designed the program, working in conjunction with the University's Division of Education and Research in Community Medical Care.

Participating faculty are members of the Department of Medicine: JANET J. FISCHER, WILLIAM E. LASSITER, OSCAR L. SAPP, ROBERT A. SHAW, RICHARD I. WALKER, DONALD D. WEIR, and DANIEL T. YOUNG. While in Wilmington, they are to participate in clinical and teaching activities on the hospital wards.

DR. GEORGE JOHNSON, JR. **(Surgery)** is principal investigator of a research grant recently awarded by HEW in support of a continuing investigation of shock. The $100,000 grant will cover a three year period.

Dr. Johnson's research will seek to determine some of the water and mineral changes that occur within the body spaces as well as within the individaul cells in shock. Information from this study will be applied to the treatment of injured patients as well as those in shock from any other cause, but especially those due to blood loss.

Initially, red blood cells will be studied to determine if any changes in the cell membranes have occurred as a result of shock. Later, muscle cells will also be analysed for abnormalities in function following shock.

Associate Dean Christopher C. Fordham III has accepted the appointment by the Board of Regents of the University System of Georgia as Vice-President for Medicine and Dean of the School of Medicine at the Medical College of Georgia, effective August 1, 1969.

Dr. Fordham has been a member of our faculty since 1958 and has held positions as Instructor, Assistant Professor, Associate Professor and Professor of Medicine. He served as Assistant Dean for Student Affairs from 1965 to 1968, and has been Associate Dean for the Clinical Sciences and Chief of Staff of NCMH since then.

Associate Dean Fordham

The William deB. MacNider Award—
Don Alexander Gabriel, '71.

The Heusner Pupil Award—Richard Kirby Primm, '70.

Alpha Omega Alpha Honor Medical Society—
James Patterson Browder III ('70).
Daniel Lind Crocker ('70).
Robert Brooke Jones ('70).
George Motley Oliver, Jr. ('70).
Heber Grey Winfield III ('70).

The Student Research Paper Awards:

The Second Award—Henry Shelton Earp III, '70. "Adenosine 3'-5' Monophosphate As the Mediator of ACTH-Induced Ascorbic Acid Depletion in the Rat Adrenal."

The Third Award—Daniel Lind Crocker, '70. "A Morphologic Study of Granulocyte Induced Hemolysis."

Special Distinction — Charles B. Brett, '71. "Experience with Serum Hepatitis in A Hemophiliac Population."

Special Distinction—Charles W. Harshaw, Jr., '71. "The Effects of Fluoride Toxicity on Blood Ammonia Concentration."

Special Distinction—John O. Reynolds, Jr., '71. "Aminoaciduria in Rats Induced by the Amino Acid Analogue, Cycloleucine."

National Foundation First Award—John T. Cuttino, Jr., '71. "Studies on the Hyperlipemia and Eruptive Xanthomata of Glycogen Storage Disease."

National Foundation Second Award —David Edward Sharp, '71. "The Role of Fibrinogen in Platelet Aggregation—A Study of Congenital Afibrinogenemia."

Student Research Day First Award—James Boykin Sloan, '70. "The Treatment of Pseudomonas Corneal Ulcer with Betadine."

Student Research Day Second Award — David Edward Sharp, '71. "The Role of Fibrinogen in Platelet Aggregation—A Study of Congenital Afibrinogenemia."

Tenth Annual National Student Research Forum Honorable Mention—John Tindal Cuttino, Jr., '71. "Studies on Hyperlipemia and Eruptive Xanthomata in Glycogen Storage Disease."

The Morehead Fellows, Class of '72—
John Millard Gilkey, Jr.
Howard Samuel Kroop
Ronald Jay Stanley

Life Insurance Medical Research Fellows—
Robert Brooke Jones, '70
Don Alexander Gabriel, '71

Foreign Fellowship Awards—
Bruce Shoo-tang Change, '70
Enser William Cole III, '71
Stephen Lloyd Green, '70
Clarence Alonzo Griffin III, '71
John Edward Hanna, '70
Michael Ray Knowles, '71

The Riggins Merit Scholarship—
Daniel Lind Crocker, '70.

Alumni Merit Scholarships—
John Richard Leonard III, '70
James Allison Shivers, '71
Robert Linville Hinkle, '70
Heber Grey Winfield III, '70
Enser William Cole III, '71

Participants at UNC Commencement Exercises (Carmichael Auditorium, June 2, 1969)—Governor Robert W. Scott and Dean Isaac M. Taylor.

Vice Chancellor C. Arden Miller and commencement speaker Dr. James A. Shannon.

Alumni News

PRESIDENT:
H. Haynes Baird ('40)

PRESIDENT ELECT:
Charles L. Herring ('55)

VICE PRESIDENT:
W. Howard Wilson ('35)

SECRETARY:
Hugh C. Hemmings ('54)

TREASURER:
James Thorp ('57)

COUNCILLORS: Julian S. Albergotti, Jr. ('55); Alton J. Coppridge ('51); Harold L. Godwin ('45); William Moretz ('37); Stephen C. Pugh ('57); Daniel H. Seals ('51); Lewis S. Thorp, Jr. ('50); Isaac C. Wright (43M); Ernest H. Yelton ('41); F. A. (Ted) Blount ('42); Dean C. Jones, Jr. ('56); Robert M. McMillan ('36); S. Malone Parham ('43D); J. Olin Perritt ('50); Charles J. Sawyer III ('63); John Cotten Tayloe, Jr. ('60); Zebulon Weaver III ('61); George Johnson, Jr. ('50); Samuel B. Joyner ('55); Edward B. McKenzie ('49); Charles P. Nicholson (HS); Cornelius T. Patrick ('54); Howard A. Patterson ('23); George D. Penick ('44); J. Iverson Riddle ('56).

1908

ROSCOE DRAKE McMILLAN (Box 232, Red Springs, N.C. 28377) received his M.D. degree from the University of Maryland in 1910 and has done general practice in Lumberton and Red Springs. From 1941 to 1945 he served as secretary-treasurer of the Medical Society of the State of North Carolina, and in 1950-51 was its president. From 1948 to 1950 he was secretary-treasurer of the North Carolina Academy of General Practice; in 1950 he was chosen outstanding general practitioner of the year for North Carolina. He was vice president of the League for Crippled Children in 1945 and has served on a Special Committee for the Hospital and Medical Care Commission, on the State Board of Medical Examiners, on the Board of Examiners of Nurses, and on the State Board of Control of North Carolina Hospitals. He was district Rotary governor in 1934 and is a deacon in the Presbyterian Church.

On April 20, 1967, Roscoe received the Distinguished Service Award from the UNC Medical Alumni Association. The citation read as follows: "A Family Physician in the true sense of this special field of medicine to the people of his community for more than fifty years; a leader in Civic, Educational, and Church Activities throughout his lifetime. He has effectively served in the medical affairs of his State as a member of numerous committees and as Secretary and President of the Medical Society of North Carolina."

The McMillans have two children. He and his wife, the former Hannah McNeill, live at 514 S. Main Street in Red Springs.

1916

EUGENE P. PENDERGRASS (3400 Spruce St., Philadelphia, Pa. 19104) is a member of the Council on Health Manpower of the American Medical Association, chairman of the Deans Committee of the Philadelphia County Medical Society, and a member of the Advisory Committee for CARE/Medico, Philadelphia Division.

His "major professional interest at the moment is concerned with pneumoconiosis in coal miners and asbestos workers. This work is being done under the direction of the U.S. Public Health Service (asbestosis)."

1919

VERNE S. CAVINESS (109 N. Boylan Ave., Raleigh, N.C. 37603) graduated from Jefferson Medical College in 1921 and has been practicing medicine in Raleigh ever since. He organized the cardiovascular clinic at Rex Hospital in 1937 and directed it until 1967. He also organized the Medical Writers Club in Raleigh and was its first president. He has been a member of the clinical faculty of UNC School of Medicine, president and secretary of the Raleigh Academy of Medicine, the Fifth District Medical Society, and the Rex Hospital staff, and is now president-elect of the Wake County Medical Society. He has served in the Medical Society of the State of North Carolina as chairman of the Section on the Practice of Medicine. A fellow of the American College of Physicians, he organized and conducted the first regional meeting of this group to be held in North Carolina. He has been president and director of many civic groups in Raleigh.

Besides practicing cardiology in Raleigh, Dr. Caviness has extensive interests in farming.

1923

M. PAUL BYERLY (5820 York Rd., Baltimore, Md. 21212) is still practicing internal medicine. His home address is 6415 Murray Hill Rd., Baltimore, Md. 21212).

1926

JAMES McRAE BETHEA (188 S. Bellevue, Memphis, Tenn.) graduated from the Harvard Medical School in 1928 and is engaged in the private practice of internal medicine in Memphis. He is "looking forward to retirement and return to Carolinas."

1931

RALPH BERNARD GARRISON (Pine Croft, Hamlet, N.C. 28345) was honored by the N.C. Academy of General Practice, at its twentieth annual meeting, for "the outstanding leadership" he provided as president of that organization.

Ralph received his M.D. degree from the University of Maryland and served his internship in the Baltimore City Hospital. After a year as junior resident physician at the Maryland House of Correction, he began the general practice of medicine and surgery in Hamlet in 1933. In addition to being assistant chief of staff at Hamlet Hospital and a member

of the executive board (and past chief of staff) at Richmond Memorial Hospital, he has been extremely active in community affairs and in the county, district, and state medical societies. He is on the executive council of the Medical Society of the State of North Carolina and is a past president of the Richmond County Medical Society, the Fifth District Medical Association, the Seaboard Coast Line Surgeons Association, the Seaboard Coast Line Golf Association, the Hamlet Civic Club, the Hamlet Lions Club, the District 8 School Board Association, and the Richmond County Country Club. Currently the President of the Hamlet Development Company, which he helped to organize, he is on the executive board of the Southern National Bank and a former chairman of its board of directors. He is also a member of the board of stewards of the Methodist Church.

In 1936, Ralph married Evelyn Louise Blackley, a native of Hamlet. They have two children—Ralph, Jr. (now connected with the Seaboard Coast Line Railroad) and Mrs. Carolyn Garrison Duckett, wife of Dr. C. H. Duckett of Canton. Ralph's hobbies are travel and golf.

1932

THOMAS JEFFERSON TAYLOR (643 Roanoke Ave., Roanoke Rapids, N.C. 27870) obtained his M.D. degree from Jefferson Medical College in 1934. After a two-year rotating internship at St. Elizabeth's Hospital in Washington, D.C., he entered private practice in Scotland Neck, N.C., in 1937. In 1938 he moved to Roanoke Rapids, where he has remained since except for a period of active duty in the Army Medical Corps from 1940 to 1945. He commanded the Medical Battalion of the 89th Infantry Divi-

sion and was awarded the Bronze Star. He was discharged with the rank of colonel.

He has served on the Halifax County Board of Health, the Halifax County Health Study Commission and the Roanoke Rapids Zoning Board. He is past president of the Roanoke Rapids Rotary Club and is now a member of the N.C. Board of Nursing Examiners. He is active in the First Methodist Church, and writes that he is the "proud grandfather of two granddaughters, children of Mr. and Mrs. James Miller of Roanoke Rapids. Another daughter and son-in-law Mr. and Mrs. Vic Bowles, reside in Chapel Hill. Present ambition—a little more leisure."

1933

AARON BARR (Meadowbrook Hospital, Box 175, East Meadow, N.Y. 11554) received his M.D. degree from the Medical College of South Carolina. He is now attending psychiatrist at Meadowbrook Hospital, senior psychiatrist at Manhattan State Hospital, psychiatrist with the State Department of Mental Hygiene, and consulting psychiatrist for the Nassau County Drug Abuse and Addiction Commission.

CAMERON F. McRAE (Apt. 6-J, 38 Front St., Binghamton, N.Y. 13905) is commissioner of the Broome County Health Department and chairman of the Broome County Council on Smoking. Last summer the Broome County Health Department and the New York State Health Department cosponsored a multiphasic screening project in Binghamton, during which some 2700 persons were screened in nine days.

A vestryman at Trinity Memorial Episcopal Church and associate teacher of the tenth-grade class in the Church School, Cam wrote the page for February 22, 1969, in the January-February issue of **The Upper Room.**

Cam's wife, the former Beatrice Crisfield (UNC '30) is a genealogist and has had articles on this subject published in various journals.

1939

MAX M. NOVICH (313 State St., Perth Amboy, N.J. 08861) is an orthopedic surgeon and a member of the New Jersey State Athletic Commission. A former boxer and an expert on athletic injuries, Max spoke on "Boxing" at the Symposium on the Medical Aspects of Sports, sponsored by the Committee on the Medical Aspects of Sports of the State of New York, and held in New York City on February 8.

As a member of the Association International de Boxe Amateur (AIBA), Max attended the Nineteenth Olympiad in Mexico City last fall.

We quote from a letter from Dean Berryhill to which he attached a clipping of an interview with Max published in the Perth Amboy **News Tribune** last November and the program of the above mentioned Symposium: ". . . Max was a star boxer in his undergraduate days in this University. That's the way he got his education . . . Over the years he has continued to be a sports enthusiast, but more importantly, one of the medical leaders in this country in attempting to prevent the injuries that come from athletic participation. He has never lost his enthusiasm for his favorite sport of boxing and, again, in preventing the serious brain injuries that used to occur . . ."

1940

SAMUEL WRIGHT (117 Llanfair Rd., Ardmore, Pa. 19003) writes that "We would have been happy to have had our two sons choose UNC Medical School, but instead they are both in the University of Pennsylvania School of Medicine, one in first year (William E.) and one in third year (Scott H.). At any rate, my training at Chapel Hill is on the way to providing two more physicians. We also

have a daughter (Elissa C.) who is a junior in high school."

1941

JACK HUGHES (923 Broad St., Durham, N.C. 27705) is in the Department of Urology at Watts Hospital.

The Hughes have 5 boys and 1 girl. Two of their sons are at UNC; Jack, Jr. is a rising sophomore in the School of Medicine.

1943M

GEORGE L. JORDAN, JR. (1200 Moursund Ave., Houston, Tex. 77025) graduated from the University of Pennsylvania School of Medicine in 1944 and served a one-year internship at Grady Memorial Hospital before entering the Army as a captain in the Medical Corps. After his discharge in 1947, he went to Tulane, where he served a two-year residency in surgery and at the same time obtained an M.S. in surgery from the Graduate School of Tulane University. From 1949 to 1952, he was a fellow at the Mayo Foundation.

After serving as chief of surgery at the Veterans Administration Hospital in Houston from 1955 to 1960, he was named deputy chief of surgery at Ben Taub General Hospital in Houston in 1961, a position he still holds. Since 1964 he has been professor of surgery at Baylor College of Medicine in Houston. In 1966, George was senior consultant in surgery for the National Institute of General Medical Sciences, and in 1968 he was chief of the medical staff at Ben Taub General Hospital.

1945

EDWIN BOYLE, JR. (4701 North Meridian Ave., Miami Beach, Fla. 33140) is director of research for the Miami Heart Institute, which last fall announced the development of a new heart monitoring system described as being as important as the original electrocardiograph. This system, based on that used by NASA to monitor the condition of astronauts in space, transmits patient-condition reports faster, more accurately, and with less danger than existing equipment. Ed describes the new system, called CARE I, as the first step toward complete patient care by computer automation. For the first time, information coming from the patient is in a language the computer can record and store for later use. Another advantage of the system is that the patient can move about, since the transmission unit (about the size of a large candy bar) is strapped to his arm or leg. With the same basic mechanism, it is possible to monitor eight patients for eight body conditions, 16 patients for four conditions, or 64 patients for one condition.

Ed's home address is 4411 Sabal Palm Drive, Bay Point, Miami, Fla. 33157.

A. ROBERT CORDELL (963 Kenleigh Circle, Merrimont, Winston-Salem, N.C. 27106) is associate professor of surgery at the Bowman Gray School of Medicine and is doing research largely in the field of cardiovascular surgery.

He and his wife, the former DeWitt Cromer of Winston-Salem have four sons.

J. HICKS COREY (4601 Brainerd Rd., Chattanooga, Tenn. 37411) has been engaged in the private practice of pediatrics in Chattanooga since 1957 and now has two associates. He is certified by the American Board of Pediatrics and is a member of the American Academy of Pediatrics. At present he is serving as president of the Tennessee Pediatric Society for 1969-70.

Hicks hopes "to return to 'Carolina' before long, to observe the great progress on 'the Hill.'"

1946

WALTER C. BARNES (Southern Clinic, 401 E. Fifth St., Texarkana, Tex. 75501) is head of the Department of Surgery of the Southern Clinic, where he has practiced for 14 years. For the past four years he has served on the Surgery Faculty at the University of Arkansas in Little Rock, and he has been a member of the Board of Councilors of the Texas Medical Association for eight years. He works with Boy Scouts and is currently serving as Council president. He is on the Official Board of the Methodist Church and teaches a Sunday School class made up of young married couples.

Walter's wife, Polly, works with the YWCA and the Girl Scouts. Their son, Tad, who is finishing junior high school this year, recently became an Eagle Scout and a member of the

National Honor Society. Their daughter, Abbie, is finishing grade school this year.

PAUL V. NOLAN (1103 Crownpoint Rd. West, Signal Mountain, Tenn. 37377) received his M.D. degree from the University of Maryland and his M.P.H. from the University of California. He is medical supervisor of the DuPont Nylon Plant in Chattanooga and a member of the Tennessee State Legislature and of the

Hamilton County Quarterly Court (to which he was elected for a six-year term in 1966). He has served as a director of the Tennessee Cancer Society; the Chattanooga area Heart Association, Council on Alcoholism, and Science Fair; and of the DuPont Employees' Credit Union.

He is also a deacon of the Signal Mountain Baptist Church and chairman of its finance committee. Paul and his wife, Anne, have twin sons (John and Tom, 13) and a daughter (Lou Anne, 10).

FRANZ W. ROSA (World Health Organization, Geneva, Switzerland) spent two years in India as chief of the Health and Family Planning Division of the Agency for International Development. In August, 1968, he and his wife and three children moved to Geneva, where he is chief of Maternal and Child Health for the World Health Organization. He keeps "in touch with UNC as an 'Adjunct Professor of Maternal and Child Health.'"

JAMES T. WELBORN (17 E. Second Ave., Lexington, N.C. 27292) (Md. '48) has served as chief of staff of Lexington Memorial Hospital and is now on the hospital's executive committee. He is also a past president of the Davidson County Medical Society and a director of the Lexington Chamber of Commerce. He is active in the First Presbyterian Church, being president of the Men's Sunday School Class and a member of the diaconate.

1948

JOYCE HINSON REYNOLDS has been elected chief of staff of the Forsyth Memorial Hospital. Joyce, who was chief of the emergency room prior to the new appointment, is the first woman to head the medical staff of any of Winston-Salem's hospitals.

EMILY TUFTS (3929 S.W. Mt. Adams Dr., Portland, Ore. 97201) is working on the Collaborative Project of the National Institute for Neurologic Diseases and Blindness for the study of factors of importance in cerebral palsy and mental retardation. She writes that the work is interesting and allows her time to pursue her research projects and also to do some watercolors. She has had paintings in several exhibits recently.

1949

CHARLES T. HARRIS, JR. (401 Fesbrook Court, Charlotte, N.C. 28211) did general practice in Salisbury until 1964. Since then he has been in the field of anesthesiology and is now on the staff of Presbyterian Hospital in Charlotte.

The Harrises have three children: Chuck, 16; Harriet, 14; and Britt, 9.

FRANKLIN G. NORRIS (55 W. Columbia St., Orlando, Fla. 32806) prepared a scientific exhibit on "Saphenous Vein as Arterial Substitute" which won first prize at the 1968 meeting of the Florida Medical Association.

He and his family enjoy trips to medical meetings in the private plane (a Beech Bonanza) that he bought last summer. He sees "too few of my classmates too seldom."

ROBERT A. PASCAL (Doctors' Clinic, Valdese, N.C. 28690) received his M.D. degree from the Bowman Gray School of Medicine in 1951 and spent two years at the Methodist Hospital in Brooklyn as an intern and assistant resident in general practice. Since 1953 he has been doing general practice in Valdese, where he is active in the Waldensian Presbyterian Church.

He is still single. His hobbies are collecting American antiques and traveling. He has been to Europe several times since he left Chapel Hill.

ROBERT M. RUDISILL (503 W. Michigan Ave., Urbana, Ill. 61801) received his M.D. degree from the Louisiana State University School of Medicine in 1951. After a year's internship at St. Joseph's Hospital in South Bend, Ind., he spent two years in South Bend doing general practice. From 1954 to 1956, he practiced anesthesiology in Reno, Nevada, and since 1966 he has been director of the Department of Anesthesia and Inhalation Therapy at Mercy Hospital in Urbana.

In addition to being a fellow of the American College of Anesthesiology and a diplomate of the American Board of Anesthesiology, he is a member of the American Society of Anesthesiologists and the International Correspondence Society for Anesthesiology. He is also on the board of directors of the Champaign County Tuberculosis and Respiratory Disease Association and a member of a special committee of the Illinois State Association for Tuberculosis and Respiratory Disease.

EDWARD C. SUTTON (1616 Memorial Drive, Burlington, N.C. 27215) was installed as a fellow of the American College of Obstetricians and Gynecologists at its annual meeting, held in Bal Harbour, Florida, April 28-May 1.

1950

LT. COL. WESLEY GRIMES BYERLY, M.C. 0963299 (Second Surgical Hospital (MA), APO 96289, San Francisco, Calif.) served for two months in 1967 with the AMA Volunteer Physician for Vietnam Program, treating civilian war casualties in a province hospital in Rach Gia. As a result of this experience, he became so emotionally involved in the war that he volunteered in February for a year's tour of active duty in Vietnam, "to see surgery from the military side." He is now doing forward combat surgery in a mobile army surgical hospital. In a note written on May 9, he stated that "the experience is stimulating, to say the least, as well as rewarding. Our hospital is in the Army's new MUST configuration with the inflatable air-conditioned ward units and the expandable-collapsible air-conditioned operating room units. This makes possible good care to the horrendous injuries we see, which is due to the fantastic job the dust-off pilots are doing getting these severely injured men back to us within 15 to 45 minutes of their injury. Best wishes to all in Chapel Hill."

GORDON R. HEATH (2134 Reaney Rd., Lakeland, Fla. 33803) is prac-

ticing pediatrics in association with two other pediatricians. He has served as president of the medical staff of the Lakeland hospital (second largest in the state of Florida) and last year was president of his county medical society.

Gordon and his wife, Audrey, have three children: Lucy, Read, and Paul.

GLENN D. MOAK (2155 Weslynn Dr., Indianapolis, Ind. 46208) (Western Reserve '52) is engaged in the private practice of radiology in Indianapolis, doing both office and hospital work. He is married and has three children.

JOHN L. WATTERS (220 Deer Trail Road, North Caldwell, N.J. 07006) is corporate medical director of Becton, Dickinson and Company in Rutherford, N.J. He writes that John, Jr., is in engineering school at N.C. State University; another son, Bill, is in the Air Force, stationed at Suffolk Air Force Base in New York. His older daughter, Liza, hopes to enter UNC in the fall of 1969, and his two youngest children, Tom and Amy, are at West Essex School in Caldwell, N.J.

1951

CHARLES C. STAMEY (Stratford Center, Winston-Salem, N.C. 27104) (Harvard '53) is practicing pediatrics in Winston-Salem and teaching clinical pediatrics at the Bowman Gray School of Medicine.

Charles and his wife, Peggy, have two sons, Chris and Kent, and a daughter, Cindy. ". . . Evanescent leisure time spent with my very tolerant Steinway and Phantasy, a great Palomino."

1954

CHARLES H. POWELL (Mars Hill, N.C. 28754) is doing general practice in partnership with his brother, W. Ernest Powell, Jr. (UNC '50) and W. O. Duck (Wake Forest and Hahnemann).

The Powells and their two children (Suzanne, 8, and Jeffrey, 2) live on Black Angus farm on outskirts of Mars Hill. He enjoys playing tennis several times a week.

LOUIS C. SPILLMAN, JR. (c/o Holmes and Narver, Inc., Box 701, Johnston Island, APO San Francisco, Calif. 96305) was chief medical officer at Eniwetok (Marshall Islands) for 22 months before accepting the same position at Johnston Island.

1955

DR. DONALD EUGENE HARRIS has been appointed Assistant University Physician at the Student Health Service. He is a native of Jacksonville, Fla., who had been a resident at NCMH since 1967.

CHARLES L. HERRING (310 Glenwood Ave., Kinston, N.C. 28501) served a medical internship at the University of Virginia Hospital in Charlottesville before beginning his two years of service in the Army Medical Corps (at Fort Campbell, Kentucky, and at Fort Bragg, N.C.). After his discharge in June, 1958, he returned to Chapel Hill for a two-year residency in medicine, followed by a one-year fellowship in chest and infectious diseases. Since completing this in June, 1961, he has been engaged in the solo practice of internal medicine in Kinston.

Charles was married in 1956 to Shirley Ann Mason, and they have two children, C. L., Jr., 11, and Rebecca Ann, 7.

WILLIAM C. RUFFIN, JR. (J. Hillis Miller Health Center, Gainesville, Fla. 32601) has been with the Department of Psychiatry at the University of Florida School of Medicine since leaving Chapel Hill. He was appointed professor of psychiatry in 1967, and as vice chairman of the department is responsible for the overall undergraduate medical program within the department. His interests include training of nonpsychiatric physicians in Florida, inpatient psychiatry, and the undergraduate medical student committee.

Buck writes, "We are in the process of major curriculum revision in all departments with increasing emphasis on students' early exposure to, and responsibility for patients . . . and are enlarging our medical student enrollment from 64 to 100. We have opened a new VA Hospital in Gainesville that has 120 psychiatric beds. At present we have 35 faculty members in the Department, and as we gradually open more beds in the VA, we will continue to add to our faculty. . . . We continually have boys from Carolina on the house staff in all departments and have had several residents in psychiatry from Chapel Hill.

". . . Smiley Hill ('55) is here at Florida, as is George Barnard ('55) who was promoted to associate professor of psychiatry in 1968, and . . . is very active in psychophysiological research. . . . In addition, Gene Glenn ('55) is in the private practice of obstetrics and gynecology in Jacksonville. . . ."

1956

COLEMAN BRANTLEY (212-B West Wendover Ave., Greensboro, N.C. 27401) is in general practice in Greensboro.

He and his wife, Shirley, have two daughters: Dana and Keri. They live at 2109 Carlisle Rd., Greensboro, N.C. 27408.

JOHN W. DEYTON, JR. (Box 155, USN Hospital, Camp Lejeune, N.C. 28542) completed a rotating internship and an Ob-Gyn residency at the U.S. Naval Hospital at Portsmouth, Va., and last year passed the Ob-Gyn Board. He has also served at Navy or Marine bases in Pensacola, Fla., in southern California, and in Cherry Point and Camp Lejeune, N.C. In addition, he has had brief tours of duty in the Caribbean and Mediterranean. He now holds the rank of Commander.

John and his wife, Clara, have two boys. They hope to settle permanently in North Carolina in the very near future.

ALEXANDER F. GOLEY (1509 Vaughn Rd., Burlington, N.C. 27215) took a one-year internship and a three-year medical residency at Grace-New Haven Community Hospital and spent two years at the Walter Reed Army Institute of Research. Since 1962, he has been practicing internal medicine in Burlington. He is also Clinical Assistant Professor of Medi-

cine at UNC and attending physician at Alamance County Hospital and Memorial Hospital of Alamance County. Alex is a diplomate of the American Board of Internal Medicine, an associate member of the American College of Physicians, and a member of the North Carolina Society of Internal Medicine, the American Medical Association, the Medical Society of the State of North Carolina, and the Alamance-Caswell Counties Medical Society. He is also past-president of the Alamance County Heart Association and a member of the official board of Front Street Methodist Church.

He and his wife, the former Sallie Boren of Greensboro, have three children: William Rankin, Daniel Boren, and Clare Lynn. Their home address is 1625 Woodland Ave., Burlington, N.C.

ROBERT P. HOLMES (709 Professional Drive, New Bern, N.C. 28560) is practicing internal medicine in New Bern in association with two fellow alumni, John R. Baggett ('56) and Francis P. King ('44). (The partnership is seeking a fourth member who has finished his training in internal medicine.)

Bob is married to the former Dorothy B. Bancker of Atlanta, and they have three children: Rob, 9; Charlotte, 7; and Thomas, 4. He enjoys hunting when time permits.

FRANCIS DeWITT PEPPER (see News from the Hill).

WILLIAM R. PURCELL (418 King St., Laurinburg, N.C. 28352) is a diplomate of the American Board of Pediatrics and a fellow of the American Academy of Pediatrics. He is back in Laurinburg for 15 months of solo pediatric practice, after spending two years in Charleston, South Carolina, where he was engaged in group practice. He is chief of pediatric service at Scotland Memorial Hospital and is vice-president of the Community Betterment Committee of Scotland County and the Scotland County Mental Health Association. In addition, he is a deacon and Sunday school teacher in the Laurinburg Presbyterian Church and is a member of the Laurinburg Rotary Club and the Chamber of Commerce.

The Purcells have four children: Bill II, Leslie, Holly, and Gus.

1957

ROBERT S. CLINE (205 Hillcrest Drive, Sanford, N.C. 27330) is a partner in the Sanford Medical Group, which is building a new office building (10,000 square feet) in an effort to entice other physicians to practice with them.

The Clines were expecting their fourth child in March, 1969.

STEPHEN THOMAS GUPTON, JR. (1300 St. Mary's St., Raleigh, N.C. 27605) is engaged in the private practice of neurology.

He and his wife Helen have six children: Debra, Diane, Stephen, Kathryn, John, and Richard.

BOBBY ALAN RIMER is Assistant Professor of Obstetrics and Gynecology at the University of Maryland School of Medicine (Baltimore, Md. 21201).

WINFRED L. SUGG has joined the UNC faculty as Associate Professor of Surgery.

Winfred took his postgraduate training at Barnes Hospital in St. Louis, Mo., finishing in 1964. For the next two years he was associated with the Department of Cardiovascular Surgery at the National Naval Medical Center in Bethesda, Md. In 1966 he was appointed assistant professor of thoracic and cardiovascular surgery at the University of Texas Southwestern Medical School where he performed the world's twenty-first human heart transplant (the first in a woman) in June 1968. He was also doing research on the development of a mechanical artificial heart assist device and transplantation.

BENSON R. WILCOX (see News from the Hill).

1958

J. RICHARD PATTERSON (990 Main St., Danville, Va. 24541) was certified by the American Board of Obstetrics and Gynecology in November, 1968. Since August, 1965 the Pattersons and their two children (son and a daughter), have been living in Danville, where he is engaged in partnership practice. He is president of the UNC General Alumni Association of Danville.

1959

EVERETT H. ELLINWOOD, JR. (Box 3355, Department of Psychiatry, Duke University Medical Center, Durham, N.C. 27706) is associated with the Department of Psychiatry at Duke. He is primarily involved in teaching and neurophysiological research, but also cares for patients.

He and his wife Connie have two children: Everett III, age 4; and Susan, 1 year. He writes that they "certainly would enjoy seeing any of the old classmates who come back to visit."

JOEL S. GOODWIN (102 Mocksville Ave., Salisbury, N.C. 28144) is practicing obstetrics and gynecology in partnership with Dr. Paul Green, Jr., after spending eight years in the Navy. He was installed as a fellow in the American College of Obstetrics and Gynecology at its annual meeting held in Bal Harbour, Fla., April 28-May 1.

The Goodwins have three sons: Joel II, 7; Jimmy, 5; and Charles, 2.

GLENN E. HAIR (see News from the Hill).

JAMES A. KILEY (378 Country Club Rd., Petoskey, Mich. 49770) is engaged in the general practice of medicine.

1960

CHARLES P. ELDRIDGE, JR. (6448 Fannin, Houston, Texas 77025) is practicing diagnostic radiology in the Diagnostic Clinic of Houston and the Diagnostic Center Hospital.

He and his wife Joan have three children: Mark, 5; Doug, 3; and Mike, born August 5, 1968.

CHARLES E. FITZGERALD, JR. (1355 Orange Ave., Winter Park, Fla. 32789) is practicing internal medicine.

JEAN RENÉ POIRIER (Ballenger Creek Rd., Route 9, Frederick, Md. 21701) has been engaged in general practice in Frederick since July, 1961. His partner is Dr. Willis J. Riddick, also of the class of '60.

Jean's hobbies are horses, golf, and sailing. He and his wife Hilda, together with their two children (Stephen, 14, and Cheryl, 11) live on Entremont Farm, where they breed and raise racehorses. One of their horses, Tearing Around, was winner of the World's Playground Stakes at Atlantic City on September 7, 1968.

WILLIAM A. REID is an anesthesiologist in Newport Beach, California (2072 Paloma Drive).

ELLIOTT SOLOMON (28 Popham Rd., Scarsdale, N.Y. 10583) took two years of surgical training at Albert Einstein Medical Center, Jacobi Hospital, Bronx, N.Y., and then served three years as a resident in otolaryngology at Manhattan Eye, Ear and Throat Hospital. In 1965 he became a member of the attending staff (as surgeon in otolaryngology) of this hospital and was appointed to the attending staff at White Plains Hospital and Saint Agnes Hospital in White Plains, N.Y. In 1966 he was certified by the American Board of Otolaryngology and became a fellow of the American Academy of Ophthalmology and Otolaryngology. In 1967 he received his discharge from the New York Air National Guard, with the rank of major, after six years of service.

In 1968 Elliott was appointed director of otology at the New York School

for the Deaf in White Plains and director of hearing and speech at Burke Rehabilitation Center in White Plains, which is an affiliate of the Cornell University Hospital in New York City. He is now engaged in the private practice of otolaryngology in Scarsdale but continues to participate in the teaching program of the Manhattan Eye, Ear and Throat Hospital.

1961

ZELL ALLISON McGEE (2010 Stokes Lane, Nashville, Tenn. 37215) served an internship and residency in internal medicine at Bellevue Hospital, New York City, on the N.Y.U. service. After spending three years in the Army (with the Department of Bacteriology, Walter Reed Army Institute of Research in Washington), he took another year of residency in internal medicine at Vanderbilt University Hospital in Nashville. Since 1967 he has held a fellowship in infectious diseases and has served as instructor in the Department of Medicine at Vanderbilt. His research interests are mycoplasmas and L-phase variants of bacteria.

Zell's hobby is skiing, which he has "pursued on a number of occasions with Bill Gibson ('61) and his family."

WILLIAM W. MORGAN (25473 Filaree Ave., Sunnymead, Calif. 92388) will be in the Air Force until 1970. After that he expects to go into the practice of pediatric surgery, but has not yet decided on a location.

LOUIE L. PATSEAVOURAS (1300 St. Mary's Street, Raleigh, N.C.) took a year's internship in surgery at George Washington University Hospital in Washington, D.C., after his graduation. He then came back to Chapel Hill for residencies in surgery and otolaryngology at N.C. Memorial Hospital. In 1967 he passed his ENT Boards and entered private practice in Raleigh, in association with Dr. N. L. Sparrow ('58).

Lou married Sandra Coffin of Saratoga, N.Y., in 1966. Their home address is 2111 Dunnhill Drive, Raleigh, N.C. 27608.

1962

T. BOYCE COLE (6217 Westchester Dr., Washington, D.C. 20031) took his postgraduate training (internship, one year of general surgery, and three years of otolaryngology residency) at the University of California in San Francisco. He is now serving with the Air Force at Andrews Air Force Base in Washington. He has not yet decided where he will locate when he receives his discharge in 1969.

Boyce and his wife, Ginny, have two boys, Eric and Marc.

ROBERT L. BROWNING (1021 Newberry Dr., Richardson, Texas 75080) interned at the University of Arkansas before spending two years in the Navy with a Research and Development Group in the Pacific "on a very challenging and exciting project." During this time he was sent to various special schools, and took intensive courses in industrial medicine and safety. After his discharge, he took a course in industrial medicine at the University of Oklahoma and worked part-time at the Western Electric plant in Oklahoma City as assistant medical director. In 1965 he began the general practice of medicine in Richardson, Texas, where he has medical responsibility for approximately six thousand employees at the Collins Radio Corporation.

Bob's hobbies are sailing (he has done a lot of sailboat racing throughout the Southwest in his Lido 14 Class boat) and raising registered Black Angus cattle on a ranch in east Texas, near Lake Tawakoni. He and his wife Sarah were expecting their first child in January.

He writes that they "are thoroughly enjoying the wide open spaces of Texas, but sincerely miss our many

friends in North Carolina and the beautiful scenery in the Tarheel State." They invite "any Tarheels who are down this way on vacations or attending medical meetings to call and visit."

H. GERARD HARTZOG served a one-year tour as general surgeon aboard the Naval Hospital Ship, USS Sanctuary, off the coast of Vietnam and six months at the Naval Hospital in Jacksonville, Fla. He will complete his service commitment in July.

While he was in Asia, his wife Joy and their three daughters spent the year in Bangkok, Thailand, with her parents. Her father is an adviser with USAID.

JOHN DAUGHTRY MARRIOTT (6854 Bamburg Drive, San Diego, Calif. 92117) completed his residency in radiology at the U.S. Naval Hospital in San Diego last August, and is now a lieutenant commander in the Navy Medical Corps. John and his wife, the former Ellen Joyner, have three children: John, Jr., 8; Elizabeth, 6½, and Ellen, 5.

KENNY JORDAN MORRIS (3838 Halifax Road, Wilmington, N.C. 28401) took his internship at Upstate Medical Center in Syracuse, N.Y., and a residency in radiology at Johns Hopkins Hospital. After serving as radiologist at Shaw Air Force Base in South Carolina, he entered the private practice of radiology in Wilmington with Dr. J. O. Perritt and Dr. J. M. James.

Kenny and his wife Carolyn have three children: Kenny, Jr., 3; Mark, 2; and Kimberly, 1.

WILLIAM A. NEBEL (see News from the Hill).

CARL SPENCER PHIPPS (380 Staffordshire Rd., Winston-Salem, N.C. 27104) has been practicing internal medicine in Winston-Salem since 1966, in partnership with Dr. Gray T. Boyette. His special interest is endocrinology and metabolism, and he is a member of the Board of Directors of the newly formed N.C. Diabetes Association.

Carl and his wife have four children: Sandra, 7; David, 6; Kimberly, 3; and John, 1½.

HARRY WHITE SCOTT (The Harbin Clinic, 104 E. Third Ave., Rome, Ga. 30161) is engaged in the private practice of dermatology.

FULLER A. SHUFORD (5-F Doctor's Park, 417 Biltmore Ave., Asheville, N.C. 28803) has been engaged in the private practice of internal medicine and gastoenterology since July, 1966, in partnership with Drs. Walter R. Johnson and E. Emmons Corcoran.

Fuller is married to the former Jo Anne Clark and they have two children: Katherine Sydney, born August 30, 1965, and Roger Jordan, born April 3, 1967. Their home address is 3 Buena Vista Rd., Asheville, N.C. 28803.

MIRIAM F. SMITH (1275 McConnell Drive, Decatur, Ga. 30033) began the private practice of general psychiatry in Decatur in August, 1968, after finishing a three-year residency in psychiatry at Emory University. Before that, she interned at Grady Hospital and spent two years in pathology at Emory.

Miriam writes that she is "very busy and very happy."

1963

WILLIAM P. ALGARY (16 Flemington Rd., Chapel Hill, N.C. 27514) started a second year of cardiology fellowship at NCMH on July 1, and plans to go into private practice in July 1970. From 1965-67 he was with the U.S. Army Medical Corps at Fort Gordon, Ga.

Bill and his wife Ruth have three children, two girls and a boy.

HARRIS HARTWELL BASS (16226 S.E. Eighth St., Bellevue, Wash. 98004) served a rotating internship and a medical residency at Virginia Mason Hospital and the Mason Clinic in Seattle. After spending two years in the Navy, he joined the V.A. system for a brief time before establishing a private practice in northwest Washington.

His wife, Rae, works as an insurance correspondent for Farmers New World Life Insurance Company.

WILLIAM RICHARD BURKE, JR. (Johnsdale Rd., Raleigh, N.C. 27609) began the private practice of adult and child psychiatry in Raleigh on July 1, 1968. He also serves as consulting psychiatrist at the Wake County Mental Health Center.

J. ANDREW BURNAM (3021 Freeman St., San Diego, Calif. 92106) completed a residency in otolaryngology at Duke Hospital on July 1, 1968, and is now serving on the staff of the U.S. Naval Hospital at San Diego.

Andrew and his wife Gloria have a son, Mark, age 4½.

ROBERT J. COWAN (Department of Radiology, North Carolina Baptist Hospital, Winston-Salem N.C. 27103) is a second-year resident in radiology. Last October he presented a paper entitled "Tc^{99} Pertechnetate Brain Scans in the Detection of Subdural Hematomas" at the Ninth Annual Meeting of the Southeastern Chapter of the Society of Nuclear Medicine, in Atlanta.

DAVE M. DAVIS (597 N. Superior Ave., Decatur, Ga. 30033) is a senior resident in psychiatry at Emory University and is doing research in family psychodynamics with Dr. Alfred Messer. He plans to remain in Atlanta after completing his residency next summer.

THEODORE C. WHITSON (106th General Hospital, APO San Francisco, Calif. 96503) finished his general surgery residency at NCMH in July, 1968. He is now a captain in the Army, stationed in Yokohama, Japan. He and two other general surgeons are running a 55-bed burn unit.

His wife Shelby and their 4-year-old daughter are with him in Japan. When he wrote last December they were expecting their second child.

1964

JOHN N. BEARD (4714 Woodlark Lane, Charlotte, N.C.) served two years in the Air Force (Abilene, Texas) and returned to NCMH where he has just completed his pediatric residence.

Nick, his wife Darlene and their three daughters (Melissa 5, Teresa 3, and Karen 8 mos.) will be moving to Charlotte this summer where he will begin pediatric practice at the Nalle Clinic.

ROBLEY KIVETTE BOWMAN (Box 7576, Dix Hospital, Raleigh, N.C. 27602), with his wife Reggie and daughter Laurel, returned to the United States in August, 1968, after serving a three-year tour in Europe with the U.S. Air Force. For the first 18 months he was chief of medical services for the base dispensary in Etain, France, and for the next 18 months, was chief of the general practice clinic at the USAF Hospital in Wiesbaden, Germany.

In October, 1968, Kivette began a psychiatric residency at Dix Hospital in Raleigh. He and his family reside on the hospital grounds.

ERNEST WOODROW HUNT, JR. (2551 Soderblom Ave., San Diego, Calif. 92122) finished his internship at the Naval Hospital in Bethesda, Md., in 1965, and went to Pensacola, Florida, for training as a naval flight surgeon. When this was completed in April, 1966, he departed for Tonkin Gulf aboard the USS **Constellation.** He spent two years as an Attack Carrier Air Wing Flight Surgeon, making two combat cruises to waters off North Vietnam. He was awarded the Air Medal and the Navy Achievement Medal, as well as unit commendations awarded to Attack Carrier Air Wing Fifteen. He was promoted to Lieutenant Commander in September, 1968.

Woody is now in the first year of a residency in ophthalmology at the Naval Hospital in San Diego, the largest military hospital in the world. He and his wife Coley plan to be in San Diego for the next two and a half years. They have a daughter, Lisa, born in April, 1966; when he wrote, they were expecting a second child.

1965

DANIEL E. BROWN (25292 Fay Ave., Sunnymead, Calif. 92388) took three years of training in pediatrics at the University of Florida Teaching Hospital in Gainesville before entering the Air Force in 1968. He is stationed at March Air Force Base in California and expects to be discharged in 1970.

Dan is married to the former Barbara Ann Poag, a registered nurse (UNC '64). They have two daughters: Deborah Kaye, born March 23, 1966, and Jennifer Lynn, born June 5, 1967.

EVIN H. SIDES (Route 4, Bolin Brook Farm, Chapel Hill, N.C. 27514) is assigned to the 312th Evacuation Hospital in Chu Lai, Vietnam.

His wife Bonnie, their son (Evin IV), and a daughter (Anna) are remaining in Chapel Hill until Evin returns to the States in September, after completing his 12-month tour of duty in Vietnam.

1966

GARRY P. BERGERON, JR. (USS Semmes [DDG-18] FPO New York 09501) completed a straight medical internship and one year of medical residency at Grady Memorial Hospital in Atlanta before entering the Navy. He is now the medical officer aboard a guided-missile destroyer assigned to the Sixth (Mediterranean) Fleet. Upon completion of his two-year tour of duty in the Navy, he plans to take a residency in radiology.

ROBERT H. BILBRO (Camp Page Dispensary, APO San Francisco, Calif. 96208) is commander of the post dispensary in Chun Chon, Korea. He writes that he is ". . . having an interesting experience . . . we see many civilian patients, so a wide range of Oriental pathology is encountered. My tour here overlapped about two weeks with classmate Hunter Vaughan."

Bob is planning to take more training in medicine, and probably in cardiology, after finishing his Army service.

The Bilbros have two children.

CAROL ANN HEDDEN HACKETT (Apt. 914, 1322 North Fort Meyer Dr., Arlington, Va. 22209) was married in Washington, D.C., on July 27, 1968, to Dr. John Peter Hackett of New York City. Both are residents in internal medicine at Georgetown University Hospital in Washington.

ELIZABETH SPIVEY HOYT (2709 Cartier Drive, Raleigh, N.C. 27608) interned at the Medical College of Virginia before her marriage to Allen Hoyt of Pittsboro, N.C., who is now employed with Pet-a-Rama in North Hills in Raleigh. Since February, 1968, she has been working as a general practitioner in the Comprehensive Treatment Unit at Dorothea Dix Hospital.

The Hoyts ". . . have no children yet but do have three cats, one German shepherd, seven gerbils, and eleven aquariums full of tropical fish!"

WYNDELL H. MERRITT (1108 Pittsboro Rd., Chapel Hill, N.C. 27514) completed the first year of his residency in surgery at the University Hospital in Gainesville, Fla., in July 1968. He is now with the Army, serving in the 85th Evacuation Hospital in Vietnam.

J. LEWIS SIGMON, JR. (1574 Clayton Dr., Charlotte, N.C. 28203) served his internship in the Air Force and completed his two years of active duty as Flight Surgeon in June. For the past year, he has served as Chief of Aeromedical Services at Shaw Air Force Base, S.C. On July 1, he began a two-year residency in family practice at Charlotte Memorial Hospital.

The Sigmons have two sons, Lewis III (3 years old) and Andy (1 year old).

1967

PHILLIP G. ARNOLD joined the Army in July and is stationed at Fort Leonard Wood, Mo. where he is serving at the General Leonard Wood Hospital.

He and his wife Susan have a son, Phillip B., born on February 16, 1969.

JOE M. CRAVER (98 Pierce Road, Watertown, Mass. 02172) is a resident in general surgery at Massachusetts General Hospital in Boston. Joe is the coauthor (with Drs. Erle Peacock and John Madden) of two papers published in 1968: one in the August issue of **Surgery** and the

other in the May issue of **Annals of Surgery.**

He and his wife Beth have a son, William Joseph, born October 24, 1968.

JERRY W. GREENE (Box 12423, APO San Francisco 96227) is in Vietnam, serving with the Air Force as flight surgeon to a fighter wing (F-100) at Bien Hoa. He recently spent three weeks in the Philippines, learning the techniques of jungle survival.

Jerry's future plans include a second year with the Air Force in Aviaro, Italy, then a residency, probably in psychiatry.

ROBERT H. KEITER (91 Maxwell Rd., Chapel Hill, N.C. 27514) began his second year of psychiatry residency at NCMH on July 1.

He married Mary Beth Fudge on June 8.

CLIFFORD THOMAS LEWIS was stationed at Otis Air Force Base on Cape Cod when he wrote us. He and his wife, the former Elizabeth Beattie, R.N. (UNC '67) were to leave for a two-year tour of duty at Clark Air Force Base in the Philippine Islands.

DONALD H. McQUEEN III (H.H.C. 05319356, 1/64th Armor, APO New York 09031) completed a rotating internship at Grady Memorial Hospital in Atlanta before reporting for military service at Ft. Sam Houston in San Antonio, Texas. After a six-week period of training, he was assigned to the 1/64th Armor in Kitzingen, Germany, where he will be stationed for three years.

Don's wife, Ann, accompanied him to Germany and gave birth to a daughter, Jennifer Lee, on November 9.

JAMES H. SPRUILL, JR. (204 First Street West, Barksdale A.F.B., La. 71110) completed a straight medicine internship at Emory University and Affiliated Hospitals before entering the Air Force. He is now assigned to the 855th Medical Group, Strategic Air Command, Barksdale A.F.B. Upon completion of this tour of duty, he plans to continue his training.

The Spruills have one child—a girl born in August, 1968.

1968

MATTHEW R. FRIEDMAN (111 Third Ave., New York, N.Y. 10003) was married in Chapel Hill on December 3, 1968, to Mary Margaret Bowsher, a 1967 graduate of the UNC School of Nursing. On July 1 he began a psychiatric residency at Boston University Hospital.

HOUSE STAFF

1962

JOHN ARMSTRONG CROSS, JR. (19 Club Terrace, Newport News, Va. 23606) completed his surgical training at NCMH in 1962 and is now practicing general surgery in a group of four Board-certified surgeons.

He is married and has four children.

1968

ROBERT N. DAVIS (206 W. Wendover Ave., Greensboro, N.C. 27401) opened an office for the practice of dermatology in Greensboro in July, 1968. In addition to being on the associate staffs of Moses Cone Memorial and Wesley Long Community Hospitals, he is clinical instructor in the Department of Medicine of the UNC School of Medicine (by virtue of its affiliation with Moses Cone Hospital).

He and his wife Nickie have one son, Andrew. Their home address is 1704 Duval Drive.

RICHARD BEVERLY RANEY, JR. (9th Medical Detachment, APO New York, N.Y. 09176) is in Heilbronn, Germany, where he is the pediatrician at an Army Medical Corps dispensary.

His wife and 14-month-old daughter are with him.

ALUMNI NECROLOGY

1968 - 1969

ARTHUR CHASE AMBLER ('18)
ALAN R. ANDERSON ('21)
CHARLES W. ARMSTRONG ('12)
THOMAS P. BRINN ('21)
CLYDE R. BROWN ('32)
HOWARD B. BARNWELL ('40)
FREDERICK P. BROOKS ('31)
ROBERT L. BUGDEN ('68)
CLARENCE P. CAMERON ('34)
G. BRUCE DAVIS ('29)
EVERETT H. ELLINWOOD ('31)
JOHN H. FITZGERALD ('18)
MARK A. GRIFFIN, SR. ('14)
JAMES HAWFIELD ('16)
JESSE F. HOBBS ('29)
WILLIAM B. INGRAM ('43M)
THOMAS C. KERNS, SR. ('09)
ROBERT F. LEINBACH ('05)
RUTH LEONARD ('40)
FILAS J. LITTLE ('43D)
JAMES F. MARSHALL ('29)
KARL B. PACE, SR. ('12)
ELLA LOUISE PAYNE ('40)
CLAUDE T. PEOPLES ('43D)
LOUIS I. POSNER ('10)
DAVID J. ROSE ('20)
ELI R. SALEEBY ('20)
EUGENE S. SUGG ('17)
ADAM T. THORP, JR. ('56)
WALTER WATSON ('08)
WILLIAM E. WILKINSON ('30)
MILTON H. YUDELL ('39)

Annual Meeting Medical Alumni Association

April 23-24, 1969

Program

APRIL 23

5:30-6:00 p.m. Chapel Hill Country Club. Registration

6:00-7:00 p.m. Social Hour

7:00-9:00 p.m. Alumni Dinner

Presiding: James E. Davis, M.D., President of the Alumni Association

Welcome: Chancellor J. Carlyle Sitterson, Ph.D.

Addresses: Mr. C. Ellis Fisher, President of the Whitehead Medical Society; Dean Isaac M. Taylor, M.D., UNC School of Medicine; James E. Davis, M.D.

Presentation of Certificates to the Class of 1944.

Presentation of Distinguished Service Awards.

9:00 p.m. Carolina Inn. Class Reunions.

APRIL 24

9:30 a.m.-12:30 p.m. Clinic Auditorium.

Presiding: James E. Davis, M.D.

Welcome: Vice Chancellor Health Sciences C. Arden Miller, M.D.

Greetings from the Medical Society of the State of North Carolina: David G. Welton, M.D., President.

Addresses: "The UNC School of Medicine and the People of North Carolina." Mr. Archie Davis, Chairman, Board of Directors, Wachovia Bank and Trust Company.

"Medical Schools—National as Well as Local Resources." Dean William N. Hubbard, Jr., M.D., University of Michigan Medical School.

Panel Discussion: "How the University of North Carolina School of Medicine Can Best Serve."

Panelists:

Julian S. Albergotti, M.D., General Medicine, Charlotte, N.C.

Floyd W. Denny, M.D., Chairman, Department of Pediatrics, UNC School of Medicine.

John R. Chambliss, M.D., Internal Medicine, Rocky Mount, N.C.

Associate Dean Christopher C. Fordham, M.D., UNC School of Medicine.

General Discussion

1:00 p.m. Chapel Hill Country Club. Luncheon and Annual Meeting of the Medical Alumni Association.

Presiding: James E. Davis, M.D.

Welcome: Associate Dean John B. Graham, M.D.

"Future Plans for the School of Medicine." Dean Isaac M. Taylor, M.D.

Report of the Visiting Committee. John S. Rhodes, M.D., Chairman.

Report of the Committee on Constitution and By-laws. John R. Chambliss, M.D., Chairman.

Report of the Loyalty Fund Committee. Charles A. Speas Phillips, M.D., Chairman.

Recognition of the Members of the Class of 1919.

Tribute to Members Who Have Died During the Past Year.

Report of the Elections Committee. John R. Chambliss., M.D.

Installation of New Officers.

3:00-5:00 p.m. Departmental Meetings

Department of Medicine—Clinic Auditorium

Department of Surgery—Surgical Lounge.

Dr. David G. Welton, President
N.C. State Medical Society

John B. Graham ('40)

John S. Rhodes ('27)

John R. Chambliss ('43M)

President H. Haynes Baird ('40), President Elect Charles L. Herring ('55), Vice President W. Howard Wilson ('35), Secretary Hugh C. Hemmings ('54), and Dean Isaac M. Taylor.

John R. Chambliss ('43), Julian S. Albergotti ('55), Floyd W. Denny, and Christopher C. Fordham ('49).

H. McLeod Riggins ('22), Dean Isaac M. Taylor and John R. Chambliss ('43M).

Barbara Denny and Margaret C. Swanton ('44).

Past President James E. Davis ('42)

Thomas J. Taylor ('32) and Edgar T. Beddingfield ('46).

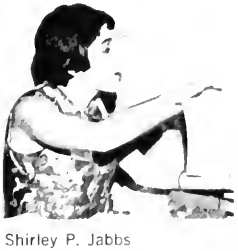
William B. Blythe ('51)

Dean Isaac M. Taylor, John F. Lynch ('42), William H. Meroney ('43M), John R. Chambliss ('43M), and John R. Kernodle

Charles A. Speas Phillips ('44).

Edward S. Williams ('54), Vice President W. Howard Wilson ('35) and Emory S. Hunt.

Charles L. Powell



Shirley P. Jabbs


CLASS OF
CLASS OF 1929


CLASS OF 1954


CLASS OF 1939

Medical Alumni Association luncheon held during the State Medical Convention at Pinehurst, N.C., May 19, 1969.

President H. Haynes Baird ('40)

W. Howard Wilson ('35) and John S. Rhodes ('27).

President-Elect Charles L. Herring ('55), John A. Ewing (UNC Psychiatry), and W. Howard Wilson ('35).

Mr. L. Richardson Preyer

John R. Kernodle (Burlington) and Robert A. Ross ('20)

C. Ellis Fisher ('70), James H. Scatliff (UNC Radiology)

L. Richardson Preyer and Dean Isaac M. Taylor.

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$250.00	$124.50	$142.00	$204.50	$284.50	$352.00
200.00	100.50	114.50	164.50	228.50	282.50
150.00	76.50	87.00	124.50	172.50	213.00
100.00	52.50	59.50	84.50	116.50	143.50

Plan L–65

Weekly Benefits	Under 30	30 - 39	40 - 49	50 - 59	60 - 69
	Maximum Accident Benefits Lifetime		SEMI-ANNUAL RATES	Maximum Sickness Benefits To age 65	
$250.00	$134.50	$177.00	$242.00	$324.50	$352.00
200.00	124.50	142.50	194.50	260.50	282.50
150.00	94.50	108.00	147.00	196.50	213.00
100.00	64.50	73.50	99.50	132.50	143.50

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