The relative scarcity of physicians in certain areas, especially rural and inner-city communities, is one of the major problems in the delivery of medical care in the United States today. The Department of Health, Education, and Welfare has recently issued a publication entitled "Factors Influencing Practice Location of Professional Health Manpower: Review of Literature" (DHEW Pub. No. 75-3). The observations which follow were taken from that source.

A number of reports have indicated that physicians tend to locate in high-income areas. However, one long-term study found that population size was the prime factor and per capita income the second in determining the number of self-employed physicians in a particular state. Also, population growth appears to be very important in determining physician location. In recent years, the migration of doctors from rural to urban areas has generally followed that of the general population.

Several reports have indicated a significant relationship between the physicians' practice location and place of residence prior to medical school. An extensive study of U.S. medical school graduates for the period 1915-1955 indicated that more than half of the graduates were practicing medicine in the state in which they resided prior to attending medical school.

In contrast, most studies agree that location of medical school alone is a poor predictor of practice location. As might be expected, this statement is true for graduates of private medical schools but less valid for graduates of state medical schools. Most writers on the subject agree that the state in which residency training was taken is more significant in predicting physicians' choice of practice location than the state in which the medical school is located.

Several studies have shown that small town doctors and their wives tend to come from small communities. Medical students with highly urban backgrounds have shown the least interest in rural practice.

It is often said that the quality of community life, including educational and cultural opportunities, recreational facilities, climate, and various public services appear to influence the physician in his choice of location. However, these are difficult variables to measure and no firm conclusions can be drawn from the meager data available.

I have no easy answer to the maldistribution problem. I would like to comment that the automobile time from the patient's home to the doctor's office is a most important factor. The residents of a rural area can usually reach a physician's office in a town 45 miles away in less than one hour. The big city resident may drive nearly as long to accomplish the same purpose. It must be recognized, however, that the residents of a small town greatly prefer to have a doctor who lives, works and sleeps in their community.

M. Kenton King, M.D.
Dean
OUTLOOK

Washington University School of Medicine
Autumn, 1974

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ON THE COVER
With the Class of '78 matriculating the largest number of women students in an entering class at Washington University School of Medicine, it was considered a "natural" for cover material for OUTLOOK. Posing 36 at one time was eliminated as a good idea, however. Using two ladders and two cameras, the pleasant assignment was accomplished rapidly. Pictured, from left, are: top left, Renee Demers, Rochelle Weber, Laura J. David, and Nola T. Mirikitani; center, Margaret Montana, Kweli Amusa, Theresa Poin Dexter, and Debra Gunn; right, Mary R. Schwartz, Barbara D. Reed, Susan Stillings, and Joan Kreiss; middle left, Frances Ann Lloyd, Carol Spellen, Ellen Li, and Martha Michalski; center, Ann Henry, Carol Marvel, Allene King, and Brenda Kurnik; right, Marcy Gibb, Sandra Spaulding, Kathy Ozanich, and Laura J. Brown; bottom left, Ada Jemison, Janet Risch, Dora Manigo, and Robin Ann Rothenhaus; center, Margaret Hochreiter, Cheryl Hairston, Mary Horn, and Diane Burzlaff; right, Carol G. Rose, Ellen Mooney, Pamela Gallin, and Sister Jeffrey Engelhardt.

BACK COVER
Through second-story windows of the McMillan Building (formerly McMillan Hospital) one can see a reinforced concrete beam extending across Euclid Avenue and connecting to the North Building. Craftsmen have been working since August on the 8 feet wide and 175 feet long pedestrian bridge which will be covered with plexiglass to provide a convenient and weather-proof access to the two structures—when these windows are removed.
With 36 Women

Class Keeps Ahead of U.S. Average

Sister Jeffrey Engelhardt, of the Sisters of St. Francis of the Holy Family order, is one of the 120 proud members of the Medical School Class of '78 selected from 5,294 applicants.

Proud, as the first nun admitted as a medical student here, Sister Jeffrey also shares the evident enthusiasm of the 35 other women who began orientation with her August 29. Comprising 28.4 per cent of the class, they are the largest assemblage of pulchritude in the school's history.

This is 7.4 per cent higher than the national average predicted by the Association of American Medical College's Council on Medical Education. In 1969 this level was only 9.1 per cent.

As is the case with previous matriculants, the class is a meld of varied backgrounds. Represented nationally are 33 states, and internationally, Iceland and Hong Kong. Twelve of the students are from minority groups.

The 30 who are married include two couples in the class.

Their educational backgrounds span many fields: three Ph.D. degrees, 10 master of history, 61 bachelor of arts, 55 bachelor of science and three bachelor of history.

Honors are not alien to these freshmen: 13 are Phi Beta Kappas; 15 graduated summa cum laude; 13 magna cum laude; nine cum laude, and 27 received degrees "with highest distinction."

Twenty-three are sons or daughters of physicians or dentists. The median age is 21 years, and the range is from 20-32.

The diversity of the class is illustrated by the variety of special interests, many of them in outdoor activities: volleyball, tennis, swimming, backpacking, bicycling, camping and gardening.

Photography is the favorite hobby. Several are interested in flying, karate and judo.

One unusual leisure-time activity is rebuilding antique horse-drawn vehicles. Community projects include singing solo in a church, and working on drug abuse rescue and telephone crisis intervention. Another is a volunteer Braillist.

To help the newcomers feel at home, the Medical Center Alumni Association annually sponsors a welcoming, and this year's was aboard the riverfront's M/S Huck Finn. While enjoying the Mississippi cruise, the freshmen had the opportunity to chat with alumni and faculty, and at the same time get better ac

Thomas Wincek and John Shega
The Class of '78

John Gibson

Robert Capps

Charles Gluck

Jeffrey Rubin and Harry Geggel

Charles Grassie and Joan Kreiss

Dora Manigo

Joseph Elterman

Ronald Waterford

Stanford Moran
**The Class of ’78**

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*Robert Schmitz and Susan Stillings |

*Keith Mullenger*
Aboard the Huck Finn

Charles McQueen and Barbara Reed

Bruce Thaler and Edward Kowert, M.D. '43 December

Robert Lee, assistant dean for minority affairs, and Robert Clayburgh

Donn Turner and Margaret Montana

Kenneth Koerner, M.D. '41

Ann Henry and John Stull

Donald H. Finger, M.D. '50
While completing more than $25 million in new buildings and renovations last year, Washington University Medical Center provided in excess of $5.4 million in free patient care.

The announcement was made September 10 at the Washington University Medical Center's board of directors annual meeting by Medical Center President Samuel B. Guze, M.D.

The board of directors re-elected as chairman Raymond E. Rowland, who also is chairman of the Barnes Hospital board of directors. Also re-elected were President Guze, who is Washington University vice chancellor for medical affairs; secretary, Norfleet H. Rand, vice chairman and treasurer of the board of Interco, Inc., and on the board of the Barnard Free Skin and Cancer Hospital; and treasurer, Joseph F. Ruwitch, president of Renard Linoleum and Rug Co., and on the board of The Jewish Hospital of St. Louis.

Newly elected were vice chairman, Landon Y. Jones, executive vice president of Pet Inc., and on the board of St. Louis Children’s Hospital; vice president, Philip R. Dodge, M.D., professor and head of the Department of Pediatrics; assistant secretary, M. Kenton King, M.D., dean of the School of Medicine; and assistant treasurer, Hugh Morris, assistant dean for financial affairs and assistant vice chancellor for medical affairs.

Entering its second decade as a corporate entity, the Medical Center is comprised of Barnes Hospital, Barnard Free Skin and Cancer Hospital, Central Institute for the Deaf, St. Louis Children’s Hospital, The Jewish Hospital of St. Louis, and Washington University, including its School of Medicine.

One focus of the President’s annual report was on the activities that illustrate the range of services, teaching programs and research in this first-rate university medical center.

But prime attention was directed to the neighborhood around the Center’s 50-acre area.

Reiterating the Medical Center’s commitment to stay in the Central West End of St. Louis, the report noted that for the past three years an ad hoc committee had quietly explored ways in which the Center could assist in revitalizing the area surrounding it.

Major economic feasibility and architectural studies were commissioned, and in November, 1973, a redevelopment corporation was formed. Following commitment, in principle, from the Missouri Housing Development Commission for mortgage funds to finance the residential portion of the project, Capitol Land Company was appointed as principal agent to undertake the project.

In an area bounded roughly by Oakland Avenue, Lindell Boulevard, Boyle Avenue and Kingshighway, the project’s approach will be to preserve as many existing buildings as possible while constructing new housing units in a variety of styles and types.

It is anticipated that a broad selection of housing would appeal to many people associated with the Medical Center, as well as the growing number of persons who prefer to live and work in the city.

Extensive changes of the street system, landscaped open spaces and recreational facilities also are envisioned. Commercial areas will be strengthened through the development of a town center and sites for corporate headquarters.

In June, 1974, the St. Louis Board of Aldermen passed a bill qualifying the 36-block area, both within and around the Medical Center, for redevelopment under the Missouri Urban Redevelopment Act. A plan detailing land use within this redevelopment area will be submitted to the Board of Aldermen soon.

Among statistics presented in the report were the continuing climb of operating costs: operations, $131.7 million, up from $113 million in 1972; salaries, $70.4 million for 8,585 employees.
Year; Area Redevelopment Planned

($63.4 million for 8,487 employees in 1972); and research, $20.8 million ($17.2 million in 1972).

The report also mentioned a few of the advances in medical care and technology that now are present in the Medical Center:
- a computerized admission system at Barnes Hospital;
- the EMI Scanner, a computerized radiological scanning device in the Edward Mallinckrodt Institute of Radiology, which permits detection of minute variations in brain tissue;
- an ophthalmic ultrasonic scanner used to locate abnormalities of the eye;
- an extension of Central Institute for the Deaf services into area schools, with follow-up care for those who failed hearing screening tests and group speech therapy;
- Children's Hospital division of endocrinology and metabolism is a major center for the treatment of growth hormone deficiency in children;
- Jewish Hospital scientists have developed new techniques for performing bone biopsy under local anesthesia.

Commenting on the physical changes at the Medical Center, Dr. Guze said, "Over the past year more intensive planning has occurred than at any period in its history."

Recently completed construction includes:
- the nine-story Sidney M. Shoenberg Pavilion at Jewish Hospital with 180 beds, a new radiology suite, clinical laboratories and more efficient admitting facilities;
- two floors of the Rand Johnson surgical wing of Barnes Hospital renovated to house 60 surgical beds;
- the Barnes Hospital Emergency Care facilities expanded and modernized;
- renovation of the 8th floor of the David P. Wohl, Jr. Memorial Hospital for the division of cardiology; the 3rd, 4th and 5th floors refurbished for patients;
- Maternity and McMillan Buildings which now house laboratories and offices for four Medical School clinical departments;
- a renovated and re-designed auditorium in the North Building named in honor of Carl Vernon Moore, M.D., former vice chancellor, dean, and head of the Department of Medicine;
- the most sophisticated pediatric life-saving equipment in an intensive care unit for newborns at St. Louis Children's Hospital.

Construction has begun on a 1,200-car, three-level underground garage to the south of Barnes Hospital Plaza. Work also is under way on an enclosed plexiglass overpass which will link the McMillan Building to the North Building.

"The future of the Medical Center," Dr. Guze said, "continues to rest on its ability to attract bright inquiring scholars whose ideas and work create the sense of academic excitement that reflects innovative approaches to research and clinical practice."

More than 2,200 are enrolled in a broad spectrum of training programs at the Center. One of the changes in traditional courses has been the reorganization of a new Division of Biology and Biomedical Sciences. The Medical School faculty will now be able to teach undergraduate students, and the Department of Biology faculty teach medical students.

A $347,871 grant from the Department of Health, Education, and Welfare has provided a residency program in primary care for internists and pediatricians in the Division of Health Care Research.

In commenting on the accomplishments of the past year, Dr. Guze noted, "Increased confidence in one another and recognition of common concerns and goals have enabled the members of the Medical Center to address problems of greater scope and importance than ever before.

"The long-range plans for the Medical Center and the massive effort to assist the neighborhood around us are bold, imaginative and vitally needed pro-

This concrete overpass linking McMillan and North Buildings will have a plexiglass cover to provide weatherproof crossing of Euclid Avenue.
An Unpredictable Sequence

Last spring Outlook featured an article about the "amphotericin B" team of Washington University scientists who are exploring the use of this antibiotic in cancer therapy. Our pride in their work is increased by the fact that it is based squarely on the pioneering research of another member of the School of Medicine faculty, Stephen C. Kinsky, Ph.D., professor of pharmacology and biological chemistry, one of our most versatile investigators.

The story behind this, and behind Kinsky's other distinguished work, shows the unpredictable sequence in science, how one discovery leads to unexpected revelations in other fields. No one could have predicted that if Kinsky worked out the mechanism of action of polyene antifungal antibiotics (such as amphotericin), it would lead to the discovery of how complement acts, or to a tool in cancer research and treatment, or to a way to generate "restricted" antibodies.

Nor could anyone have predicted that Stephen Kinsky would land in pharmacology in the first place. After graduating from the University of Chicago in 1951, Steve went to the Johns Hopkins University's Biology Department to study for his Ph.D. degree under William D. McElroy (now Chancellor of the University of California at San Diego). McElroy is one of four people that Kinsky says had a significant scientific influence on his life. McElroy taught his students self-reliance. "Sink or swim was his philosophy; he cut the scientific umbilical cord and forced me to think on my own." In retrospect, Steve's Ph.D. thesis under McElroy seems pretty remote from drugs and immunology: "Neurospora Nitrate Reductase: Role of Phosphate, Flavin and Cytochrome c Reductase."

Earl Stadtman, a preeminent biochemist, was the next "molding" individual. During a two-year postdoctoral fellowship at the National Institutes of Health "he taught me the basic things, like how to take good laboratory notes, and that a good scientist is his own severest critic." The admiration is mutual, Stadtman says, "Although Kinsky is recognized internationally for his pioneering contributions in the field of membrane structure and immunochemistry, his earlier studies on the enzymic acetylation of imidazole and on the hydrogenase system of Clostridia illustrate the versatility of his competence." And yet it is again hard to see how these studies which Kinsky started under Stadtman are related to what followed. (A lesson perhaps in the irrelevance of "relevance.")

In 1959 Kinsky was invited here to join the Department of Pharmacology by Oliver H. Lowry, M.D., Ph.D., professor and head of the department, who Steve lists as another of his "molders": "a unique individual in his capacity to nurture young people. The whole environment, which Ollie fosters, is conducive to research. If he can't make the grade scientifically here, a person has only himself to blame."

A close associate in the department when Steve arrived in St. Louis was Jack Strominger, now a professor of biology at Harvard. He was the fourth influence. "Although I never had the opportunity to work directly with Jack, I credit him with identifying the 'sixth sense' that a scientist must acquire that tells him when to drop a problem or to pick up another lead." Strominger in turn says that Kinsky's "work on the mechanism of action of polyene antibiotics is a true classic in the field . . . and he extended it in a beautiful way to give us real insights into membrane structure. I have watched him develop with admiration ever since we
were both colleagues at Washington University."

Steve encountered an even more important influence in St. Louis. Shortly after arrival, he met Constance Bednall who was working in the next laboratory. They were married in 1959, and except for a short time when their two sons were small, Connie has been in the lab as her husband’s most valued associate.

When Steve joined the Pharmacology Department, he thought it appropriate to shift to a problem that could properly be called pharmacological (although he admits no one pressured him into it). He had been studying adaptive enzyme formation in the fungus *Neurospora crassa* while a graduate student, and this became the slender bridge to a pharmacological problem. He had learned from lecturing on antifungal agents that little was known about amphotericin B and related antibiotics, except that they killed fungi and not bacteria. He therefore began studies to see whether these drugs might act by inhibiting cell wall synthesis. In 1960 he demonstrated that in mycelial mats of *Neurospora crassa*, these antibiotics produced a marked decrease in dry weight and loss of nucleotides, peptides, and possibly protein. This could have been due to damage to the cell wall, but further work with *Neurospora* protoplasts (no cell wall) made it apparent that the polyene antibiotics act instead by increasing the permeability of the cell membrane. (Simultaneously, J. Oliver Lampen at Rutgers University, working with yeast, came to the same conclusion.)

Continued investigation revealed that *Neurospora* protoplasts bind polyene antibiotics while insensitive bacterial protoplasts do not. The ability of particulate fractions to bind polyenes was lost after ethanol-acetone extraction. The binding property was fully restored by adding back the extracted lipids and partially restored by adding ergosterol. Since Gottlieb at the University of Illinois had earlier shown that cholesterol and ergosterol antagonized the antifungal effect of polyenes, a reasonable hypothesis was that the polyenes act by combining with sterols in the fungal membrane. Kinsky also took into consideration the fact that bacteria do not contain any sterols.

On this basis, it was predicted that mammalian cells, in which the predominant sterol is cholesterol, should also be vulnerable to these antibiotics. This was confirmed in 1962 when a group of sophomore medical students doing a special project, under Steve’s direction during the pharmacology course, showed that mammalian erythrocytes were rapidly lysed by amphotericin B. This indicated that some of the severe side reactions associated with prolonged amphotericin B therapy may be due to increased permeability of the patient’s cell membranes. This is the lead being followed up by the “amphotericin B group.” (Incidentally, one of those medical students—M. Alan Permutt—is now on the faculty in the Department of Medicine; another—Joseph Avruch—became a chief resident in Medicine.)

The clinching evidence for the role of membrane sterol in the action of polyene antibiotics was obtained in collaboration with Dr. M. M. Weber of St. Louis University in 1965 using *Mycoplasma laidlawii*, an organism which can be grown in two forms, one with and one without sterol in the membrane. The growth inhibition and lytic action of polyenes such as filipin was seen only with those cells which had sterol in their membranes.
The molecular basis for the membrane damage resulting from the sterol-polyene interaction now had to be investigated. In 1964 Kinsky went to the laboratory of Laurens van Deenen at Utrecht, The Netherlands, and conducted experiments that showed that polyenes interact with a variety of model membrane systems, provided they contain a sterol. Evidently the introduction of a small proportion of the antibiotic alters the orientation of sterol molecules in lipid monolayers and bilayers, and by inference in cellular membranes, with consequent changes in permeability.

The transition from research on antifungal antibiotics to complement arose from an electron microscopic study to see if, in fact, membrane damage by polyenes could be visualized. In 1965, in collaboration with a medical student, David Zopf, Steve demonstrated the presence of "pits" in human erythrocyte membranes that had been lysed by filipin, which is related in structure to amphotericin B. (For this work, Zopf eventually received the coveted Borden Undergraduate Research Award in 1969.) The lesions had a striking similarity to those reported a year earlier by an English group, Humphrey and Dourmashkin, in a variety of natural membranes after immune lysis by antibody and complement. This similarity suggested that perhaps the terminal stages of polyene-induced and immune lysis shared common features. In consequence, Kinsky attempted to prepare a model membrane system which would mimic the response of natural membranes to antibody and complement. For this purpose he chose "liposomes," which are minute aqueous compartments surrounded by lipid bilayer membranes. They are formed by emulsifying suitable lipid mixtures. Initial experiments were performed with liposomes prepared from lipid extracts of sheep erythrocyte membranes. Kinsky explained the logic behind this choice. “First, sheep erythrocytes have long been the favorite target for studying complement mechanism, so that a wealth of background information was available. Second, rabbit antisheep erythrocyte antiserum contains antibodies directed against Forssman antigen. This antigen is a glycolipid having amphipathic character, i.e. both a polar and a non-polar region. This was important because complement is activated by the formation of antigen-antibody complexes on the membrane surface. It seemed likely that the non-polar portion would be incorporated into the bilayers of the liposomes in such a way that the polar, oligosaccharide end (which carries the antigenic determinant) would project into the aqueous medium where it could interact with antibodies and initiate the complement sequence.”

In 1968 James Haxby (then a graduate student) performed the initial experiments and, as predicted, when these liposomes were incubated with the appropriate antibody and a source of complement, they did undergo permeability changes which appeared to be analogous to those observed in natural membranes. Subsequent experiments demonstrated that immune damage to liposomes required the same nine complement proteins, reacting in the same sequence, as did immune damage to natural membranes. These experiments were performed in Hans Müller-Eberhard's laboratory at the Scripps Clinic and Research Foundation in California. Müller-Eberhard, one of this country's leading immunologists, was suitably impressed. “It was a privilege for me and my..."
This liposomal model membrane, prepared with four compounds, will release trapped marker [e.g. glucose] when incubated with antibody against the selected antigen and a source of complement.

Phospholipid
Sterol
Charged
Amphiphile
Lipid Antigen

Trapped Marker [e.g., glucose]

with model membranes to a different area of immunology. Working with Kei-ichi Uemura (then a postdoctoral fellow) and with Joseph M. Davie, M.D., associate professor in the Department of Pathology, he observed that liposomes, "sensitized" by incorporating certain synthetic antigens, are immunogenic. The antigens were synthesized by covalently attaching low molecular weight haptens, which by themselves do not induce the production of antibodies, to a phospholipid which can hold the hapten within the lipid membrane of the liposomes. The antibodies produced in response to these sensitized liposomes are directed against the haptenic determinant.

An exciting finding is that the antibodies produced are much more "restricted" i.e. more homogeneous than those ordinarily generated against haptenic groups attached to proteins. This Kinsky attributes partly to the fact that haptens carried by the liposomes are in a more homogeneous environment than those carried by proteins.

What may come next in the "unpredictable sequence"? A definite practical possibility is that liposomes, which contain drug-substituted antigens, may be used to provide a simple procedure for screening patients with drug allergies. A possibility of more fundamental importance is that liposomes may offer a tool to unravel mechanisms of cell-mediated immunity. In any event, it is a safe prediction that Kinsky's sixth scientific sense will lead to many more discoveries.

Editor's note: This is the introductory article in a series that will feature members of the Washington University School of Medicine faculty who have distinguished themselves and the institution through their contributions.
Lipid Research Center Director Gustav Schonfeld, M.D., inspects three blood samples for turbidity, which indicates high concentrations of lipoproteins.

"I want to live."

Donald F. Loncrini smiled as he told why he is participating in the Washington University School of Medicine's Lipid Research Center (LRC) study. The research involves a special group of men, aged 35 to 59, who, hopefully, will be helping to answer, "Can heart attack be delayed or prevented in men with hypercholesterolemia—those who are in high risk for the development of coronary artery disease—by lowering the levels of cholesterol in their plasmas?"

"Since my doctor told me I have an elevated cholesterol level, naturally I have been concerned. When I learned that the LRC was looking for men like me, I called for an appointment," he said.

Dr. Loncrini, who is a biochemist at Mallinckrodt, Inc., is one of more than 8,000 who have had blood and blood pressure checked as the first step in the LRC's Coronary Primary Prevention Trial (CPPT). Of this number, 478 were identified by the LRC tests as men who have elevated cholesterol levels and normal blood pressure. Of these men, 137 have met the rigid requirements to be in the study.

"We expect to screen more than 30,000 to find the 350 participants needed in the program," said Gustav Schonfeld, M.D., associate professor of medicine and of preventive medicine, and director of the Center.

All participants also agree to follow a diet designed to lower cholesterol levels in the blood. In this double-blind study, one-half will be taking a drug called cholestyramine, the remainder will receive a placebo (fake drug).

The St. Louis LRC, which has been actively recruiting for the CPPT for about six months, is one of 12 centers in the United States and Canada participating in the research. The Washington University program is funded by the National Heart and Lung Institute with an average of $750,000 annually for up to seven years.

"We are rather proud of the results of our efforts to date," Dr. Schonfeld said. We have been quite successful in recruiting for the study by contacting major corporations, cooperating with the Red Cross, and by physician referral either directly or through the clinical laboratories.

Men from more than 70 companies and civic organizations in the area have

WANTED: 30,000 men between the ages of 35-59 with no history of heart disease, diabete or high blood pressure. They must have elevated cholesterol in their blood to answer the question: Can lowering fat levels in plasma reduce the development of heart disease?

For further information, telephone (314) 454-3162, or write:

Lipid Research Center
507 South Euclid Ave.
St. Louis, MO 63110

Open 8 a.m.-4 p.m. Monday-Friday
8 a.m.-Noon Saturday
participated in the study. At Olin Corporation in East Alton, Ill., the LRC team screened 1411, of whom 112 met the criteria for the study and are now participating.

There were 596 men who volunteered for the screening at Emerson Electric Company; 393 at the Jewish Community Centers Association; and 365 at Western Electric.

Through the initial efforts of Dr. Loncrini, 175 men were screened at Mallinckrodt, Inc.

The LRC sends all participants the laboratory findings on their cholesterol, and the blood pressure reading. Those with irregularities are referred to their private doctors.

As a service to men donating blood to the Red Cross, more than 3,300 have had their cholesterol levels measured. Of this number, 204 have qualified and volunteered for further study.

"More than 250 physicians have referred patients to us after receiving test results from laboratories of Barnes, Jewish, Missouri Baptist and several other hospitals. The Midwest Medical, Missouri Clinical and Biochemical and a few other laboratories also have been most helpful," Dr. Schonfeld cited.

Another major factor in the success of the program, according to the Center director, is the LRC staff of more than 30, including physicians, laboratory technicians, dietitian-nutritionists, physician assistants, office personnel and data processors.

"Fortunately, we have a group which understands and supports the scientific aims of this project," he explained.

Full-time physicians are Coordinator of the Primary Prevention Trial Joseph L. Witzum, M.D., instructor in medicine and in preventive medicine; and Jon D. Cooksey, M.D., assistant professor of medicine and of preventive medicine. Working part-time are Stephen R. Crespin, M.D., assistant professor of clinical medicine; Ananda DeSilva, M.D.; Joseph M. Orenstein, M.D., and Sigmund Tashma, M.D.

Doctors meet with participants, take medical histories, perform physical examinations and administer treatment. Dr. Cooksey also supervises the exercise elec-
Technician Anne Larson prepares samples of blood plasma to be automatically analyzed. Identical procedures are followed by the 12 Lipid Research Centers in the United States and Canada participating in this study.

Nutritionist Mary Ann Howald and Joseph N. Marcin compare yesterday’s dinner, and discuss the suggested moderate low cholesterol, fat-controlled meal pattern outlined in a brochure furnished to all participants.

trocardiograms and consults on heart problems.

Dr. Orenstein’s prime activity is recruiting referrals from private physicians. Dr. Tashma contacts men whose doctors have identified as potential candidates, explains the program, and makes appointments for them. These two physicians are responsible for the recruitment of more than one-third of the participants.

The detailed procedures for the study were developed from collaborative efforts of the directors of the 12 Lipid Research Centers with added input from prominent advisors. Treatment methods and information flow were carefully outlined so that each LRC provides data that is usable for all 12 centers.

Dr. Witztum explained the procedure: “We contact the men our tests have shown to have high cholesterol levels, and ask them to come to the clinic. On the first visit the purpose of the study is explained, and one of our three nutritionists meets with them and asks about their eating habits. Another blood sample is drawn so that detailed lipoprotein and chemical tests can be performed.

“Men with a cholesterol level of 265 mg/100 ml of plasma are asked to return for a second visit a month later. At this time we ask questions for a detailed medical history, give a thorough physical examination, and then take both resting and exercise electrocardiograms. The participant is usually accompanied by his wife and both meet with the nutritionist who outlines a suggested cholesterol-lowering diet,” he continued.

“Those who qualify for the third and fourth visits again have blood drawn for tests which determine the presence or absence of diabetes mellitus. Additional blood lipid tests are also carried out, and blood pressure is taken and weight recorded.”

At Visit 5 the volunteers formally enter the study, and by a random allocation are assigned to two groups: those who receive cholestyramine, a drug which lowers the cholesterol level below that which can be achieved by diet alone;
and the remainder who are given a placebo. Neither the participants nor the clinic professional staff know how the allocation was made. This results in unbiased data.

Cholestyramine works by binding cholesterol to the bile acids. Up to 90 per cent of the latter normally are reabsorbed during the digestive process in the alimentary canal. The cholestyramine restricts this activity, however, and allows retention of only 50 per cent of the bile acids. The net effect is a drainage of cholesterol from the body.

"The advantage of this medication is that it is very effective in lowering cholesterol with no systemic side effects because the drug is not absorbed," Dr. Schonfeld explained. "The minimal discomforts are limited to the gastrointestinal tract (bloating and constipation)."

None of the participants thus far has reported any complications from taking the medication or the placebo; however, they have commented on the gritty consistency of the amber powder. Daily they drink about one ounce of it mixed in water or juice.

"In time," Dr. Schonfeld said, "a less inconvenient drug may be developed, but the best choice now for high cholesterol patients is a bile acid-binding resin."

A factor motivating the participants is the friendly relationship they maintain with the clinic staff. Earl Werner, a Metropolitan Life Insurance salesman, attests to this:

"The first time I came to the clinic I was so nervous that my blood pressure readings were almost too high to qualify me for the program. Fortunately, on the third try I was declared within the limit. I've been with the study nearly a year, and I feel that one reason I am doing so well is the helpful, friendly people at the Center."

An essential part of the study is adherence: taking the medication or placebo, and returning to the Center for examinations at prescribed intervals.

"Because the study will be on-going for up to seven years, we also have made provisions to maintain contact with the participant's private physician. With our periodic reports to the doctors, we ask them to inform us of any changes in their patients. This way we can update the health records of the study volunteers," Dr. Schonfeld said.

One question the investigators at the various centers and at the National Heart and Lung Institute hope will be answered by the research is whether medication and diet will affect the development and progression of arteriosclerosis. They anticipate that the reduction of cholesterol will prevent the deposit of fat in blood vessels which impedes the normal flow of blood.

In St. Louis, and at the 11 other centers, the LRC teams are working toward a common goal to see if those receiving cholestyramine will have a statistically lower incidence of heart attack than those not taking the medication.

"If this is the case, the drug will be prescribed for everyone in the program," Dr. Schonfeld said.

In the next seven years the 12 Lipid Research Centers, working separately but with comparable data, will each test 350 men. The expense of this research will be justified if it can be demonstrated that lives may be saved. The men participating in the study apparently share the enthusiasm of the staff. Several have commented that regardless of whether they are receiving the medication or the placebo, they feel that their lives already have improved.
Can someone who has been king find happiness and/or satisfaction in serving as president? Charles W. McLaughlin, Jr., M.D. '29, believes the answer is an unqualified YES! On Oct. 24 he was installed as the 55th president of the American College of Surgeons.

He also realizes that the new position will be more demanding of him than his reign as King of Ak-Sar-Ben LXXI in 1965 when he was ruler of the mythical realm of Quivira.

This prominent Omaha surgeon, whose professional and private (often public) lives have been filled with acts of service, looks upon his current "opportunity" as the acme of his career. Many of his contemporaries, who marvel at the 67-year-old's attainments, perhaps look at this election as "just another pinnacle."

Such as the receipt of the Nebraska Governor's Meritorious Service Award in 1973 for the thousands of hours of volunteer service to hospitals, and especially the University of Nebraska Medical Center.

But it is the surgeon Dr. McLaughlin that was voted to the top job in the College, and such an elevation doesn't occur without merit—and the hard work that a successful candidate accomplishes—and then smiles to himself.

Others with a Washington University background who have served as American College of Surgeons president were Evarts A. Graham, M.D., St. Louis, 1940-41; Alton Ochsner, M.D. '20, New Orleans, 1951-52; Frank N. Glenn, M.D. '27, New York, 1954; and Warren H. Cole, M.D. '20, Chicago, 1955-56.

Naturally, Dr. McLaughlin's curriculum vitae is extensive, and his bibliography lists 99 papers. But before reviewing the highlights of the "accomplishment" 45 years, his medical beginnings might be exposed to provide a colorful contrast.

"My father was a general practitioner in Washington, Iowa, who practiced until he was 88 years old. I started helping him about the time I was 9 years old," Dr. McLaughlin recalled.

"Some days Father worked 15 hours or more in the practice of 'cottage medicine,' as it was called, and I often accompanied him as he used horse and buggy or sleigh to get around. Sometimes we had to take the train.

"Under Dad's direction I administered anesthetics and assisted him with operations he performed in farmhouses. Because of these experiences while I was growing up I never knew anything but medicine, and therefore never even debated going anywhere except into medicine," he emphasized.

After receiving the undergraduate degree at University of Iowa, and the first two years of medical school there, Charles McLaughlin decided that the departure of seven medical faculty members following a faculty explosion was reason enough to seek admittance elsewhere. His primary choices were Washington University and Harvard.

"The letter from Washington University told me that if I could report there in 24 hours and make up a course in clinical microscopy I would be admitted to the junior class. Robert Phillips got the same message.

"We arrived in St. Louis the last day of July, got off at the railway station and found our way to the School. We were assigned to the laboratory of the dispensary on Euclid Avenue.

"For the month of August we ran the lab, doing blood counts, urinalysis—and anything else that needed doing—and with hardly any instructions. When September arrived, and the lab crew returned from their vacation we were informed that we had made up our course in clinical microscopy and were now duly admitted to the junior class," he remembered, with a smile.

Dr. McLaughlin graduated with the Class of '29. After an internship and a year of residency in pathology at Montreal General Hospital, he served from 1931-34 as a fellow in surgery at the University of Pennsylvania Hospital, and then
Charles W. McLaughlin, Jr., M.D. '29, on Oct. 24 was installed president of the largest surgical organization in the world, with more than 35,000 members. Photo by Fabian Bacharach

for six months as a traveling fellow in surgery at the Royal Infirmary of the University of Edinburgh, Scotland.

"After all this valuable training, with some of the great men in the profession, I felt it was time to establish a practice. I wanted to locate in a midwestern city with a medical school," he said.

"My uncle, Howard Hamilton, M.D., was professor of pediatrics at the Nebraska University Medical Center, and he asked me to come to Omaha to look things over. Even though I was penniless at the time I took him up on it, and I liked what I saw."

Except for the years of World War II, Dr. McLaughlin has continued in private practice and on the teaching staff of that medical center. From 1955 to 1971 he held the rank of professor of surgery; now he is senior consultant in the department of surgery.

In 1942, at age 37, he volunteered for duty in the U.S. Navy. He served as chief of surgery at the Great Lakes Naval Training Station and at the Naval Hospital in Corpus Christi, Texas, before being assigned sea duty aboard the aircraft carrier USS Essex.

"We were at sea for 18 straight months," he commented. "We lasted from the Marianas assault through to the surrender of the Japanese in Tokyo Bay."

When he was discharged in 1946 with the rank of commander, he had earned seven battle stars, the Presidential Unit Citation, and a personal Navy Citation from Admiral Richard Spruance.

Back from the war, Dr. McLaughlin settled down to the routine of being a community surgeon. But he also was prompted to serve in a variety of callings in a sequence that brought about the natural ascendency to his present position:

President of Staff of Nebraska Methodist Hospital and Children's Memorial Hospital; President of Omaha-Douglas County Medical Society and Omaha Mid-West Clinical Society; and then in the American College of Surgeons, President of Nebraska Chapter; three terms as Governor; Secretary of the Board of Governors; Chairman of the Board of Governors; Regent, and President-elect.

He also continued his activities through membership in several other surgical organizations including the American, Southern, Western and Central (he was a founder-member of the Central Surgical Association). Dr. McLaughlin's interest in the military is manifest in his appointment as Consultant to Headquarters of the U.S. Air Force Strategic Air Command since 1946; Citation, from SAC in 1967, being designated Honorary Consultant in General Surgery, and in 1968, appointed general surgical consultant to the Surgeon General, U.S.A.F.

Other memberships include Trinity Cathedral, Omaha Club, Omaha Country Club, and Joslyn Liberal Arts Society. He and Beatrice, his wife for 35 years, enjoyed raising roses and vacationing at their summer residence in Park Rapids, Minnesota. A son, Charles, is district sales representative for the Crown-Zellerbach Co., and now resides in Kansas City, Mo.

An avid hunter, Dr. McLaughlin has been shooting waterfowl and upland game since the age of 10.

"Over the years I've been doing exactly what I want to do, and I have few regrets," he commented. "My health is excellent, and I want to continue for the present in giving service to my patients, my community and surgery in this country. Retirement holds no special attraction to me because my life has not been dull or a drudgery."

Washington University School of Medicine is proud to claim this interesting and interested illustrious alumnus, and wishes him many more years of activity to his varied constituents.
Health, human wholeness and a more patient-oriented system of medical care are two goals of a small group of health enthusiasts in pursuit of change here.

Another goal is the creation in Honolulu of a Center for Human Wholeness which would incorporate nontraditional methods of healing—such as yoga, meditation, massage and bioenergetics—into the present system.

“We want to work with all the ideas that exist in the world as well as with orthodox medical beliefs and practices,” explained a group spokesman, Dr. Walter Strode.

“So we have created a loosely-knit organization that can be used as a vehicle to explore different alternatives without getting hung up in a particular point of view,” he said.

Known as the Hawaii Health Net, the group now numbers about 150 people from all walks of life and from many different areas of the globe, although its main activities are centered in Honolulu.

Dr. Strode—a urologist at the Straub Clinic and Research Foundation—his wife Nancy, and a handful of other people founded the group in 1972.

Using the key idea called networking; borrowed from the noted futurist-author Robert Theobald, and another idea called synergy, the group set to work.

They put on two 4-day conferences to explore health and the future; one occurred in August, 1972 at the East-West Center and the other at Hawaii Loa College in May, 1973.

Co-sponsors included the Straub Clinic and Hospital, the Pacific Health Research Institute, the Pan-Pacific Surgical Association, the Hawaii Commission on the Year 2000, and the Association for the Study of Man-Environment Relations.

Theobald delivered the keynote address at Hawaii Loa College, and said, “We have to find a way of getting into the future in which all of us create that future . . . People who know what’s going on have tremendous power.”

At the conclusion of the conference, the group defined synergy thus: The combined, cooperative actions of two or more people which generate greater results than would be produced by the same parties acting independently or competitively.

Since those early beginnings, Health Net members have traveled to Cuernavaca, Mexico, and Spokane, Wash., to attend conferences on health. They also have formed affiliations with various other groups such as the Center for the Study of Power, headquartered at Berkeley, Calif.

Sitting on the lawn of their beachfront home at Lanikai, the Strodes appeared relaxed and in good health themselves as they recounted ideas and events that have shaped the Health Net.

“Acquiring good health is a dynamic, not a static process; it’s a process in which the patient has learned to rely on himself instead of a physician or health care system to keep him well.

“That doesn’t mean that the practitioner or system is ruled out as a means of coping with problems that may arise; it means that the patient has learned to use them as resources rather than the other way around,” Strode said.

A native of Oahu, Strode graduated from Punahou School in 1942, and received his M.D. degree from Washington University in St. Louis, Mo. in 1948. It was there that he met his wife Nancy, while she was studying to become a nurse.

Based on their observations and experiences with traditional as well as unorthodox methods of healing, the Strodes believe that “allopathic medicine” (the orthodox system taught in U.S. medical schools) tends to increase disease rather than alleviate it.

“As a result,” they said, “patients are often made worse instead of better, and despite the appearance of so-called ‘wonder drugs’ and ‘new advances’ in medicine, disease is at an all-time high.”

One way this occurs is by developing cultural expectations based on the statistics of disease—“a harmful practice,” Strode says, “because it perpetuates the idea that there will always be disease.”

Another way is by inadvertently fixing the idea of disease as opposed to health in the minds of both patient and practitioner—“a practice which makes disease become a self-fulfilling prophecy,” he said.

“Yes, if we had anything like that idea which says there is always going to be
Medicine in the Future

health, we could really go somewhere," added Mrs. Strode.

Another notion Health Net members have developed is termed the "problem/possibility" view of things.

Strode defines it thus: "If you look at things as problems they tend to become stumbling blocks; but if you re-define them as opportunities they can become challenges that make new growth and experiences possible.

"For example, look at our medical care system in terms of disease and the solutions having to do with conquering or overpowering disease—and that's what we experience, disease and more disease.

"Now look at it in terms of 'problem/possibility' and it just might be possible to eliminate disease and experience health instead," he said.

Pausing a moment to reflect on what he had just said, Strode threw his head back and broke out laughing.

"I can just see one of my colleagues reading this article and picking up the phone to call me and ask: 'Hey Walter, I have a patient over in my office whose had a heart attack, would you please come over here and turn it into a possibility?"

Anyone interested in contacting the Strodos to learn more about the Health Net, can write to them at 1629 Wilder Ave., Honolulu, Hawaii 96822.

This article appeared in the Sept. 17, 1974 issue of the Honolulu Advertiser, and is reprinted with permission.
Alumni Activities

Pre '20s and '20s

James A. Tesson, '18, Kansas City, who retired after 56 years as a surgeon, wrote "Half Century of Medicine Recalled" for the Aug. 2 issue of The Kansas City Times.

Faye C. Lewis, '21, Webster City, Iowa, wrote the Commentary "Sic Transit" in the Aug. 5 Journal of the American Medical Association.

William A. Fuson, '24, Trenton, Mo., received a 50-year pin from the Missouri State Medical Association at the Past President's Banquet.

Edward H. Barksdale, '25, Nashville, Tenn., has been elevated to associate professor emeritus of urology at Vanderbilt University School of Medicine.

Arthur C. Fortney, '27, Fargo, N.D., has retired from private practice and has accepted a position in the Veterans Hospital outpatient department.

Alfred G. Henrich, '27, Los Angeles, retired, is emeritus assistant professor of surgery at Loma Linda University School of Medicine. In August he gave the Jesse A. Griffin Medalist Address at the Phi Rho Sigma medical fraternity meeting.

A. Ford Wolf, '29, Temple, Tex., retired from allergy practice after 43 years, wrote, "I never had so much fun. Retirement is great!"

Herbert H. Gass, '30, Pleasant Hill, Tenn., lectured at the 15th annual American Leprosy Missions-Public Health Service seminar at Carville, La. He is the former head of the PHS hospital's training branch. Dr. Gass received the Kaiser-Hind Medal from Great Britain for his 33 years of public service to Hansen's Disease sufferers in India.

Stanley L. Harrison, '30, Chicago, who recently retired after 11 years as associate director of the American Academy of Pediatrics, was author of "The Most Important 30 Minutes of Your Child's Life" in the August issue of Today's Health.

George H. Curtis, '33, retired dermatologist, is living in the "golf capital of the world," Pinehurst, N.C.

Robert S. Smith, '33, has written his autobiography, entitled "Idaho Surgeon," and it is being published by Syms-York Co. of Boise, his home town. Dr. Smith is presently disabled by stroke.


Leo Wade, '38, New York, became member emeritus of the Sloan-Kettering Institute for Cancer Research upon his July retirement as member, vice-president and deputy director of the institute.

See Pages 25 and 26.
'40s

Ewald W. Busse, '42, Durham, N.C., was elected president of the American Geriatrics Society for 1975-76.

Hugh E. Stephenson, Jr., '45, Columbia, Mo., is president of the Missouri Chapter of the American College of Surgeons.

Alan H. Thatcher, '45, Carlsbad, Calif., is on the faculty of Palomar College training emergency medical technicians.

E. F. B. Cadman, '46, Southport, England, is chairman of the Medical Executive Committee of the re-organized Health Service. He is also the hospital member of the district management team. He is a Fellow of the Royal College of Physicians of London.

Claude K. Leeper, '46, Columbia, Mo., received the Legion of Merit Medal at his retirement from the U.S. Air Force. He is now professor of pathology at University of Missouri School of Medicine.

H. Mitchell Perry, '46, is president of the St. Louis Heart Association.

James C. Sisk, '46, was re-elected chairman of the board of trustees of the St. Louis Blue Shield Plan.

Philip N. Jones, '48, Chicago, has been elected to his second term as president of Rush-Presbyterian-St. Luke's Medical Center. He is associate professor of medicine and senior attending physician.

See Pages 25 and 26.

'50s

Elmer B. Brown, '50, St. Louis, presented two papers at the 15th Congress of the International Society of Hematology meeting in Jerusalem.

Harriette L. Livingston, '50, is chief of the department of anesthesiology at Presbyterian Hospital of Dallas.

Richard J. Puls, '50, Dallas, was a strong competitor through round 16 of the Senior Men's Singles in the 1974 National Table Tennis Tournament.

William N. Blalock, '52, Paducah, Ky., consultant in gastroenterology with Air Products and Chemicals, Inc., is evaluating the toxicity of industrial vinyl chloride for the National Cancer Institute. He is also working with the Labor Department concerning proposed standards for exposure.

Robert Katims, '52, Miami, is president-elect of the Dade County Medical Association. He also was promoted to clinical professor of medicine at University of Miami School of Medicine.

Max A. Heeb, '53, Sikeston, Mo., secretary-treasurer of the Missouri chapter of the American College of Surgeons, was also voted president-elect of the University of Missouri Medical School Alumni.

John I. Sandson, '53, formerly with Albert Einstein College of Medicine, Yeshiva University, has been appointed Dean of the Boston University School of Medicine.

Robert E. Hermann, '54, is president of the Cleveland Surgical Society.

A. Martin Lerner, '54, Detroit, presented a paper on "Viral Encephalitis" at the annual meetings of the Infectious Disease Society and the American Society for Microbiology, in San Francisco.

A. Robert Arnstein, '55, Detroit, was promoted to professor of internal medicine at Wayne State University School of Medicine.

H. Marvin Camel, M.D., associate professor of obstetrics and gynecology, affixes an Israeli mezuzah, a symbol of the Jewish faith, to the doorpost of the East Pavilion's new Britth Room, where ritual circumcisions are performed. Observing are Rabbis Lawrence Siegel, a Barnes Hospital chaplain; Sheldon Switkin, past president of the St. Louis Rabbinical Association; Abraham Magence, Jeffrey Stiffman, Association president; Mrs. Camel; and Samuel B. Guze, M.D., vice chancellor for medical affairs.
of Medicine. He also is chief of endocrinology and metabolism at Harper Hospital.

Galen B. Cook, ’55, Tahoe Vista, Calif., president of Medical Logic International, introduced an automated prescription writing device called ACCURX at the annual AMA meeting in Chicago.

Robert E. Froelich, ’55, has assumed the duties of assistant dean in charge of program development and evaluation, and professor of psychiatry at the University of Alabama’s School of Primary Medical Care in Huntsville.

Richard W. Hudgens, ’56, has entered the private practice of psychiatry in St. Louis. In July he was promoted to professor of clinical psychiatry at Washington University.

Doris R. Jasinski, ’56, Honolulu, is president-elect of the Hawaii Academy of Family Physicians.

Robert D. Wald, ’56, Sausalito, Calif., wrote the chapter “Children of Divorce” in the best seller Creative Divorce. He has been promoted to associate clinical professor of psychiatry at University of California School of Medicine, San Francisco.

Robert C. Meredith, ’57, was transferred from the Navy Regional Medical Center, Japan, to the one in San Diego, Calif., after a 4-year tour of duty.

William J. Goettman, ’58, Springfield, Ohio, is team physician for the NCAA Division III champions of Wittenberg University, and for North High School.

Lucy Jane King, ’58, has accepted a position as coordinator of research in the department of psychiatry at Medical College of Virginia in Richmond.

Byron J. Masterson, ’58, was voted outstanding staff physician by residents of Kansas City General Hospital. He was certified by the Board of Gynecologic Oncology, and elected president of the Felix Rutledge Society.

David L. Rabin, ’58, Chevy Chase, Md., is professor of community medicine and international health at Georgetown University School of Medicine.

Robert E. Fechner, ’60, Houston, Tex., was a member of the invited faculty for the American College of Obstetrics and Gynecology meeting in Las Vegas. He is associate professor of surgical pathology at Baylor College of Medicine.

Gary R. Jystad, ’60, clinical instructor of emergency medicine at the University of Southern California School of Medicine, was elected a Charter Fellow in the American Academy of Family Physicians.

Nicholas T. Kouchoukos, ’61, was a developer of the medical “logic” for the University of Alabama’s computerized intensive care unit blood infusion system, as reported in the Aug. 19 issue of Hospital Tribune.

Stanley S. Shimoda, ’61, has joined the internal medicine and gastroenterology staff of Straub Clinic in Honolulu.

H. Kenneth Fisher, ’62, Tucson, associate professor of internal medicine at University of Arizona College of Medicine, has been elected to the executive committee of the American Thoracic Society. His research on Effect of Experimental Pneumococcal Meningitis on Respiration and Circulation in the Rabbit was published in the Journal of Clinical Investigation. He also made a presentation before the American Federation of Clinical Research on the Site of Bronchodilator Action of Inhaled CO₂ in Asthmatics at Rest and after Exercise.

Alumni Activities

'60s

Robert E. Fechner, ’60, Houston, Tex., was a member of the invited faculty for the American College of Obstetrics and Gynecology meeting in Las Vegas. He is associate professor of surgical pathology at Baylor College of Medicine.

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At the Aug. 8 formal dedication of the Sydney M. Schoenberg Pavilion addition to The Jewish Hospital of St. Louis, instead of the traditional ribbon, Sydney M. Schoenberg, Jr., and Mrs. John M. Schoenberg, assisted by Hospital President David Gee, cut a garland of leaves from a Calamondin orange tree (chosen because this species has a growth and development symbolic of the continuous enlargement and restoration of health that characterizes a modern patient care institution). Samuel B. Guze, M.D., vice chancellor for medical affairs, was keynote speaker at the opening of the $14 million nine-story facility.
The times change
And we change with them.

—From Owen's Epigrammata

Name

Address

City, State, Zip

Year of graduation or on faculty or house staff

Dear Readers:
Please help us keep your classmates, former house officers or faculty, and friends informed of your latest achievements.

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Please cut out, fold, staple or tape, and mail. Thanks!
Harvey S. Kantor, '62, Chicago, who has been named a Fellow in the American College of Physicians, presented a paper at the Gordon Research Conference on Cyclic AMP at Tilton School, N.H.

Donald M. Rubin, '62, Brooklyn, was appointed clinical assistant professor of psychiatry at the State University of New York Downstate Medical Center.

Patrick O'Donoghue, '63, Denver, is the head of two associated health care research and consulting organizations, Spectrum Research, Inc., and Policy Center, Inc.

Carl G. Kardinal, '65, Columbia, Mo., was appointed chairman of the department of medicine at Ellis Fischel State Cancer Hospital after serving 12 years in the U.S. Navy.

James S. Louie, '65, is now assistant professor of medicine and chief of the division of rheumatology at the Harbor General Hospital campus of the University of California at Los Angeles Medical School.

John C. Shaw, '65, for the past two years has been chief of orthopedic surgery for Presbyterian Medical Center, Jeonju, South Korea.

Robert H. Gelber, '66, board certified in internal medicine, in July was appointed chief of infectious diseases at the U.S. Public Health Service Hospital in San Francisco after service at the National Leprosy Control Center in Malaysia, and the National Institute for Medical Research in Mill Hill, England.

Charles K. Harmon, '66, has joined Largent & Clontz Surgical Associates of Sanford, Fla., in the practice of general and vascular surgery.

Douglas W. Alvord, '67, is in the practice of internal medicine and an instructor in the WAMI program at Montana State University.

John S. Douglas, Jr., '67, Atlanta, has been appointed assistant professor of medicine (cardiology), and of (cardiac) radiology at Emory University School of Medicine.

Robert D. Porter, '67, Topeka, Kan., is in the private practice of internal medicine and nephrology.

Edward K. Stevenson, '67, has established a child and adolescent psychiatry practice in Overland Park, Kan., after completing training at Mayo Clinic.

Maj. Melvin Strauss, '67, chief of the otorhinolaryngology section at Fort McPherson Army Hospital, Atlanta, is completing work on a two-year Deafness Research Foundation study of the relationship of cytomegalovirus infection and congenital deafness.

Marc A. Schuckit, '68, assistant professor at University California, San Diego Medical School, also is special assistant to the commanding officer for alcohol studies at the Navy Medical Neuropsychiatric Research Unit.

Earl D. Hearst, '69, is in private practice with Psychiatric Associates of Tidewater in Norfolk/ Virginia Beach, Va.

Before delivering the Third Wendell G. Scott Memorial Lecture on Sept. 9, John M. Dennis, M.D., right, shares remembrances of the late professor of clinical radiology in the portrait above with Ronald G. Evans, M.D. Dr. Dennis, who spoke on "External Forces on Radiology," is dean of the University of Maryland School of Medicine and professor and head of its department of radiology. Dr. Evans is professor and head of the department of radiology and director of the Mallinckrodt Institute of Radiology.

Neil S. Alex, '70, Branford, Conn., completing his second year in Yale University Medical Center's adult psychiatry program, will return to St. Louis next year to begin a child psychiatry fellowship at Washington University.

William A. Blattner, '70, Bethesda, Md., is studying the epidemiology of familial cancer at the National Cancer Institute and then will have a clinical year as part of an oncology fellowship.

Joann L. Data, '70, Nashville, is in her second year of a clinical pharmacology fellowship at Vanderbilt University.

Richard A. DiGioia, '70, completed a year with the Army in South Korea, and is now stationed at Ft. Belvoir, Va. He passed the internal medicine board examination.

Robert G. Harmon, '70, Rockville, Md., has begun a two-year assignment with the U.S. Public Health Service working on PSRO.

Thomas K. McMahan, '70, is in family practice and internal medicine in North Wilkesboro, N.C.

Lytle D. Pahnke, Jr., '70, is chief surgical resident at New York University's Bellevue Medical Center.

Stanley J. Vogel, '70, after completing an internal medicine residency at University of Michigan, is stationed for two years at the Army's 130th Station Hospital in Heidelberg, Germany.

Jo Beamer Zurbrugg, '70, Chicago, has completed a pediatric residency, and is now in private practice. Husband Eric Zurbrugg, '70, has been released from U.S. Air Force active duty and is a pediatric resident at Michael Reese Hospital.

Edward C. Clark, '71, San Diego, will complete military service as U.S. Navy flight surgeon in December, and start ophthalmology residency at Wills Eye Hospital in Philadelphia.

Robert A. Laibovitz, '71, is chief resident in ophthalmology at University Hospitals of Cleveland, and has been accepted for a fellowship in retina and
Alumni Activities

macular disease at Wilmer Eye Institute in Baltimore next year.

Lee A. Rigg, '71, is chief resident in obstetrics and gynecology at University Hospital in San Diego, Calif.

Robert F. Scheible, '72, St. Louis, has been named chief resident at the Mallinckrodt Institute of Radiology.

IN MEMORIAM

Alumni

Edwin H. Rohlfing, '19 July 16, 1974
J. Paul Frick, Sr., '23 July 14, 1974
John W. Williams, Jr., '23 Aug. 12, 1974
Willard Bartlett, Jr., '26 Aug. 14, 1974
Jesse L. Henderson, '29 March 15, 1974
Thelma C. Bucktorhe, '30 April 13, 1974
Wilbur J. Wilson, '33 Sept. 1974
Everett O. Jeffreys, '34 March 4, 1974
Gordon E. Stone, '34 Oct. 3, 1974
Robert V. King, '35 Feb. 23, 1974
George F. Fraser, '39 April 7, 1974
Hugh Ashley, Jr., '43 March June 14, 1974
Walter E. Koppenbrink, '45 Nov. 13, 1974
Elmer T. Egashira, '57 July 1974
John A. Semmelmeyer III, '58 Sept. 30, 1974

Faculty

LeRoy L. Costantin, M.D. Nov. 7, 1974
Charles H. Eyermann, M.D. Aug. 31, 1974
Arthur E. Strauss, M.D. Oct. 9, 1974

Former Faculty

Lilburn C. Boemer, M.D. Nov. 7, 1974
Grover B. Liese, M.D. Sept. 15, 1974
Hugh McCulloch, M.D. July 25, 1974

Former House Staff

Frank G. Bivings, M.D. April 1973

Robert W. Parvin, M.D., became director of medical education at Burlington County Memorial Hospital, Mount Holly, N.J., after retiring from the Army.

Robert J. Sokol, M.D., Cleveland, is assistant professor of obstetrics and gynecology at Case Western Reserve University School of Medicine, and co-director of the Perinatal Clinical Research Center and acting director of obstetrics at Metropolitan General Hospital.

Don E. Schwartz, M.D., Silver Spring, Md., was appointed assistant clinical professor of ophthalmology. He has published several articles in various journals including the Archives of Ophthalmology on "Diabetes and Corneal Sensitivity."

James Weaver, M.D., Jackson, Miss., accepted an appointment as an associate professor of pathology at the University of Mississippi Medical Center.

Park J. White, M.D., St. Louis, was honored as a poet, physician and philosopher in the May issue of the American Academy of Pediatrics' "News and Comments."

Former House Staff and Former Faculty

Willard Allen, M.D., Baltimore, is professor of obstetrics and gynecology at University of Maryland.

John D. Armstrong, M.D., Salt Lake City, is assistant professor of radiology at the University of Utah Medical Center and chief of radiology at the V.A. Hospital. He is researching membrane oxygenation in adult respiratory distress.

Kenneth M. Calhoun, M.D., has retired to Sun City, Ariz., to pursue his hobbies: photography, history and ghost towns.

Balder P. Gloor, M.D., was elected professor of ophthalmology and chairman of the department at University of Basle, Switzerland.

Owen S. Kantor, M.D., St. Louis, is a director of the Arthritis Clinical Research Center of the National Arthritis Foundation.

Tetsuo Kashiwagi, M.D., Osaka-Fu, Japan, is conducting psychosomatic research of headache, and has had two papers published on this subject. He also is involved in the organized care of the dying patient and in pastoral counseling.

Joseph A. Kopta, M.D., Oklahoma City, has been appointed chairman and professor of orthopaedic surgery at the Health Sciences Center, University of Oklahoma.

Ira J. Malter, M.D., Pomfret Center, Conn., is chief of nuclear medicine at Day Kimball Hospital in Putnam.

Gilbert H. Mayor, M.D., Ann Arbor, Mich., became a fellow in the American College of Physicians in March. He is assistant professor of medicine at University Hospital.

Richard W. McCallum, M.D., Los Angeles, is chief of the gastrointestinal endoscopy unit at Wadsworth Veterans Hospital, and assistant professor of medicine at U.C.L.A. Medical Center.

See Pages 25 and 26.
Doctors: Refresh your acumen at sea!
February 22 - March 1, 1975

At the Second Annual Clinical Conference of the Washington University Medical Center Alumni Association aboard the "floating resort" M/S SKYWARD you will visit the exciting Caribbean ports of Haiti, San Juan, St. Thomas and Puerto Plata. This ultra-modern Norwegian vessel offers luxurious accommodations, gourmet meals, exciting shipboard activities, relaxation, and enjoyment!

Faculty for the Clinical Conference:

2. Elmer B. Brown, M.D. '50, Professor of Medicine and Associate Dean for Continuing Medical Education, "Evaluation of the Patient with a Bleeding Disorder," and "A Primer of Polycythemias."
4. Marvin E. Levin, M.D. '51, Assistant Professor of Clinical Medicine, "Complications in Diabetes," and "The Diabetic and the Diabetic Foot."
5. Virgil Loeb, Jr., M.D. '44, Associate Professor of Clinical Medicine, "Cancer Chemotherapy for the Man in Practice," and "Newer Approaches of Diagnosis and Treatment of Cancer."
6. James M. Stokes, M.D. '48, Associate Professor of Clinical Surgery, and Past-President of the Medical Center Alumni Association, "Medical-Surgical Interfaces in Vascular Disease," and "New Techniques in Cerebrovascular Diseases."
7. Donald H. Finger, M.D. '50, Assistant Professor of Clinical Medicine, and President, Medical Center Alumni Association, program chairman.

Arrangements are being made by Lee Kirkland, president of Group Travel Services of Kansas City.

Don't leave without me. Please send me complete information about that glorious week afloat for the Annual Clinical Conference.

Washington University Medical Center Alumni Association
660 South Euclid Avenue
St. Louis, Missouri 63110

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Calendar of Continuing Medical Education at Washington University School of Medicine

1974

November 21 (Thursday)
"Common Pediatric Problems"
Program Director: J. Neal Middelkamp, M.D.

December 6 (Friday)
"Current Topics in Diabetes"
Program Directors: Charles Kilo, M.D., and Francis Zacharewicz, M.D.

1975

February 6-7 (Thursday and Friday)
"A Short Course in Hematology"
Program Director: Stuart A. Kornfeld, M.D.

February 22 through March 1 (Saturday through Saturday)
"The 1975 Washington University Medical Center Alumni Association Annual Clinical Conference"
7-day Caribbean cruise
Program Directors: Donald H. Finger, M.D., and Elmer B. Brown, M.D.

February 26 through April 30 (Wednesdays)
"Morphologic Hematology for Internists and Pathologists"
Ten 2-hour sessions—7-9 p.m. weekly
Program Director: Virginia Minnich, Sc.D.

March 5 through May 21
Internal Medicine Board Examination Review

March 6-7 (Thursday and Friday)
"Use of the Laboratory in Clinical Practice"
Program Director: Leonard Jarett, M.D.

March 19-20 (Wednesday and Thursday)
"Topics in Gastroenterology"
Program Director: Francis J. Tedesco, M.D.

March 24-26 (Monday through Wednesday)
"Introductory Workshop on Clinical Laboratory Computing: Specification and Evaluation"
Program Director: John W. Lewis, Ph.D.

April 3-4 (Thursday and Friday)
"Evaluation of the Patient with Kidney Disease"
Program Director: Saulo Klahr, M.D.

April 14-15 (Monday and Tuesday)
"Symposium on Obstetrics and Gynecology"
Program Director: George J. L. Wulff, Jr., M.D.

April 23-25 (Wednesday through Friday)
"Diagnosis and Management of Disorders of Skeletal Metabolism"
Program Director: Louis V. Avioli, M.D.

May 1, 2, 3 (Thursday through Saturday)
"Topics in Internal Medicine"
Program Director: Jerry R. Meyers, M.D.

May 14-16 (Monday through Friday)
Alumni Reunion—"Postgraduate Course in Infectious Diseases"
Program Director: Gerold Medoff, M.D.

June 4 (Wednesday)
"Perinatal Medicine"
Program Director: Richard Marshall, M.D.

September 8-9 (Monday and Tuesday)
Orthopedic Surgery Board Examination Review

September 18-20 (Thursday through Saturday)
"Hand Symposium"
Program Director: Paul M. Weeks, M.D.

For additional information, write:
The Office of Continuing Medical Education
Washington University School of Medicine
660 South Euclid Avenue
St. Louis, Missouri 63110

or telephone (314) 367-9673 or 454-3372.
Names Make News

The Carl Vernon Moore Auditorium was filled to capacity for the October 10 dedication ceremonies and for the Second Annual Moore Memorial Lecture, which was delivered by Bert W. O'Malley, M.D., professor and chairman of the Department of Cell Biology at Baylor College of Medicine, who spoke on "Mechanisms of Steroid Hormone Action." Among those present for the program honoring the late world-renowned physician, scientist, teacher, administrator and friend, were his daughter, Mrs. James Frisbie; Samuel B. Guze, M.D., vice chancellor for medical affairs; Mrs. Moore, and David M. Kipnis, M.D., Busch Professor and head of the Department of Medicine, Dr. Moore's successor. The old North Building auditorium was renovated to provide a modern 273-seat facility, the largest in the medical center.

Recognition Received . . .

. . . by Joseph H. Ogura, M.D., Lindburg Professor and head of the Department of Otolaryngology, who was re-appointed to the National Cancer Advisory Board, and by William E. Powers, M.D., professor of radiology and director of the Division of Radiation Oncology of the Mallinckrodt Institute of Radiology, who was appointed to the Board.

. . . by Sidney Goldring, M.D., professor of neurological surgery and co-chairman of the Department of Neurology and Neurosurgical Surgery, who was elected chairman of the American Board of Neurology.

. . . by James A. Felts, M.D., assistant professor of anesthesiology, who was elected speaker of the American Society of Anesthesiologists' House of Delegates.

. . . by David M. Kipnis, M.D., Busch Professor and head of the Department of Medicine, and P. Roy Vagelos, M.D., professor and head of the Department of Biological Chemistry, who were elected members of the Institute of Medicine.

. . . by Louis V. Avioli, M.D., Schoenberg Professor of Medicine, who (1) was appointed to the National Academy of Sciences Research Council; (2) was appointed to the advisory council of the National Aeronautics and Space Administration; (3) spoke at the International Society of Nephrology's Conference on Uremia on "Alterations in the Enzymatically Controlled Collagen Maturation Defects in Bone"; (4) spoke at the International Congress of Paediatrics on "The Relationship of Maternal Vitamin D Metabolism with Fetal and Neonatal Development"; and (5) spoke at the Second International Workshop on Vitamin D on "The Pathogenesis of the Bone Lesion in Experimental Renal Osteodystrophy."

. . . by Allen P. Klippel, M.D., assistant professor of surgery, who was elected to the board of directors of the American College of Emergency Physicians.