Kathleen Anderson Warfel pauses to gaze out a Queeny Tower window, wishing she had more time to break from her clinical duties to stroll through Forest Park. In arranging to take pictures of the women medical students for this issue, each was asked where she would like to be photographed. Most suggested "in the park." The pictures were taken over a five-month period, and repeated attempts were made to get every girl before our cameras. Several ignored us; others claimed they were either too busy or too shy.
You might see one on duty in the clinics asking patients where it hurts, or in a laboratory scrutinizing specimens stained on slides. Another could be presenting to an attending physician at rounds — or holding retractors during surgery.

A patient awaiting treatment glimpsed one scurrying along the hall on the way to class and murmured, “Oh, good Heavens, what’s this world coming to?” The reaction was not too unusual because it seems that “No one expects women to be doctors. If you tell people that you’re in medical school, they say, ‘Oh, you’re going to be a nurse.’”

Despite what the public expects, women are training for health professions other than nursing. And at Washington University School of Medicine where 48 are enrolled, prospective doctors dressed in white skirts rather than pants are not an uncommon sight.

Women compete for admission here on an equal basis with men,” said John C. Herweg, M.D., associate dean and associate professor of pediatrics. “Members of the Admissions Committee evaluate applicants on their merits, and there is no prejudice in regard to sex,” he explained.

It turns out that with this impartial procedure, the school admits a larger percentage of women applicants (about 9.5%) than men (about 6.2%).

The school doesn’t actively recruit women, but 271 applied for admission this year. Dr. Herweg thinks, “If coeds here are happy, and the word gets around that they are welcome, this attracts more applicants.”

“Women have done well here,” he noted. “They are good students and physicians. The faculty and admissions committee are inclined to accept them on their qualifications, irrespective of sex.”

“For the past few years, there have been 10 to 15 girls in each entering class,” said Dr. Herweg.

The coeds are a heterogeneous group. They come from such diverse places as Woodville, Miss., and Valencia, Spain, and received their undergraduate education at small schools like Muhlenberg College and at mammoth ones like University of Maryland. Sixteen of them mix marriage with medical school. Seven are wed to other medical students. Three are doctors’ daughters.

The girls range from petite, demure beauties to tall, striking sophisticates. There are pixie blondes, and long-haired redheads, brunettes — and several who wear wigs when the fancy strikes.

Attire for first and second-year students to lectures and labs varies from the mini to midi to slacks or jeans. Ponchos and scarves accent the garb of some colorful dressers. Ruffled blouses or sporty tweeds, tasteful jewelry, as well as knee-high boots are other fashion favorites.

Somewhat of a transformation occurs with the beginning of the clinical years, when white skirts and jackets (mostly permanent press) and sweaters or crisp blouses become the standard feminine uniform. The white pantsuit also is a new choice.

Although a large number of women entered medical schools during World War II, the figure dropped 50% at the war’s end. Since the 1950s an increase has been noticeable, and in 1969, 9.1% of students enrolled were women — up from the 5.7% of 1960. Even though their number is growing, the
women nevertheless are a minority of the students enrolled here, and their academic and social lives can't help but be a little different from those of the men.

The Outlook staff talked to more than 60% about their thoughts on being women in medicine. Although their profession is predominated by men, it doesn't seem to matter to most of them. They are happy doing what they do and, for the most part, view difficulties that arise as obstacles which must be overcome in order to enter their chosen profession.

"Women are being discouraged culturally from entering medicine by guidance counselors in high school and by pre-med advisors in college. They always say, 'you have a big battle ahead; you are a girl, you know.'"

Although most of the girls do not necessarily think more of their sex should enter medicine, they would like educational opportunities to be more accessible to those who are interested. Although more women are becoming doctors, the Journal of Medical Education reports that they still are relatively unrepresented in medical schools. While women constitute only 9% of entering students, more than 40% of those who receive baccalaureate degrees are female.

To encourage more high school girls to think seriously about a medical career, a senior student suggested that women M.D.s speak at assemblies. Several mentioned that more teens would be encouraged if there were no social stigma about being a woman doctor.

Being a girl hasn't stopped them here, however. The determination apparent in all WUMS coeds could be summed up by a freshman: "I came here because I wanted to go to a top school. I wasn't going to waste my time going anywhere less."

"If you try to compete, you'll have a nervous breakdown. If you don't, the work is still hard. You just do the best to pass, and be happy with that."

Members of the fair sex say they don't vie with the men academically. Although several agree that there is some competition among individuals, they find that virtually none occurs on a male-vs.-female basis.

Any difficulties that exist apparently lie with the men. One girl observed, "Some of the boys have ego problems and get upset if we know something they don't. They ask other guys to explain it to them." In addition, noted a junior, competitiveness is considered more offensive in women than in men.

"A few boys think we have no place in med school," said a freshmen coed. "This makes some women put forth more effort to prove they belong here."

"If you're a girl, everybody knows your name."

Being a member of the "weaker sex" could have advantages, but half of those contacted don't feel that the faculty is more lenient or attentive towards women than men students. They do not equate male chivalry with coddling.

"I never thought I got it easier or tougher," recalled a senior. "I go through doors first and get the seat by the bed, but otherwise I have to ask the same questions and know the same information."

Others replied differently. One admitted, "Yes I think I get attention from professors. Of course, I go with a smile and with a reasonable question, and I naturally get the answers I want."

A senior remembered a few doctors who didn't expect as high performance from women students. "They don't ask us questions, or if they do and we don't know the answer, it's because we're girls," she said. "If you're a boy, you don't know the answer because you're stupid."
"Men are men," said a junior matter-of-factly. "They often are nicer and more patient with girls than with guys. But I don't think the way teachers treat us means anything in the long run."

Nothing else, the coeds do stand out in a crowd. Most of them noted but couldn't explain why. "If there are 10 people in a classroom and eight are called on, three of them will be women."

"Discrimination? Not here."

The girls are almost unanimous in their belief that bias against them does not exist at the medical school.

A junior said, "We're asked if we encounter prejudice in course evaluations at the end of rotations. The school is aware of the possibility of it."

What problems the girls do face could be termed a lack of facilities. "In surgery we use nurses' locker rooms because there are none for women doctors," said a junior. Another reported, "In ob/gyn, there are no call rooms for women to sleep in, so we have to use research rooms."

A senior contrasted the absence of discrimination here with its prevalence elsewhere. "I went to interview at other medical schools, and the people who spoke to me were antagonistic," she related. "I was there admissions committees were composed of old men who didn't believe that women belong in medicine."

There was a single dissenter who declared, "There isn't blatant prejudice here. It's more subtle. This is a male establishment."

"Women's Lib has good ideas, poor mechanics."

The emergence of the women's liberation movement has not strongly affected the attitudes of coeds here. Although they favor job equality, they prefer not to use antagonizing methods to achieve their goals.

One blonde prefers to "use being a woman to my advantage." Another thinks that "to be treated as a man would be incompatible with things."

Several thought it would be practical to organize to decide on reasonable, attainable goals. A freshman would like to see "women's internship and residency periods extended to allow more time for families."

A senior had more immediate ideas. "This year, I realized that none of us here had to deal with pregnancy," she said. "We should survey the medical schools and hospitals to see what their policies are. We also should establish a student chapter of the American Medical Women's Association here."

"A woman is better off in a field where she can set her hours. It's not a matter of one field being easier than another."

Many plan to enter specialties which have a large number of women but do not feel their choices are influenced by sex. Although their selections may coincide with those they've been advised to pursue, most emphasize that decisions were made without outside direction. Careers often mentioned to them as being "good for women" are pediatrics, dermatology, research, obstetrics and gynecology, and radiology.

"A sensible woman will choose a field that will allow her to balance her work with a husband and family, if that's what she wants," said a junior. "But others should not set the limits."

A senior complained, "It makes me very angry. When I mention that I'm going into radiology, I always hear, 'Oh, that's a great field for a girl.'" One freshman remarked, "I've been told not to go into surgery because the hours are so long that I'd never have a family. I've excluded surgery because I'm a klutz, not because I'm a woman."
"I'm marrying a doctor because I love him, not because he's a doctor."

More than 25% of the women are married and combine a demanding medical curriculum and household duties with remarkable ease. They are married to other students as well as to men in nonmedical professions.

One couple has arranged identical clinical rotations so their free time coincides. "We don't talk medicine when we're home. It's not good to dwell on it all the time," said the medical wife. Another student's husband spends a lot of time "on the road." "He comes home on weekends, and then we have fun," she related.

A senior whose spouse is a history graduate student thinks the career difference does not matter in their marriage. "He finds my work fascinating," she said. "He picks up a lot from conversations. When he took our sick dog, he described the symptoms in such technical terms that the veterinarian thought my husband was a medical student."

"It's better to marry a doctor. There are long hours involved, and there are things you can't do as a wife. Another doctor will understand this." "Men are not defined by their professions," said a junior, "but the man a girl marries is very important if she wants to be a successful doctor. He should be wrapped up in his own activities as the woman doctor will be in hers. He must have a generous nature because he will have to give up time with his wife, a clean house, and a 9-to-5 existence."

"In planning our careers, we have to consider one another's needs," noted a senior engaged to a classmate. "We had to look at internships together. It makes it difficult, but we don't want to be apart," she said.
Looking to the future, a junior engaged to a medical student wondered "how we're going to get a full-time sitter when we have children."

Most of the unmarried girls think that they eventually will marry doctors. "If I don't, it will have to be someone who always will be interested in my work because I talk about it all the time," explained a freshman. "The odds are that I will," said another, "but it's no priority as long as he's intelligent."

Some girls spoke of postponing thoughts of matrimony until they receive their degrees. "Med school requires concentration," said one. "It's utmost in my mind now."

"This school is socially constraining." The girls generally agree that medical school obligations put restraints on their social lives. For new students, what time there is for socializing sometimes is not utilized because opportunities for meeting people in an unfamiliar city are limited.

Although several recognized a need for planned social activities for some, three fourths do not think that the medical school should schedule special events. "Our lives are organized for us two-thirds of the day already," complained one coed.

Suggestions for ways to increase social outlets included establishing closer connections with "The Hill." "It might help if it were more accessible," offered a freshman. "The Medical School-Main Campus shuttle bus doesn't run on weekends, and that's our only free time," she explained. "A common lounge for all graduate students would involve us with those on the other campus," a junior said.

The wives of medical students could invite women students to visit their homes and introduce them to their friends, thought a sophomore.

Karen L. Scruggs
Selma, N.C.
B.A., Macalester College

Annette Twitchell
Yakima, Wash.
B.S., Washington State University

Nancy E. Weaver
Billings, Mont.
B.S., Montana State University

Sue Basolo
Muskogee, Okla.
B.S., University of Oklahoma

Janet Blohm
Red Bluff, Calif.
A.B., University of California at Berkeley

Jane Elmblade Brazy
Greeley, Colo.
B.S., University of Colorado

Mary Rose Glode
Rolling Meadows, Ill.
University of Nebraska

Charliene Chang Gottlieb
Morton Grove, Ill.
B.A., Radcliffe College

Charlotte DeCroes Jacobs
Kingsport, Tenn.
B.A., University of Rochester

Eva K. Jedlickova
Brno, Czechoslovakia
University J.E. Purkyn

Jane O. McWilliams
Paducah, Ky.
B.S., Rensselaer Polytechnic Institute

Joan E. Mollman
St. Louis, Mo.
B.A., Northwestern University

Kathleen Brogan Schwarz
Des Moines, Iowa
B.A., Scripps College

Kathleen Anderson Warfel
Indianapolis, Ind.
B.S., Butler University

Maria D. Santa Maria
Valencia, Spain
B.S., College of Idaho

Kathleen Brogan Schwarz
Des Moines, Iowa
B.A., Scripps College

Joan E. Mollman
St. Louis, Mo.
B.A., Northwestern University

Rita Addison Wicks
Cathage, Ind.
B.S., Purdue University

Claudia L. Sainz
Florissant, Mo.
A.B., Washington University

Margaret Kitchell

Roslyn Kaplan

Sue Basolo

Linda Bixby

Rosemary Moroni
A stimulating lecture or film series to broaden the students' horizons beyond medicine was suggested by a junior. She cited a visiting scholar program at State University of New York Downstate Medical Center featuring such eminent people as poet W. H. Auden, philosopher Arnold Toynbee, and composer Aaron Copland.

A few thought that the most helpful thing the school could do would be to schedule more free time. "If students had more time to themselves, they would turn out to be more personable doctors," observed a junior.

"I sing because it makes me happy."

Most coeds manage to use what free time they have to their advantage. While some said they do "nothing special" to occupy leisure moments, most have favorite pastimes.

Their activities reflect the wide variety of interests they have: everything from composing music to blending perfume, from gourmet cooking to candle-making. Karate practice, trips to museums, and refinishing furniture also are "relaxers." Golf, hiking, and canoeing take some outdoors. Reading, sewing, and drawing are their quieter pursuits.

Although the girls occasionally may wish their hectic schedules allowed more time for leisure, not one said she would trade places with women who lead more slowly paced but less interesting lives.

As a senior reflecting on her career said, "Despite all the problems, I'm doing what I want to do, and that is the best of all possible things.

**Faye Cashatt Lewis** was the first woman to receive the M.D. degree from Washington University. This year Dr. Lewis joins her classmates for their 50th reunion, and May 28 she will be on the Alumni Day program speaking on "Our Changing Profession." Since 1921, 241 women have qualified for the medical degree from WUMS. Nine 1971 graduates will join this select group.

**FOURTH-YEAR STUDENTS**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Dixie Anderson Aronberg</td>
<td>Fayetteville, Ark.</td>
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<tr>
<td>Eileen Doyle Brewer</td>
<td>Houston, Tex.</td>
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<tr>
<td>Sandra M. Carnesale</td>
<td>New York, N.Y.</td>
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<tr>
<td>Carla Beechie Cohen</td>
<td>Mexico City, Mexico</td>
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<tr>
<td>Jane Berrier Diedrichsen</td>
<td>Scottsdale, Ariz.</td>
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<tr>
<td>Miriam Ross Freiden</td>
<td>Lakewood, N.J.</td>
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<tr>
<td>Elna T. Phelan</td>
<td>La Mesa, Calif.</td>
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<tr>
<td>Laura Fooner Wester</td>
<td>New York, N.Y.</td>
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<tr>
<td>Myra L. Collins</td>
<td>Marshville, N.C.</td>
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**M.D.-PH.D. CANDIDATE**

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<th>Name</th>
<th>Institution</th>
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<tr>
<td>Miroslav Kolarov</td>
<td>Czech Republic</td>
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**Leslie Blumberg**

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**Charlotte DeCroes Jacobs**

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**Pearl Grimes**

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**Peter and Jane Brazy, left, and Michael and Mimi Glode**
"Academania" is a pun, not a word. This was the official ruling of the English Department of Washington University when I approached them about combining "academic" and "mania", and a pun it is meant to be. Like Humpty-Dumpty, "When I use a word it means just what I choose it to mean neither more nor less". "Academic" means a lot of different things to each of us, and we should be theoretical and not expected to produce a practical result — literary, classical, or liberal rather than technical or professional — it may mean scholarship — it may suggest the establishment which sets the rules for advancement, for productivity, or for defining what scholarship is in medicine. Synonyms of academic are: pedantic, bookish, theoretical, speculative — some of these having acquired not entirely favorable connotations. "Mania," on the other hand, is better understood as excessive enthusiasm, a craze, an infatuation or a passion for something.

I would like to raise this question: Are there areas of excessive enthusiasm, a craze, or an infatuation, in many medical schools with the literary, classical or liberal rather than technical or professional, or with the theoretical, and not expected to produce a practical result? I think there may be. These may be well directed, well intentioned, and dedicated to true scholarship; but they may at the same time be overly rigid, unresponsive to changing needs, isolated from what is happening — sloppy from overindulgence. Probably none of these have reached the clinical stage of an acute psychosis, but certainly severe neuroses are evident. The short half-life of the medical school dean, the transiency of department chairmen, the avulsion of three department chairmen in surgery within a recent two-week period, the acute and chronic phenomenon of town and gown feuds in regions, in states, in communities, in individual medical schools, and even in the same hospital, could be a few of the symptoms of the neurological disorder which I have called "academania". I would like to point out first that I am not referring here to investigation, whether basic or clinical, which is the soul of the university.

Academania
By Arthur E. Baue, M.D.*

*Harry Edison Professor of Surgery, Washington University School of Medicine, and Director, Department of Surgery, The Jewish Hospital of St. Louis. Presented as the 19th Annual Alpha Omega Alpha Lecture at Washington University School of Medicine, May 14, 1970.

Philip Anderson has compared medical education and medical schools with the governments of emerging new nations such as those in Asia, Africa and Latin America. He analogy is interesting in terms of the size of their budgets, the need for ever more money, the varied and difficult tasks, involvement in the life of all citizens, the power of the establishment, tolerance for poor management, ambiguity in communication (the twelve to sixteen different tribal languages of department chairmen at an executive faculty meeting may differ only in magnitude with the over 200 different tribal languages in a country such as Nigeria), idealistic ultimate goals, conservative behavior, a strong loyalty within the group, and the tendency for violent overthrow of the heads of state.

Can some of the manias which will be described affect students and influence their course in ways which are not totally desirable? When speaking with students about their professional careers, I am struck by the desire of many — particularly in surgery, but in other disciplines as well — to practice in a university hospital and perhaps do some teaching. One could say flippantly that this is a "have your cake and eat it, too" approach.

Looking at it more closely, I believe one would conclude, more correctly, that many students of medicine ultimately wish to care for the sick, and they wish to do this in the very best environment. If this is truly a commonly held student attitude and interest, it is not totally consonant with the presently stated needs of the academic community for more full-time faculty, nor is it consonant with many of society's stated needs of more and better patient care in the community. Does this suggest, then, some manias which could influence these attitudes?

I would like to list seven potential or real manias which can be seen here and there today. Some are interrelated:

1. The classic, strict, full-time faculty as defined by the form and/or level of remuneration is the only true answer to the needs of medical education in 1970. — I will refer to this as the "Full-Time" mania.

2. Clinical departments on the whole can be lumped together. — The "Togetherness" mania.

3. Excellent clinician — teachers are borderline members of the club. — The "Anybody Can Teach" mania.

4. Postgraduate education is a professional rather than a university function. — The "We Have Too Much To Do Already" mania.

5. National, regional and local organizational activities are an important and necessary part of academic progression, departmental significance and professorial life. — The "Jet-Set Professor" mania.
6. Graduate schools with a unified purpose, i.e., the health of the nation, cannot or should not be active forces in determining how the health is maintained. — The “Let’s Stay Within The Hallowed Halls” mania.

7. “A Student Mania”. What we need is more and better teaching relevant to the care of the sick, — or “I Didn’t Pay Tuition To Hold A Retractor” mania.

Many others could probably be found and all of us have our own.

I would like to take up those listed in a little more detail. Each could occupy the full hour, but my purpose is to question, not answer — by far the easier course.

1. The “Full-Time” mania. Abraham Flexner’s experiment fifty years ago certainly revolutionized medical education and has resulted in excellence. It must be remembered, however, that a full-time salaried faculty was only one aspect of the Flexner Report. Even more important is the fact that Flexner looked upon this as an experiment. This fact seems to have been lost along the way since often it is officially accepted, without good data, that full-time as defined by form or level of income is the only satisfactory approach for clinical departments. This is brought to our attention at Washington University in reading Donna Munger’s paper, “Robert Brooking and the Flexner Report, a Case Study of the Reorganization of Medical Education.” She states: “At noon on 19 November 1913, Brooking called a special meeting of the Executive Faculty of the Medical School to announce that he was applying to the General Education Board for a grant to place three clinical departments of the Medical School, medicine, surgery and pediatrics, under conditions similar to those at Hopkins. With the exception of the chairman of Surgery, who stated that he felt incapable of conducting his department on purely academic lines... the faculty was heartily in favor of the full-time plan”. Since 1913 this problem has never been satisfactorily resolved. This is not so strange. For centuries surgeons weren’t even allowed in the universities and the English surgeon maintains the title “Mr.” as a constant reminder of his journeyman heritage. In most schools a strict full-time faculty has never been achieved in pure culture, where it alone provides all teaching, patient care and provision for clinical material along with its other responsibilities. Where it has, it has often not led to great productivity by the usual standards. Where there has been the mixed bag, there has been intermittent, if not constant, consternation. James Maloney recently studied the role of economic motivation in the performance of medical school faculty and presented the results in his presidential address to the Society of

University Surgeons. He carried out a detailed analysis of the faculty in several departments of nine medical schools which he considered excellent. His study, he felt, revealed serious defects in the strict full-time system. It was clear that academic physicians, unless economically motivated, would not assume the emotionally and physically exhausting role of providing personal medical care. He pointed out, however, that a high order of genius is required to design a viable equilibrium between the interests of the university and the faculty clinician. The conflict between intellectual and economic motivation, he said, establishes the critical lines of tension in academic medicine, with both influences inherently valuable. As stated by John Gardner in his study of the lines of tension in society, “This tension will never be resolved and never should be resolved. Failure to accept this reality has led to a lot of nervous indigestion and unnecessary commotion.”

Excellent clinical departments will always have to maintain and nurture the image that the purpose of the whole exercise is the care of the sick and that this is, indeed, a noble task. Doctors who exemplify this must be integral and significant members of clinical departments. The question which must be asked is: Has rigidity of full-time systems drawn the line too sharply between those who practice and those who preach? Speaking only of surgery, the greatest progress has come in those departments with enlightened leaders who have reasonable control of the environment regardless of the system. No one, however, is enlightened enough to lead without the provision of a cohesive environment or department.

When speaking with students about their professional careers, I am struck by the desire of many... to practice in a university hospital and perhaps do some teaching.

2. Clinical departments on the whole can be lumped together. Needs and problems of clinical departments differ greatly at any one time and also they change markedly from time to time. With advances in medicine the direction, emphasis and needs of departments will change. Divisions may become departments and perhaps sometimes departments should become divisions. Realities rather than empires should be the first consideration. Here again the question must be asked: Is complete departmental uniformity deleterious to growth, development, and full and significant participation in the educational job at hand? Maloney again found impressive data to support the differences in motivation and work habits of internists, surgeons and pediatricians.

Francis Moore summed it up for surgery
saying: "The surgical investigator must be a bridgebuilder, channeling knowledge from biologic science to the patient's bedside and back again. He traces his origin from both ends of the bridge. He is thus a bastard, and is called this by everybody. Those at one end of the bridge say that he is not a very good scientist, and those at the other end say he does not spend enough time in the operating room."}

If these differences are recognized, and many are very evident, individualizing departmental needs should not threaten other departments.

3. Clinician — Teachers are borderline members of the club. Eugene Stead in his article, "The Limitations of Teaching," stated that: "Teaching should be the price of admission to the club and not something to be paid for over the period he belongs to the faculty." He feels that appointments for teaching ability alone lead to a dull shop. Even Stead agrees, however, that medical schools should appoint faculty for their skill in patient care. Would that all of us could be imaginative, innovative, articulate, organized clinicians, investigators, and leaders, but such is not the case. The faculty requires all and each. The strength of the clinical faculty rests in good part upon its clinician teachers who may begin as clinical investigators or imaginative clinicians. Some are called voluntary staff, or attending staff, or part-time, or geographic full-time, or clinical professors. Isn't it time they were allowed full membership in the club as part of the spectrum of needs in clinical departments? In this, the university can and must insist upon its due in commitment, in time and in some, if not complete, economic relationship. This could eliminate classes of citizenship and promote a unified faculty in which each did his bit. Many members of the clinical faculty should be provided with a protected environment in which to pursue new knowledge. Is it really true, on the other hand, that the press of clinical activities has deprived the world of a significant investigator? Probably not very often. I was reminded very quickly of certain distinctions shortly after coming to St. Louis two years ago when I met a colleague in the corridors of the hospital late in the evening while I was seeing a patient. He said, "What are you doing here? You're full-time!" I was taken aback initially, but managed to respond that I felt that "full-time actually meant all the time."

4. Postgraduate education is a professional rather than a university function. The university medical school's function has been sharply limited to undergraduate education. Postgraduate education for specialty careers in medicine has been considered a hospital function with its course determined by professional societies and specialty boards. It is now increasingly apparent that this is becoming a university function, whether by our own conscious or unconscious efforts or by default. Where fourth-year students throughout the country will intern in July indicates a trend that soon only university-related hospitals will have interns, and residencies will soon follow. This is supported by the desire of urban hospitals to acquire university affiliation as rapidly as possible. They may look on this as necessary in order to have house staff to provide for patient care around the clock. This reason alone will not be acceptable nor will it be successful. Many such institutions, however, will be willing to develop excellent teaching services and can provide for the university resources which would not ordinarily be available, such as support of clinical faculty, teaching cases, clinical investigation, and the provision for increased medical manpower. There has been a tendency in various segments of the academic establishment to draw back into the university hospital enclave. After all, it is said, there are enough patients for the students to see, the environment is more controllable, and, what do we need all those problems for? As universities accept the fact that postgraduate education is a university function, which they must, the enclave becomes untenable. Besides, a little friendly competition for excellence in teaching services may be a healthy thing.

In most schools, a strict full-time faculty has never been achieved in pure culture, where it alone provides all teaching, patient care and provision for clinical material along with its other responsibilities.

5. The "Jet-Set Professor" mania. Originally I considered entitling this segment "From Trains to Propeller Airplanes to the Boeing 707 — An Academic Transition". Social evolution and technology has produced the organization man in academic medicine, just as it has in all other segments of society. The trend shows no sign of letting up and has, I think, become alarming. Northcote Parkinson might have said, "Organizations and societies multiply to fill the time available for meetings and to provide the opportunity for holding office for those who need this form of gratification". One might also invoke other principles of human behavior such as those described by Laurence Peter as "The Peter Principle" and by Townsend in "Up the Organization", where he paraphrased Chapter 1 of Genesis, "And God created the Organization and gave It dominion over man." We might long for the day when an organization decides that it has fulfilled its mission and disbands. They will generally, however, follow the course of the various health-care fund-raising organizations, which when they lose one disease, simply find another. The fact that this mania is influencing
the course of recent medical graduates is described by Jacques Barzun who said, "Thousands of young men are at work on little papers: thousands more are racking their brains to think of an experiment or study. Most of them worry more about the acceptability of the subject in academic eyes than about their chances of doing and saying something useful,".12

Dickinson Richards has described our own problem very well when he says, "For our students, we have thrown the lecture into outer darkness, as an outworn remnant of an earlier pedagogic era, but for ourselves, we teachers continue to lecture to each other, almost incessantly. We dash all around the country, indeed halfway around the world, winter and summer, spring and fall, leaving our appointed tasks — such as teaching students — and when we get there, what do we do? We sit down and listen to lectures, or, worse still, we stand up and give them".13

So long as investigation and/or bibliography is the principle or sole measure of academic citizenship and progression the skies will be filled with academic physicians running hither and thither, to all the meetings which are necessary to get in all the papers which are necessary to maintain all of the faculty which is necessary for medical schools which then become increasingly necessary in larger numbers in order to have a quorum minding the store at all times. Cross-fertilization is a healthy intellectual activity, but nowhere in nature is there continuous ovulation which is receptive to this.

I cannot continue without one comment about exclusivity, or the lack thereof, as a major factor in organizational multiplication. Some are too exclusive and spawn a more broadly-based club. Some are maintained for older men, thus requiring a young men's club. Some become too large to be effective and require small interest groups to get at the nitty-gritty of things. Ultimately, the academic physician often finds that he belongs to all of them. To the young physician, making it on the national scene can become an exercise in itself.

6. The "Let's Stay Within the Hallowed Halls" mania. If there is presently a crisis in health care in this country it is the result of the inevitable realization by society that health is a right. If there have been any failures which have led to this, it has been the lack of a cohesive, integrated approach to the health of the nation. A democracy moves slowly — it does not assure the best of everything, but it does provide for progress. Progress now requires leadership and this can best come from medical schools. Organized medicine must be involved, but it does not always recognize the problems, nor can it always move effectively. If medical schools are responsible for undergraduate medical education and the size and nature of its output, for postgraduate education, and for health care in core urban hospitals, the position of leadership in providing for society's needs is crystal clear and must be assumed. The leadership which must be exerted is in systems and program development. This doesn't mean providing personal medical care itself. Chancellor Eliot in his March, 1968, Quarterly Message entitled, "What a University Is Not" said, "The university is not a service station or supermarket." "It is not an unwordly enclave . . . Its scholarly concerns embrace the social, economic and material problems of today's world . . .".14 The mechanism for university action in this leadership could well be through the Association of American Medical Colleges.

The concern of the man in private practice in the community, and of organized medicine, about such a role for medical schools of which they are products, may not be so great if they and we could better understand some of their and our manias. The practitioner of medicine in the community often suffers from a mirror-image disease which might best be called "antipathycademia". The presenting complaint heard from five to ten years after entering practice is, "You in the medical schools don't understand our problems and aren't doing anything to solve them". Unfortunately, the two-day treatment programs each year called Alumni Day often actually intensity the symptoms of what may be an auto-immune disease.

A political solution to health care is on the way which requires leadership for better health rather than just preservation of classic approaches.

Where fourth-year students throughout the country will intern this July indicates a trend that soon only university related hospitals will have interns, and residencies will soon follow.

7. The "I Didn't Pay Tuition To Hold A Retractor" mania. The matter of relevance of present teaching in medical schools to the care of the sick cannot help but remind one of Sidney Burwell's comments to a graduating class at Harvard Medical School. He said, "Half of what you are taught as medical students will in ten years have been shown to be wrong, and the trouble is, none of your teachers knows which half".16 Granted that a student should insist upon obtaining the best education possible. There is total disagreement, however, as to how this can best be obtained. It might generally be thought that good schools with a good faculty, devoted to teaching in relevant fashion, produce good graduates who do good things.
If one looks for data to identify or support the important ingredients of this process, it is lacking. The available evidence actually supports the hypothesis that good schools attract good students who then rather automatically become good graduates. The most important aspect, then, of an excellent institution seems to be in attracting excellent input. The influence of institutional quality whether good, bad, or indifferent, seems to be less important.

One cannot escape the conclusion that the primary purpose of the faculty is to provide challenges for the student without getting in his way or impeding his progress and thus allow the natural development of motivated individuals.

Studying colleges, Alexander Astin\(^\text{6}\) found that traditional indices of institutional quality do not appear to contribute to student achievement. He found, further, that differences in student achievement during the senior year were much more highly dependent upon variation in student characteristics that existed before entrance into college than upon the characteristics of the undergraduate college attended. Unfortunately, no such information is available about medical schools, but one might seriously question whether or not the output of a particular medical school is not primarily dependent upon the excellence of input. This has been studied for internship by Edith LeVit at the National Board of Medical Examiners.\(^\text{11}\) She found that interns in university-affiliated hospitals are of a significantly higher caliber than those going to hospitals having no medical school affiliation. However, following the internship when this difference in input is adjusted, there is no significant difference in output between affiliated and non-affiliated hospitals with respect to competence of the interns at the end of the internship. Thus, the quality of the institution seems to be less important than the quality of the student entering it and its programs. The same was true for straight internship as related to rotating internships. In the university-affiliated hospitals, the only characteristic that appeared to have any effect upon both input and output was the per cent of interns filled. This type of information, although incomplete, should give us some reason for pause when we begin to question relevance of curriculum, teaching faculty, and the program offered. Given a critical mass of faculty with a satisfactory environment and a prestigious position in the academic world, one would expect that an excellent student body would be selected and that this excellent student body would graduate with a good medical education and would represent itself well in its professional careers. How much the excellent or average institution influences input to output remains speculative. One cannot escape the conclusion that the primary purpose of the faculty is to provide challenges and opportunities for the student without getting in his way or impeding his progress and thus allow the natural development of motivated individuals.

The real privilege of giving an Alpha Omega Alpha lecture is the opportunity to express a few thoughts unencumbered by data — and such this has been. I have talked about academic medicine because you, as students and members of AOA, will soon become leaders in it. The academic establishment in medicine is viable, generally healthy, and is fulfilling its mission. It should be able to fulfill this mission even better and meet new challenges presented by society's needs if there were no manias about its role and its organization. The student of medicine will generally follow or react against what he sees rather than what he is told. I have described some of our manias. What will yours be?

References

Appointment of a new professor and head of the Department of Radiology at Washington University School of Medicine was announced by Chancellor Thomas H. Eliot.

Ronald G. Evens, M.D. '64, assistant professor of radiology and James Picker Foundation advanced fellow in academic radiology, assumes the administrative position this summer. He also will become director of the Edward Mallinckrodt Institute of Radiology.

He succeeds Juan M. Taveras, M.D., who is leaving to head the Department of Radiology at Massachusetts General Hospital and Harvard Medical School in Boston, Mass.

In announcing the appointment, Chancellor Eliot said, "At 31, Dr. Evens is one of the youngest department chairmen the Medical School has appointed. His noteworthy contributions to medical research already are numerous. His participation in community and specialty-related activities have brought favorable attention to him and the University. We know he will continue the tradition of excellence of both the Department and the Institute."

Dr. Evens received the A.B. degree in 1961 and the M.D. degree in 1964 from Washington University. He did his internship and residency at Barnes Hospital and Mallinckrodt Institute of Radiology, and was a research associate at the National Heart Institute in Bethesda, Md.

In 1970 he was elected vice president of the Washington University Medical School and Associated Hospitals. He also is a consultant to the Bi-State Regional Medical Program, a member of the executive council of the Washington University Medical Center Alumni Association, a board member of the St. Louis Neighborhood Comprehensive Health Center, and a member of the U.S. Pharmacopeia panel on radiologic contrast materials and other diagnostic agents.

A member of Phi Beta Kappa, scholastic fraternity, and Alpha Omega Alpha, medical honorary society, Dr. Evens also is active in the American College of Radiology, the Association of American Medical Colleges, and the Society of Nuclear Medicine.

Alumnus Appointed Head of Radiology

ST. LOUIS, MISSOURI
Barnes Hospital 63110
Blanke, Thomas J. — Surgery
Clamon, Gerald H. — Medicine
Corder, Clinton N. — Medicine
Harris, John T. — Surgery
Merritt, Joe P. — Obstetrics and Gynecology
Noller, David W. — Surgery
Rouse, Ernest T. — Medicine
Spencer, Dennis D. — Surgery
Stenson, William F. — Medicine
Summers, William K. — Medicine

St. Louis Children’s Hospital 63110
Bloom, Marshall E. — Pediatrics
Brewer, Eileen D. — Pediatrics
Clancy, Thomas G. — Pediatrics
Goldstein, Paul D. — Pediatrics
Schreiner, Richard L. — Pediatrics
Shaprio, Larry J. — Pediatrics

Jewish Hospital of St. Louis 63110
Eaglebrecht, Russell E. — Medicine
Rose, Edward P. — Medicine

Washington University School of Medicine 63110
Stephenson, Gary S. — Ophthalmology
Research Fellow

ARKANSAS
LITTLE ROCK
University Hospital 72201
Zimmerman, George J. — Surgery

CALIFORNIA
LOS ANGELES
Cedars Sinai Medical Center 90029
Weiner, Alan B. — Rotating
Wellauer, Robert E. — Rotating

Los Angeles County-U.S.C. Medical Center 90033
Berger, Jack E. — Pediatrics
Quillin, William H. — Obstetrics and Gynecology

University of California Hospital 90024
Cassell, Sidney L. I. — Medicine
Snelid, David S. — Medicine

TORRANCE
Los Angeles County Harbor General Hospital 90509
Klipatrik, William R. — Rotating

SAN DIEGO
Mercy Hospital and Medical Center 92103
Weisenberger, Anthony J. — Rotating

School’s Completed, but the Training Continues

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This article, which appeared Christmas Day in the St. Louis Globe-Democrat, was written by Dorothy A. Brockhoff, a writer with the University's office of information. This and two other articles submitted by Miss Brockhoff were awarded first prize in the technical and medical category of a writing contest sponsored by the Missouri Press Women and are now eligible for a national prize by the National Federation of Press Women. Last year she received a national first prize for a story in the Washington University Magazine. Miss Brockhoff is a Phi Beta Kappa graduate of Washington University and earned a master's degree in public law and government at Columbia University.

In some places the gulf separating the medical researcher from the practicing physician is as wide as the generation gap.

But not at the Clinical Research Center of Washington University's Medical School where the M.D. and Ph.D. investigators combine their expertise and efforts to produce results which are sometimes both dramatic and heartwarming.

That's what a rural Missouri couple with an ailing baby daughter discovered some months ago when they brought her to the center. She was saved from brain damage and possible death, which is why this Christmas they have so much cause for rejoicing.

The story began in May when 8-month-old Amy Windeknecht, daughter of Mr. and Mrs. Galen S. Windeknecht of Oak Ridge, near Cape Girardeau, was referred to St. Louis Children's Hospital by her pediatrician, Dr. James Kinder of Cape Girardeau. He felt that she might be seriously ill because for the second time since her birth she had just experienced a severe attack of lactic acidosis accompanied by mild hypoglycemia.

In everyday terminology, Amy's system was abnormally acid with a low blood sugar content.

The first such episode occurred only two days after she was born. At the time, she was being fed a formula, a factor which was later

**Her Present is Her Health**

By Dorothy A. Brockhoff
to prove significant, but which nobody suspected might be at the root of the trouble then.

Little Amy responded promptly to intravenous feeding, her symptoms disappeared, and she went home — presumably a normal, healthy baby. For more than six months, she thrived on her mother's milk and grew plump and pretty.

But when Amy was weaned, she began to have breathing problems. Finally, one morning, Mrs. Windeknecht awoke to find her baby very sick and in a coma-like state.

Once again she responded to intravenous feeding, but it was at this point that her Cape Girardeau physician suspected that she had an unusual illness and recommended that she be taken to the Washington University Medical Center for examination.

Because of her history of periods of hypoglycemia (a metabolism-related disease), she was placed in the Children's Hospital feeding, but it was at this point that her Cape Girardeau physician suspected that she had an unusual illness and recommended that she be taken to the Washington University Medical Center for examination.

This sympton coupled with her history of hypoglycemia and lactic acidosis suggested to them that she might have an enzyme defect. Enzymes have become a household word thanks to TV detergent commercials, but still comparatively few people know that in the human body they serve as catalysts which enable the tissues to carry out a large number of life-sustaining chemical reactions.

In consultation with Dr. David M. Kipnis, professor of medicine and director of the Clinical Research Center, they speculated that perhaps Amy might have one of the glycogen storage diseases.

Glycogen is a technical term for animal starch stored in the liver, and can, through enzymatic action, be broken down into glucose or blood sugar when the body needs energy.

For this important discovery, Doctors Carl and the late Gerty Cori of the Washington University Medical School won the Nobel Prize in 1947. It was also this husband-wife team who first showed that a certain type of glycogen storage disease can be caused by a missing enzyme, glucose 6-phosphatase. This discovery is regarded as a milestone which led to the identification of a great many hitherto undetected metabolic diseases.

The Cori contribution is pertinent to the Windeknecht case for several fundamental reasons. In the first place, the Washington University specialists speculated that Amy might be lacking in glucose 6-phosphatase and possibly be suffering from what is known as Von Gierke's disease.

Also directly connected with the Cori research was another distinguished scientist at the Washington University School of Medicine, Dr. Barbara Brown, research associate professor of biochemistry. Because of her vast experience in this area, she now joined the team of Pagliara, Keating and Kipnis struggling to identify Amy Windeknecht's problem.

Another woman who became an integral part of this investigative group was a Ph.D. scientist, Dr. Irene Karl, research assistant professor in the Washington University School of Medicine, and a key member of the Clinical Research Center.

Pagliara set up a number of metabolic studies which were carried out with Karl, who is a specialist in microtechniques.

Through study and investigation, they established that Amy did not have Von Gierke's disease nor any of the other glycogen storage diseases. They also considered and discarded the theory by careful testing that she suffered from fructose (a type of sugar) intolerance, a rather rare disease.

In the midst of the testing, Amy, who had been thriving in the center, suddenly experienced another lactic acidosis attack accompanied by hypoglycemia.

What had triggered this unexpected development? The team of doctors treating Amy noted that she became suddenly ill immediately after eating a breakfast of egg yolk, cereal, two glasses of orange juice and a fruit dessert.

Was there a connection between the food and her dramatic disturbance? The team...
suspected that there was. They noted that the fruit she had eaten is rich in fructose, and the egg yolk is rich in glycerol, and they theorized that these two food substances might be the key to the puzzle.

For one of the major pathways carrying these food substances up through the liver has a junction along the way where fructose and glycerol have to be acted upon by a key enzyme, fructose-1,6-diphosphatase, if they are ultimately to be converted into starch or the sugar (glucose) that the body and brain need.

If that enzyme is missing, then a roadblock is created which cuts off the upward flow and causes the creation of an abnormal amount of lactic acid. This would explain Amy's acidosis.

In the midst of this speculation, word reached the team that two Philadelphia doctors had reported a similar case there. These physicians announced their findings at a meeting in St. Louis in June at the very time the W.U. team was working on the same problem. Pagliara could hardly contain his excitement when he heard the Philadelphia report by Doctors Lester Baker and Albert L. Winegard, for their announcement was the first such case ever reported of the missing enzyme in the annals of medicine.

Although many tests remained to be done, Pagliara felt confident enough of the outcome to prophesy that Amy Windeknecht would become the second such patient in all of medical history to be identified as not having this essential enzyme.

Of this strange coincidence, Kipnis said, "When scientific information reaches a certain stage of development, it is amazing how frequently similar observations are made within a comparatively short time by skilled investigators in various laboratories focusing on a problem."

It was proved conclusively that Amy truly lacked the vital enzyme. As part of the tests, a liver biopsy was performed by Dr. Jessie Ternberg, associate professor of surgery. Analysis of this bit of liver, no larger than half a fingernail, was made by Dr. Brown, who is nationally renowned for her skill in this field. Her findings reaffirmed the clinical tests perfected and carried out by Pagliara and Karl. The latter doctor's techniques were so skillful that during Amy's entire confinement in the hospital it was necessary to extract only a small amount of blood from her for these tests.

Once Amy's trouble was recognized, the doctors enlisted the help of Children's Hospital dietician, Mrs. Barbara Till, in formulating a diet which would satisfy Amy's requirements for normal growth and development, be palatable, and at the same time devoid of those foods which could conceivably cause her problems.

It was not an easy task, for not only could she not tolerate fructose, but she also could not handle fats and excessive amounts of protein. Such a diet was devised, however, and as long as Amy stays on it, the doctors anticipate no further difficulties.

They regard it as a small miracle that she was breast-fed for so long because her mother's milk was able to be assimilated via a separate pathway in the liver which bypassed the enzyme roadblock. Hence, she experienced no problems nor brain damage during that period.

Now that Amy's trouble has been identified, the Washington University team is certain that other such cases involving this missing enzyme will turn up with increasing frequency. These will be much easier to pinpoint, however, because during the course of Amy's stay in the hospital, new types of infusion tests and analytical techniques were developed which make it possible to detect and identify specific defects by injecting different kinds of materials intravenously and measuring the effects on blood sugar and other chemical substances.

These new methods should prove very useful for the Clinical Research Center is a nationally recognized unit for the treatment of all types of metabolic disease ranging from diabetes to ketotic hypoglycemia, an illness of major interest to Pagliara who will shortly announce new findings about its cause.

The latter problem is rather common among young children as is the incidence of low blood sugar in premature infants.

Treatment for such children at the center would be terribly expensive if parents had to pay for it, but fortunately the unit is financed by a grant from the National Institutes of Health. The Windeknechts, for example, were not charged a penny for all the service provided to Amy.

With government funds being cut back, however, Kipnis is concerned about the future of the center and is hopeful that private donors will provide the funds necessary for its continued operation.

Substantial support is required, for although no one can put a price tag on Amy's precious life, it is estimated that thousands of dollars of time and effort were expended on uncovering her trouble. The solution to her problem may mean the difference between life and death for many other children.

(Editor's note: Amy is progressing very favorably, the Clinical Research Center reported just before we went to press.)
On September 8, 1970, 110 eager young men and women started their medical school careers in the Washington University School of Medicine. They had been carefully selected from 2,056 applicants.

On September 7, 1971, another 110 students will begin their freshman studies in the beautiful new McDonnell Medical Sciences Building. This group of physicians-to-be has been chosen from the 3,151 who applied.

How would you make these selections if you had this interesting, challenging and, at times, frustrating assignment? If you sat in your office and interviewed and evaluated 30 applicants a day (an impossible task in itself) and selected one young man or woman each day, it would take you nearly six months to complete the job (we would mercifully allow you week-ends and holidays off). Fortunately, one person is not saddled with either the burden or the responsibility of this onerous task.

For many years medical student selection in this school has been made by the Committee on Admissions. The 14 faculty members on this committee represent both pre-clinical and clinical departments, and include both full-time and part-time staff members who bring many diverse talents and viewpoints. Dean M. Kenton King has characterized this group as "the hardest working committee in the school." I believe that you will agree with this characterization when you read about their activities. The charge to the committee is to recruit and enroll young men and women who possess superior intellectual ability and the desirable personal characteristics for a productive career in the ever-broadening field of medicine.

This year the School of Medicine was one of 56 of the 102 U.S. schools participating in the Centralized Application Service of the Association of American Medical Colleges (AMCAS). The AMCAS program enables the student to fill out one application form and have it sent to the participating schools of his choice. The charge for application to six schools is $25. Copies of the student's application form and college transcript are

"The Hardest Working Committee in the School"

By John C. Herweg, M.D.
Students applying to medical schools not participating in the AMCAS program, send in individual applications, as in years prior to the development of AMCAS. It is hoped that eventually all U.S. medical schools will participate in this centralized application service, since it greatly reduces the student's task of completing applications, and provides periodic computerized class status data to participating medical schools.

Upon receipt of the student's application and transcript, he is requested to provide the Committee with a composite letter of recommendation from his school's premedical advisory committee, or individual letters of reference from a professor of chemistry, biology, mathematics or physics, and from a non-science teacher. Upon receipt of these supporting documents, each completed application is reviewed and individually evaluated and rated by four members of the Committee on Admissions. A 1-to-4 rating scale is utilized by Committee members to quantify their evaluation of the applicant's qualifications.

Four major factors are considered in the selection process: 1) academic record; 2) Medical College Admission Test scores; 3) letters of recommendation; 4) the personal interview. Of these four, the best predictor of success in medical school is the student's undergraduate academic record. This is a three-year longitudinal evaluation of the student's performance made by 20 or more professors and instructors. With the full realization that a student's grades are not always a clear reflection of his performance, let alone his capabilities, they are nonetheless the most reliable single indication of future academic success.

The Medical College Admission Test is a standardized examination taken by all applicants. It tests four areas: verbal, quantitative, general information and science. Science and quantitative test scores correlate fairly well with academic success in the basic medical science coursework in medical school. In most instances these scores correlate well with the student's undergraduate academic record. Major emphasis is not placed upon these test results, nor are they used in a determinative way in the selection process.

Letters of recommendation are often of considerable help in appraising both the academic capabilities and the personal qualities of the applicant. We are always pleased to hear from alumni who write in support of one of our applicants, since often they have had long-term and meaningful relations with these young students.

Every student who is selected for admission to the school has been interviewed. Many visit the school during the summer following the junior year in college, or the early winter months of their senior year. They talk with committee members, are taken on a tour of the school and medical center by a medical student, they attend classes, talk with students, and often have lunch with a faculty member not on the Committee on Admissions.

In addition, every fall, each member of the committee spends one or two weeks interviewing scores of applicants in various parts of the country. The committee member visits campuses, talks with premedical advisors, and interviews applicants and other premedical students who desire information about the School of Medicine. In the personal interview one attempts to appraise the student's motivation for the study of medicine, to determine whether he possesses the personal characteristics to deal effectively and compassionately with people, and to learn something of his interests and accomplishments outside of his academic coursework.

With all of the above information and data in hand, the 14-member committee as a whole begins the selection process. It meets weekly, and sends out acceptances from early October until the freshman class is filled in late spring. By the time the class is filled, the Committee has usually chosen two or more applicants for every one of our 110 first year positions. Most whom we accept also have been selected for admission to one or more schools to which they have applied. For a wide range of personal and financial reasons some will enroll here, and others will go elsewhere.

In the past 10 years the number of applicants here has more than tripled. We believe this reflects both the national increase of applicants, and the very high esteem that students and premedical advisors have for Washington University School of Medicine. Although firm data is not yet at hand, it appears that this year more than 27,000 applied for the approximately 12,000 first year class positions in all the U.S. medical schools.
Many of the young men and women who are not accepted by any school are obviously qualified to study medicine. Some of these unsuccessful applicants will try again after additional college or graduate school work; others will go to medical school in foreign countries; some will enter other health profession training programs, but unfortunately a considerable number will be lost from careers in the health fields. This seems particularly tragic at a time when it is estimated that 50,000 additional physicians are needed in this country. Despite the fact that new medical schools are being formed, and present institutions are enlarging classes, there will be, for a number of years, a wide discrepancy between the number of students who are accepted to study medicine and the much larger number of qualified applicants.

Washington University is attempting to do its part in increasing the number of physician graduates. While in 1967 there were 325 students in the four classes in the School of Medicine, this September there will be approximately 425 medical students. The 92 in the Class of 1971 comprise the largest graduating class in more than a decade.

For the past several years the Committee on Admissions has had an active minority recruitment program, particularly for Black students. At the present time, there are only nine Black students in the School of Medicine, but 10 of our incoming freshman class will be Black. These are a group of bright and extremely well-motivated young people, and it is anticipated that they will do well here. They were selected from well over 100 Black applicants. Just two years ago there were only 21 Black applicants to the School of Medicine.

The Committee on Admissions pays particular attention to the applicants who are the sons and daughters of alumni of the School of Medicine, or of our present faculty and staff members, and to the applicants from the University’s undergraduate school. Slight, but definite, preference is given these applicants, and those who are accepted for admission comprise an appreciable segment of each incoming class. Not all of the applicants in these groups can be offered an acceptance to the School of Medicine, and the Committee on Admissions sincerely hopes that they are selected by one of the other schools of medicine to which they have applied.

A rejection by the Committee on Admissions certainly does not imply that the student is not qualified to study medicine in this school. It merely indicates that other applicants have been evaluated a bit more favorably. Our committee appreciates the continuing efforts of our alumni to refer outstanding applicants to the school and to assist us in their evaluation. We are indeed pleased to receive letters of recommendation from alumni in support of these applicants. In turn, the Committee on Admissions pledges that it will continue its efforts to select outstanding students who will benefit most from the educational opportunities afforded by the School of Medicine, and who will become physicians of whom we all can be proud.

**ADMISSIONS COMMITTEE**

John C. Herweg, M.D., Chairman
Associate Professor of Pediatrics and Associate Dean

John M. Anderson, M.D.
Instructor in Clinical Psychiatry

Mordecai Blaustein, M.D.
Associate Professor of Physiology and Biophysics

John A. Collins, M.D.
Associate Professor of Surgery and Markle Scholar in Academic Medicine

Luis Glaser, Ph.D.
Professor of Biological Chemistry

Duane C. Hellam, M.D.
Assistant Professor of Medicine and of Physiology and Biophysics

Rex L. Jamison, M.D.
Assistant Professor of Medicine and Markle Scholar in Medicine and Assistant Professor of Physiology and Biophysics

George H. Klinkerfuss, M.D.
Associate Professor of Neurology

Phillip A. Majerus, M.D.
Associate Professor of Medicine and Assistant Professor of Biological Chemistry

George E. Murphy, M.D.
Professor of Psychiatry

John L. Schultz, Ed.S.C.
Assistant Dean for Records and Admissions

Jessie L. Ternberg, M.D.
Associate Professor of Surgery

H. Phillip Venable, M.D.
Instructor in Clinical Ophthalmology

Robert A. Woodruff, Jr., M.D.
Associate Professor of Psychiatry
Coral reef? No, trabecular meshwork regions of human eye. 300 X. Morton E. Smith, M.D., Ophthalmology Department.

Jack Frost painting? No, papillary muscle of rat heart. 61 X. Edward H. Finke, Pathology Department.

Italian gastronomical delight? No, fourth ventricle in rat brain. 2900 X. Edward H. Finke, Pathology Department.

Artichoke heart? No, human stratum corneum in an area where it forms the lining of the pilary canal. 1300 X. David N. Menton, Ph.D., Anatomy Department.
To the untrained eyes, this might just be two pages of pretty pictures. But to researchers these are something far better.

Recordings of images produced by the scanning electron microscope give a better view than is possible with light microscopy or transmission electron microscopy — in effect, a third dimension.

These photomicrographs were taken by investigators from several departments using the Medical School's only instrument, located in the Pathology Department.

It's Pathology, but is it Art?
I had finished my freshman year at Washington University School of Medicine when my husband was offered the job of regional manager for Monsanto Company's agricultural chemicals program in northern South America and the Caribbean, which I accepted with pleasure. On July 8, 1968, we found ourselves in the hot steamy airport of Maiquetia, on the coast of Venezuela. Here we were met by new friends who took us up through the coastal mountains to Caracas — our home for the next 2½ years.

Before coming, we learned that I could continue my studies at the Universidad Central de Venezuela—Facultad de Medicina. While we were assured there would be no problems, it was 20 months of unbelievable red tape later that I actually was admitted.

Our first three months were spent finding and furnishing our apartment, learning Spanish, and exploring. From the outset we had decided to live in a Venezuelan neighborhood, make Venezuelan friends, and not join in the "American colony." Many Americans there live almost a St. Louisan existence and even talk about the oddities of the "foreigners" (the Venezuelans). This was not for us.

But, as we discovered, when you can’t speak the language, you can’t very well make close native friends, and if you cut yourself off from Americans, you can be a bit lonely. We were at first, I admit it.

I hope I can remember the feeling when I meet visitors to my country. Being a foreigner is at once gratifying, exhilarating and distressing. You never can know until you are one.

Fritz (my husband) started traveling a great deal to Peru, Ecuador, Columbia, the Venezuelan interior and the Caribbean, and was excited to be a part of introducing new agricultural technology to these areas.

I started medical school October 15, although I still hadn’t been officially accepted. In St. Louis I had studied everything the Venezuelan medical students do their first two years, so I was assigned to "El Tercer Año."

Venezuelan “Elective” Delays Graduation

By Kathy Schwarz
Pathophysiology, parasitology, preventive and social medicine, semiology (study of signs and symptoms) and psychiatry were the curriculum.

My classmates were all about 19 or 20 years old. They are required to graduate from "bachillerato" (the equivalent of high school plus one or two years of college) to be admitted to medical school. Although internships and residencies are beginning to be available, many start their own practices upon completion of the six years of medical school.

My memories of "the third year" are many, but I'll mention only three. Number one is my pathophysiology course. The 10 professors instructing each had a small practice, but dedicated most of their energies toward teaching and research. In a country where basic medical needs are so pressing, research funds are very limited, but these men were all determined to carry out "investigaciones" and even managed to publish occasionally in American medical journals. Even with far less formal training than their "norte americano" counterparts, they were turning out good work.

One ingenious experiment involved measuring the daily amount of iron consumed by a hookworm. One Necator americanus was placed in a small two-chambered tank, with Fe tagged blood on his head side and the tail in the other. In 24 hours, Fe consumption was 0.03 mg. Since it is not uncommon to find 1,000 N. americanus in the "campesino's" GI tract, this means a loss of 30 mg of iron/day, and makes iron deficiency anemia a formidable problem.

The second incident was a trip I made in the preventive and social medicine course. Our assignment was to make several visits to a "barrio" (slum district) for a medical-sociological survey. Each of us was assigned to one family.

I was not ecstatic about the idea because my Spanish was none too good, I was an American, and I don't like to peer and pry without being able to be of help.

The "barrio" was a group of about 100 mud, brick and tin shacks separated by small walkways strewn with human sewage and garbage. The stench was almost unbearable. Even more so was the sight of elderly 3-and 4-year olds sitting or standing listlessly in tiny mud yards.

I was introduced to Señora Gonzalez, the "head" of the family. The "barrio" family here is a matriarchal one. The man is usually an unstable element who proves his "machismo" by fathering as many "niños" as he can. Some sociologists claim Venezuela has the world's highest illegitimacy rate. Some 60 percent of the births are to unwed mothers at

Hospital Maternidad Concepcion Palacios in Caracas (called the world's largest maternity institution).

Srta. Gonzalez welcomed me to her cleanly swept dirt yard and into the two-room house — where she insisted on covering the one good chair with a towel before I sat down. I was humbled and embarrassed, and she, the gracious hostess, put me gently at ease.

The walls of the hut were made of "bareque," a mixture of mud and straw, the roof was tin, and there were no windows — to reduce the temptation for thieves. The six in the family slept on two beds. Senor Gonzalez earned 17 bolivares ($3.75) a day as an unskilled laborer. The four children all had large umbilical hernias and constant diarrhea, but the nearest Centro de Maternidad-Infantil was several miles away. Getting to the Centro was expensive, and then there would be a wait of several hours to see a doctor.

I laugh as I recall the questionnaire I had to fill out. My Spanish was limited. I didn't know how to say modern plumbing, so I asked if she had a toilet connected with water. She proudly said yes. Later I realized the truth. A small shack in the back covered a hole in the ground that was indeed "connected with water" — an underground canal emptying into an uncovered sewer running through the heart of Caracas!

A third memorable experience was caring for a 14-year-old girl with subacute glomerulonephritis and nephrotic syndrome. Doctors were trying to get her in condition for a kidney transplant, and due to tremendous ascites, among other problems, it was no easy job.

I went to the hospital one morning only to find her gone. I asked the nurse what happened. She simply said, "El brujo." The girl's mother had decided that evil spirits were causing the problem, and the only sensible cure was the chants and herbs of "el brujo" (the witch).

I thought this was probably only an isolated incident, but that was not the case. The average "campesino" relies on "el brujo" until an illness frightens him to the point of seeking medical help. If the doctor fails, the "campesino" only feels his original low opinion of "los médicos" has been confirmed, and the next time he has a health problem he again hunts out "el brujo."

At the end of our first year, life for both Fritz and me began to be much more fun. Our Spanish was not yet perfect, but, more important, we felt relaxed with it and delighted in speaking it. The strain was gone, and we now had Venezuelan friends with whom we could share joys, sorrows, politics and jokes. When we had free time we spent delightful days at a wild beach where scarlet and great blue heron vied with clowning pelicans for our
attent Ion. We also hiked in the mountains surrounding the city. We were even fortunate enough to fly to Angel Falls, the highest in the world.

In addition to our Venezuelan friends, we had several wonderful relationships with other expatriots — Germans, Anglo-Argentines, Czechoslovaki ans, Spanish, English and Chileans. Evenings with these people involved two or three hours of good conversation before dinner. It had taken almost a year for us to lose our "gringo" rush-rush mentality, but it had happened. Life's new rhythms were immensely appealing, and the Venezuelan lyrical and humorous outlook on life made a lot of sense. We were "Venezuelanizados" (Venezuelanlzed) and loved it.

In "El Cuarto Año" I studied pathology, pharmacology, internal medicine (including clerkships in gastroenterology, radiology, neurology and cardiology), surgery, obstetrics and tropical medicine. Of the many happy memories of this year, I'll mention only one concerning tropical medicine.

Dr. Felix Pfiano, affectionately called "doctorcito" (little doctor) by his students, is the head of the Instituto de Medicina Tropical and an energetic giant of a physician and scientist, even though he only stands 4 feet 11 inches tall. He has developed numerous antigens for intradermal testing for the presence of parasites: "toxoplasmina" for *Toxoplasma gondii*, "cruzina" for *Trypanosoma cruzi* (the agent responsible for Chagas disease), "leishmanina" for *Leishmania brasiliensis*, "bilharzina" for *Schistosoma mansoni*, and more. He also has done outstanding work on the natural history of Chagas disease, which affects more than a half-million in that country alone.

In Venezuela as in the United States, exists an unequitable distribution of health care services. Caracas has an overabundance of doctors, the interior not nearly enough. Dr. Pfiano is constantly crusading to correct this by encouraging students to get rural experience, and often he succeeds.

And no article about Venezuela is complete without a few words about the terrain — the wild sturdiness of the Andes, the rock huts dotting the slopes, the rich green seductiveness of the jungle areas, the Sahara-like bigness of the "llanos" (central flatlands). And best of all are the Venezuelan people themselves — maddeningly irresponsible at times, surprisingly inventive, irresistably warm-hearted and expressive.

My husband read this article and said that I was concentrating too much on the problems. In a way, I guess he was right. Most of his time was spent with university-trained "ingeniero-agronomos" (engineer-agronomists), chemists, government representatives and businessmeh.

Occasionally, of course, he worked with the farmers, but mostly he was with the forward-looking industrious middle class, and he, quite rightly, was impressed with the ability and concern for the country that he saw. I, on the other hand, perhaps saw more results of poverty, ignorance and disease — the classic triad of problems of the developing world.

In October of 1970 we were called back to the U.S. My medical school friends said "Kathy, tu no puedes ir ahora. Tu ya eres demasiado venezolanizada." (You can't go now. You're too much a part of us.) And so I was. As I mentioned, we both had grown to love the new rhythms of life. I now had treasured friendships with some of the students and faculty and felt proud of them for their knowledge and desires to improve medical care in their country. They were fun, good people, and I miss them very much.

I was sad to leave, as was Fritz, and thinking about it now makes me very homesick. But I also am happy to be back, especially here where classes are held at the stated hour, the school does not close for two months every time a national election is held, no shooting incidents prevent my getting home on time, the library doesn't have its recent journals locked away for professors only, and where the administration has treated me with utmost kindness and cooperation.

My husband and I are forever grateful to Associate Dean Dr. John C. Herweg who helped us wade through all the protocol involved in both going and coming. And when I think about all that red tape and voluminous correspondence involved in the fight for admission to the Universidad Central, I know it for sure. It's great to be home!

(Editor's note: Kathleen Brogan Schwarz enrolled at Washington University School of Medicine in 1967, with every intention of qualifying for the M.D. degree with the Class of 1971. She says the opportunities afforded by her Venezuelan visit more than make up for the postponement of the degree for a year. Kathy is a 1960 graduate of Roosevelt High School in Des Moines, Iowa, and received the B.A. degree from Scripps College in 1964 and the M.A.T. degree from Northwestern University in 1965 before coming to medical school.)
PRE '20s AND '20s

Lloyd J. Thompson, '19, Chapel Hill, N.C., received the 15th Annual Medical Citation of Merit Award from University of Missouri at the Missouri State Medical Association meeting.

Walter R. Peterson, '26, Kansas City, Mo., was inducted into the International College of Surgeons by invitation.

Frank Glenn, '27, New York, delivered the 47th Hodgen Lecture at the St. Louis Surgical Society. His topic was 'The Role of Obstruction and Infection in Biliary Tract Disease.'

Paul I. Robinson, '28, Montgomery, Ala., received The Malford W. Thewlis Award for outstanding contributions to the welfare of the American Geriatrics Society at the Society's annual meeting.

Samuel D. Soule, '28, St. Louis, lectured at a medical staff meeting at Good Samaritan Hospital, Mt. Vernon, Ill. He spoke on "High-risk Obstetrics," "Teenage Emergencies," and "Pitfalls in Hormone Therapy."


THE '30s

Wendell G. Scott, '32, St. Louis, was reappointed to the Council of Voluntary Health Agencies of the American Medical Association.

Fred C. Reynolds, '34, St. Louis, was a coauthor of "The Nonoperative Treatment of Impacted Fractures of the Femoral Neck," in the October, 1970 Southern Medical Journal.

Robert W. Kelley, '36, St. Louis, an alternate delegate to the American Medical Association, was elected chairman of the Missouri Governor's Advisory Council on Comprehensive Health Planning.

Carl E. Lischer, '37, St. Louis, is president of the St. Luke's Hospital Staff Association, succeeding Hugh R. Waters, '45. John D. Davidson, '52, was elected vice president.

Brigadier General Robert M. Hardaway III, '39, commanding general of William Beaumont General Hospital, received a resolution from the board of governors of the American College of Osteopathic Surgeons in praise of his keynote presentation at the 43rd Clinical Assembly.

William F. Melick, '39, St. Louis, is president-elect of the South Central Section of the American Urological Association.

THE '40s

Seymour Brown, '40, St. Louis, received the 1970 Mercy Award for outstanding service to St. John's Mercy Hospital and the healing arts.

Robert L. Garrett, '40, Vallejo, Calif., is chief of staff of Vallejo General Hospital.

Joseph W. Noah, '41, St. Louis, was appointed a representative of the Allergy Foundation of America on the Committee on Continuing Professional Education Programs of Voluntary Health Agencies.

R. Cramer Reed, '41, Kansas City, Kan., is dean of the recently-authorized College of Health Related Professions, and associate dean of University of Kansas School of Medicine.

William L. Topp, '41, Seattle, Wash., is a member of the University's newly formed Alumni Board of Governors.

Ewald Buse, '42, Durham, N.C., received the William C. Menninger Memorial Award for distinguished contributions to the science of mental health from the American College of Physicians.

Henry V. Guhlman, '43 (December), is president of the Missouri Medical Alumni organization.

Burton A. Shatz, '43 (December), St. Louis, has been appointed medical director of Laclede Gas Company.

Jack Westley Cole, '44, chairman of the department of surgery at Yale University School of Medicine, was one of 12 receiving outstanding alumni citations at the University's annual Founders Day banquet.


Harold Jolley '46, San Francisco, Calif., is now chief of anesthesia at Harkin Community Hospital and Medical Center and associate professor of anesthesia at the University of California.

Paul Busiek, '47, Springfield, Mo., is president of Drury College's Alumni Advisory Council.

William M. Landau, '47, St. Louis, spoke of "Physiological Aspects of Pain," at the Third Annual Leonard J. Dueker Pharmacy Seminar at the St. Louis College of Pharmacy.

Harold B. Rapp, '47, Cape Girardeau, Mo., was named a fellow of the American College of Radiology.

Alumni Activities
ALUMNI ACTIVITIES

Edward W. Dempsey, Ph.D., right, former dean (now at Columbia University College of Physicians and Surgeons), was a special guest at the retirement party for Mrs. Edward (Louise) Jacoby, administrative secretary to the dean. Sharing pleasantries were Carl V. Moore, M.D., Busch Professor of Medicine and a former dean, left, and M. Kenton King, M.D., dean.

Mrs. Jacoby began with the Medical School in 1937 as secretary to Philip A. Shaffer, Ph.D.

James W. Willoughby, '47, Kansas City, Mo., was elected secretary of the North Central Regions of the American Association for Clinical Immunology and Allergy.

Robert Lund, '49, St. Louis, is vice president of the St. Louis County Medical Society.

Kenneth Sugiooka, '49, Chapel Hill, N.C., has been named chairman of the department of anesthesiology at University of North Carolina School of Medicine.

THE '50s


George Goto, '51, Honolulu, Hawaii, was named one of three outstanding citizens for 1970 by the Men's Club of Temple Emanuel during National Brotherhood Week.

M. Ann Hunt, '51, Santa Fe, N.M., is president of the Santa Fe County Medical Society.

John Knowles, '51, Boston, Mass., spoke on "The Water-Shed of the '70s" at the American Medical Association's 24th Clinical Convention in Boston.

Richard E. Ernst, '53, St. Louis, was named a fellow of the American College of Radiology.

Godofredo M. Herzog, '57, St. Louis, was elected a fellow in the American College of Obstetrics and Gynecology.

Frederick Peterson, '57, St. Louis, is treasurer of the St. Louis County Medical Society.

William F. Hejna, '58, Chicago, Ill., has been appointed associate dean for surgical sciences and services at Rush Medical College.

THE '60s

Paula Clayton, '60, St. Louis, coauthored the book Manic-Depressive Illness.

Joseph W. Eades and Donald C. Sauer, '60, St. Louis, were elected fellows of the American College of Surgeons.

Eli R. Shuter, '60, St. Louis, assistant professor of neurology at St. Louis University School of Medicine, has received a $34,852 grant from the United States Public Health Service to study "Hexosaminidases in the Central Nervous System."

John E. Munzenrider, '64, Norwood, Mass., has completed a residency in therapeutic radiology and is assistant professor of radiology at Tufts-New England Medical Center, Boston.

Thomas J. Prendergast, Jr., '66, Durham, N.C., is studying for the Masters degree in public health from University of North Carolina School of Medicine. While in West Germany, he studied drug use among military personnel and dependents.

Carl F. Ritter, '66, Ann Arbor, Mich., is doing mammography research as an American Cancer Society Fellow.

The following appointments and changes in position of Health Care Administration alumni have been announced:


Nell C. Worley, '52, executive administrator for the Lester E. Cox Medical Center, Springfield, Mo., has been named a member of the University's newly formed Alumni Board of Governors.

Ben Tobias, '54, administrator, Parkway Hospital, Houston, Tex.

Jack T. Kindig, '55, administrator, Desert Springs Medical Center, Las Vegas, Nev.

Edgar G. Kilby, '59, associate director, Masonic Home and Hospital, Wallingford, Conn.

James E. Pears, '59, administrator, Sam Houston Memorial Hospital, Houston, Tex.

John W. Hankins, '60, administrator, Parkway Hospital, Houston, Tex.

Noel E. Kroncke, '64, administrator, Children's Hospital, Washington, D.C.

Ward B. Darley, '65, assistant administrator, The Swedish Medical Center, Englewood, Colo.

Ed Tinnermon, '67, associate administrator, Piedmont Hospital, Atlanta, Ga.

Harold Scheff, Jr., '68, associate director of health facilities planning, Alliance for Regional Community Health, Inc., St. Louis.

Albert R. Martin, '69, assistant administrator, St. Elizabeth's Hospital, Chicago, Ill.

Delbert E. Hurt, assistant administrator, Good Samaritan Hospital, Vincennes, Ind.

IN MEMORIAM

Alumni
Harry T. Evans '12 .................. January 21, 1971
Joseph W. Larimore '13 ........... March 22, 1971
Charles H. Haddock '21 ........... January 6, 1970
James Barrett Brown '23 .......... March 18, 1971
Michael C. Geraci '27 ............ September 10, 1970
Clarence G. Ochsner '31 .......... September 16, 1970
Ralph M. Stuck '32 ............... March 1, 1971
Edward F. Carlson '33 ............ December 20, 1970
F. Craig Johnson '33 .............. November 19, 1970
William H. Gray '37 .............. April 13, 1971
John M. Rodeman '38 ............. January 1, 1971
William C. Dunckel, Jr. '47 ...... February 8, 1971
Lynn E. Silberman '66 ............. Date unknown

Faculty
Helen Tredway Graham, Ph.D. ... April 4, 1971
S. Albert Hanser, M.D. ......... March 15, 1971
Lilli Hofstatter, M.D. .......... December 4, 1970
Theodore E. Walsh, M.D. ....... April 29, 1971

Former Faculty
W. Barry Wood, M.D. .......... March 9, 1971

CENTURY CLUB RESPONSE ENCOURAGING

The recent organization of a Century Club for the School of Medicine has been met by an enthusiastic response from alumni. More than 125 had enrolled as Founding Members by early April in response to letters of invitation sent in March.


The Century Club is composed of those who contribute $100 or more annually for the unrestricted use of the Medical School. Century Clubs have been organized in other schools of the University for several years and have proven to be an effective means of support for their educational budgets. Funds contributed through the new Medical Century Club will provide direct support for the School's teaching program.

During the initial stages of the membership campaign, invitations have been extended to alumni who already qualify on the basis of previous gifts. The Organizing Committee is currently writing to all alumni to explain the function and importance of the Century Club and to invite their participation.
Names Make News

FACULTY PROMOTIONS ANNOUNCED

Fifty-three at Washington University School of Medicine will receive faculty promotions effective July 1.

Five new professors are: Elmer B. Brown, M.D., Arthur Z. Eisen, M.D., Phillip W. Majerus, M.D., and Charles W. Parker, M.D., medicine; and David B. Mc Dougali, M.D., pharmacology.

Twelve promoted to associate professor are: David H. Alpers, M.D., George S. Kobayashi, Ph.D., Rosalind H. Kornfeld, Ph.D., and Eduardo Slatopolsky, M.D., medicine; Lawrence A. Coben, M.D., and Arthur L. Prensky, M.D., neurology; William F. Marovitz, Ph.D. and Lindsay L. Pratt, M.D., otolaryngology; William W. Schlaepfer, M.D., pathology; Dorothy J. Jones, M.D., pediatrics; Leslie Wise, M.D., surgery; and R. Dean Wochner, M.D., medicine and preventive medicine.

Of 36 elevated to the rank of assistant professor, 22 are in clinical pediatrics: Helen M. Aff., M.D., C. Read Boles, M.D., Martin M. Calodney, M.D., Robert H. Friedman, M.D., Samuel Gollub, M.D., Gene Grabau, M.D., Marshall Greenman, M.D., Norman Hankin, M.D., Maurice J. Keller, M.D., Kenneth A. Koerner, M.D., Marianne Kuttner, M.D., and Maurice J. Lonsway, Jr., M.D.

Also John C. Martz, M.D., David McClure, M.D., Helen Nash, M.D., Frederick D. Peterson, M.D., Edith C. Robinson, M.D., Frederick Sargent, M.D., George Sato, M.D., Bernard Schwartzman, M.D., Donald B. Strominger, M.D., and Frank Wissmath, M.D.

Other new assistant professors are: Joseph L. Price, Ph.D., anatomy; Om P. Bahl, M.R.C.P., and John G. Haddad, Jr., M.D., medicine; Charles C. Norland, M.D., William J. Phillips, M.D., and Stanley M. Wald, M.D., clinical medicine; Robert L. Kaufman, M.D., and Anthony S. Pagliara, M.D., medicine and pediatrics; Warren A. Weinberg, M.D., neurology; Jacques P. Sauvage, M.D., otolaryngology; Michael E. Phelps, M.D., and Glenn H. Roberson, M.D., radiology; Ralph J. Graff, M.D., surgery; and Garth T. Tubbs, occupational therapy.

CITY HOSPITAL CHIEF NAMED

John D. Vavra, M.D., '54, on March 1 became chief of the Washington University Medical Service at City Hospital, Max C. Starkloff Division.

An associate professor of medicine, assistant professor of preventive medicine, and assistant dean of the School of Medicine, Dr. Vavra succeeded R. Dean Wochner, M.D., '60, who on Jan. 10 became acting director of health and hospitals for St. Louis.

As chief of medicine, Dr. Vavra will supervise medical students, interns, residents, and attending physicians.

A native of Boulder, Colo., he received the M.D. degree with honors in 1954 from Washington University, where he was elected to the medical honorary, Alpha Omega Alpha.

He completed his internship and residency training at Barnes Hospital and held clinical and research fellowships from the United States Public Health Service.

Dr. Vavra joined the School of Medicine faculty in 1959 and became an assistant dean in 1968. He was promoted to associate professor in 1966.

He was invited to deliver the annual Alpha Omega Alpha lecture in 1966 and the Senior Awards Program address in 1968. He initiated a senior course on medical ethics in 1967 which became part of the medical curriculum in 1969, and has served as director of the medical clinic in the medical center since 1967.

Last June, Dr. Vavra received the Senior Award for excellence in clinical teaching from the Class of 1970 and was named an Alumni Teaching Scholar by the Medical Center Alumni Association.

He is a member of the Society of Sigma XI, the American Society of Hematology, the International Society of Hematology, and the Central Society for Clinical Investigation.

Dr. Vavra conducts research on the metabolism of hemoglobin, and is involved in effecting methods for communicating the ethical problems of medical practice.

RECOGNITION GIVEN

Lauren V. Ackerman, M.D., professor of pathology and surgical pathology, who in March received the Janeway Medal of the American Radium Society for "outstanding contributions to science." In May he was honored at the Lila Motley Cancer Foundation's annual Peacock Ball where he was presented the Shabanou Medal by Princess Shahrezad, niece of the Shah of Iran. Dr. Ackerman will visit that nation and hold seminars on cancer at several hospitals.

SURGEON HONORED IN ENGLAND

Leslie Wise, M.D., associate professor of surgery, has been honored by his appointment as a Hunterian Professor of the Royal College of Surgeons, England.

He will hold the prestigious professorship for the year 1971. On April 15 he delivered a Hunterian Lecture entitled "Peptic Ulcer: A Reappraisal of its Etiology."

Dr. Wise also will deliver lectures in London at the University College Hospital and at St. Thomas Hospital.

The professorship honors John Hunter, an 18th-century English surgeon considered the founder of pathological anatomy. The specimens of his anatomical museum formed the basis of the collection of the Royal College of Surgeons.
ALUMNI POSTGRADUATE SEMINAR
Clopton Amphitheatre    Thursday, May 27, 1971

9 a.m. Welcome
         William H. Danforth, M.D., vice chancellor for medical affairs

9:15 a.m. Introductory Remarks by Alumni Teaching Scholars
          John D. Vavra, M.D. ’54, associate professor of medicine, assistant professor of preventive medicine, and assistant dean
          John M. Kissane, M.D. ’52, professor of pathology and professor of pathology in pediatrics

9:30 a.m. Grand Rounds
          The John Milliken Department of Medicine

11 a.m. Biochemical Physiology of Anxiety
          Ferris N. Pitts, Jr. M.D. ’55, associate professor of clinical psychiatry

11:25 a.m. “Current Status of Marijuana Research”
          Donald W. Goodwin, M.D., assistant professor of psychiatry

Noon Clinoico-Pathologic Conference
          The John Milliken Department of Medicine

2 p.m. “The Use of Nitroblue Tetrazolium Dye Test in Differential Diagnosis of Febrile Disorders”
          Ralph D. Feigl, M.D., assistant professor of pediatrics

2:25 p.m. “Management of Diabetic Retinopathy”
          Edward Okun, M.D., associate professor of clinical ophthalmology

2:30 p.m. “Experiences with 1,000 Cases of Monitor-Induced Labor”
          Arpad I. Csapo, M.D., professor of obstetrics and gynecology

3:15 p.m. “Experiences with the Total Hip Replacement”
          Fred C. Reynolds, M.D. ’34, professor and chairman of the division of orthopedic surgery

4 p.m. “Patterns of Atherosclerosis and their Clinical Significance”
          Michael E. DeBakey, M.D., president and chairman, department of surgery, Baylor College of Medicine; director, Cardiovascular Research and Training Center, The Methodist Hospital, Houston, Texas

CLASS REUNIONS
Thursday, May 27, 1971

1921
    Oscar C. Zink, chairman
    University Club

1926
    Max Deutch, chairman
    Washington University Club

1931
    Delivan Calkins, chairman
    Aum Club

1936
    Robert W. Elliott, chairman
    Riviera Room
    Midtown Holiday Inn

1941
    William F. McGinnis, chairman
    Williamsburg Room
    12th floor, University Club

1946
    Willard B. Walker, chairman
    St. Louis Country Club

1951
    George B. Rader, chairman
    River Room
    13th floor, University Club

1956
    Richard W. Hudgens, chairman
    East Room
    Washington University Club

ALUMNI BANQUET
Khorassan Room, Chase-Park Plaza Hotel
6:30 p.m. Cocktails
7:30 p.m. Dinner

COMMENCEMENT ACTIVITIES
Stouffer’s Riverfront Inn    Sunday, May 30, 1971

11 a.m. Brunch
12:30 p.m. Senior Awards Program

“Medical Education, 1971: Built-in Obsolescence?”
Malcolm L. Peterson, M.D., Ph.D., Director, Health Services and Research Development Center, The Johns Hopkins Medical Institutions, Baltimore, Maryland

1961
    Ronald E. Rosenthal and Harold S. Zarkowsky, co-chairmen
    Excelsior Room
    Midtown Holiday Inn

1966
    Edward D. Maley, chairman
    Champagne Room
    Crest House