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The Class of 1952

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Special Address

The Dimensions of Education *

J. NEIL MORTON, LL.B.†



J. NEIL MORTON

This appears to be a unique occasion for all of us. In the past, apparently, only doctors of medicine, or at least of philosophy, have been permitted to address you. So there is at least a presumption that your program committee has fallen into error. Before the error becomes palpable and the presumption conclusive, I propose to talk a little about education. My credentials for so doing are that I was once exposed to it.

PRIMARY AND SECONDARY SCHOOLS

Nearly everyone understands, I believe, that our public primary and secondary schools are instruments of mass education. They are concerned with doing as much as possible for the total student population. This total population embraces every level of ability and motivation. It requires the embattled educator to deal with the moronic and the disturbed, at one end of the scale, and the precocious and the mothers of the precocious at the other and presumably higher end.

It is less often mentioned, and probably less well understood, that this program arises out of necessity and not merely from policy. It is necessary, as well as politic, because American society, as now constituted, has only two places for the young: one is the school; the other is some institution of correction. The street corner is only a way station between the two.

* *Nu Sigma Nu Founders Day Address, Minneapolis, Minn., February 23, 1962*

† *Attorney, St. Paul, Minn.; former President, Ramsey County Bar Association; former President, St. Paul Board of Education*

This is true socially; it is true economically. It is worthy of emphasis because when the fact becomes clear, it also becomes clear that no part of the total pupil constituency can safely be neglected. In fact, as Dr. James Conant has demonstrated, if we permit the academically incompetent, or the economically submerged, or the culturally unassimilated to drift out of our schools into the streets of our urban slums, we foster a cancerous growth—a menace to our social and political health.

Given these facts, we have two related tasks. The first is to confine the young in school until they can enter society on acceptable terms. The second is to impart education (or at least instruction) which will be useful to them in society. These matters are fundamental in primary and secondary education. They determine the curriculum; they fix the tone and emphasis of the operation; and they furnish at the same time the measure of our opportunities and the measure of our frustrations.

Those who think of secondary education principally in relation to college tend to overlook the larger problem in favor of an ideal college preparatory curriculum and its ideal product. Under this vision of the good life, any college prospect weighing less than two hundred pounds or standing less than six feet four inches in his stocking feet should be graduated from high school speaking and writing in Ciceronian prose, versed in trigonometry and the calculus, on good terms with one or more foreign languages, generally acquainted with history, political science, the best of literature, and oriented to the methods of natural science. I find the image attractive, but regretfully recognize it as a mirage.

The limitations and the diversities of human capacities (not to speak of differences in background and motivation) require our high schools to provide for every degree of academic competence and every degree of its lack. Because the median I.Q. of the consumers of education is about 100, it is not likely on theoretical grounds and it is not true in fact that college preparation is the major task of our high schools. The required instruction will range from college preparation to teaching some individuals how to come in out of the rain.

Hence, although the educational purist may urge us to reconstitute the traditional curriculum of (let us say) Winchester, Harrow and Eton, it will not come to pass. College preparation is but a part of the fare to be provided. It is feasible to provide it, in a larger context, in good quality, for those with the capacity and the motivation to pursue it. Many will qualify in any company. Others will display varying degrees of competence in other skills. In general the graduates will resemble the society from which they have emerged, because the problems of education are deeply rooted in the problems of society.

Because that society is diverse, because abilities and motivations are diverse, and because we do not live under an authoritarian regime, secondary education probably bears some resemblance to a smorgasbord—a table to which each may resort according to his appetite and digestion. Beyond a certain point there will be no forced feeding. But at least nourishment is available, in all its diversity, to all comers.

I do not find this unduly disturbing. Rugged individualists may even applaud it as the expression of an Emersonian principle of self-reliance and, concurrently, an aspect of the free enterprise system.

On the debit side, however, this state of affairs does not make of high school commencements an introduction to the fellowship of educated men. It raises doubts (some of which are reasonable) as to whether academic values are being diluted. It poses continuing questions as to how dilution is to be avoided. And it undoubtedly imposes additional burdens on higher education.

HIGHER EDUCATION

One of the additional burdens imposed on higher education is that of separating the men from the boys. Many institutions use exclusionary admissions policies; others the revolving door method. I shall not dwell upon this academic roulette. Let us assume that the initial selection is done, and pass on.

Even in higher education, adequate opportunity remains to escape the real rigors of academic discipline. After the formula of Robert Benchley, it is still possible to avoid any course taught in a class room above the first floor. But the time comes when those with greater ends in view make a commitment to the world of knowledge. This is similar, perhaps, to the choice made by the followers of the Buddha between the greater path and the lesser path to salvation. Presumably those in the graduate and the professional schools have made some such choice.

To do so is to reject the notion that work is a spectator sport and to embark upon a long journey. I would underscore this by a saying attributed to the Father of Medicine, who said (or at least is said to have said) that:

"Life is short and art is long; the occasion fleeting, experience fallacious and judgment difficult."

Although here spoken of Medicine, which is both a science and an art, it is true of every learned profession. In all of them the necessity of commitment exists, and in all of them the task is greater than the means of its accomplishment.

Let me venture another quotation, this from Mr. Justice Holmes, a great man, not wholly a stranger to eloquence. Addressing the undergraduates of Harvard College in 1886 on "The Profession of the Law," he said this:

"No man has earned the right to intellectual ambition until he has learned to lay his course by a star which he has never seen — to dig by the divining rod for springs which he may never reach. In saying this I point to that which will make your study heroic. For I say to you, in all sadness of conviction, that to think great thoughts you must be heroes as well as idealists. Only when you have worked alone — when you have felt around you a black gulf of solitude more isolating than that which surrounds the dying man, and in hope and despair have trusted to your own unshaken will — then only will you have achieved."†

†Quoted from Collected Legal Papers, Harcourt, Brace & World, Inc., 1920

If this medicine is too strong, the dose can be reduced until the ringing in the ears subsides.

What Hippocrates and Holmes have said is that the professions, properly served, require something approaching total commitment. It is my observation that this is true.

In the pursuit of one of the great professions, a man will find, not merely a craft and a calling, but a manner of thinking and a way of life. It will possess his attention and consume his energies. He will become not merely a specialist, but a specialist dedicated in a unique way to his speciality.

SPECIALIZATION AND GENERAL KNOWLEDGE

If this principle of commitment is valid, as I believe it is, we come face to face with a major educational problem, that is, the establishment of a reasonable balance between specialization and general knowledge.

Those who worry about education (and disdain to suffer about it in silence) proclaim their anxiety in every field, whether it be medicine, law, science or engineering. It has been known to worry business executives. It doubtless motivates the proposals now being considered here by your University Senate. Simply stated the question is how to equip specialists with the attributes of learned men.

It may be argued, of course, that this solicitude is merely ritualistic; that it is a pious nod toward an older faith, now no longer believed but relegated to the status of poetry and myth. I do not agree. The problem has too many responsible underwriters to be dismissed in this manner. For instance, it has had continuing attention under impeccable academic and scientific auspices at M. I. T., as witness the 1952 prospectus entitled "Liberal Education at Massachusetts Institute of Technology." The 1961 report of Dean Burchard of M. I. T.'s School of Humanities and Social Studies indicates that the problem still flourishes. Columbia has been a pioneer, and (to name a few others) there are Harvard, Dartmouth, Amherst, and Chicago. The matter has not been neglected here.

The general thesis, as expounded by Dean Burchard, is that specialists, who are now indispensable, are among the most intelligent and influential members of society. (I hope no one here cares to dissent.) Specialists must now know more than ever before in some area of concentration. At the same time they are likely to be influential in other fields, to which their knowledge does not necessarily extend. There are two dangers: one, that the specialist will abdicate by dismissing general affairs as "out of his field;" the other, that he will assume that his real skill in one field implies wisdom in others and, as Burchard says (quoting Ortega y Gasset) that he will display merely "the petulance of one who is learned in his own special line." Both of these (i. e., abdication and excessive extrapolation) are unfortunate, the latter perhaps more than the former, because although any man can make an ass of himself, a fine but limited education makes the results more dramatic.

One of your own profession (Sir William Osler), speaking in 1919, had this to say:

*"Specialism, now a necessity, has fragmented the specialties themselves in a way that makes the outlook hazardous. The workers lose all sense of proportion in a maze of minutae. Everywhere men are in small coterie intensely absorbed in subjects of deep interest, but of very limited scope. Applying themselves early to research, young men get into backwaters far from the main stream. They quickly lose the sense of proportion, become hypercritical, and the smaller the field the greater the tendency to megaloccephaly."**

And what is megaloccephaly?—Swelling of the head.

Jose Ortega y Gasset, the Spanish philosopher, is even more forthright than Burchard's quotation would indicate. His book, *The Revolt of the Masses*, published in 1930,† is one of the significant and original works of our time. It contains a chapter entitled "The Barbarism of Specialization." This is the specification of a general thesis that the specialist is alienated from the larger interests of science

* Quoted from Osler, *The Old Humanities and the New Science*, by permission of John Murray, London, England

† W. H. Norton & Co., New York, N.Y.

and civilization, and that, outside of the narrow trench in which he digs deep, the specialist knows mostly things that are not so. Concerning men of science, engineers, technicians, and all followers of special callings, he delivers three judgments:

(1) that the specialist is not learned because he is "formally ignorant of all that does not enter into his specialty;"

(2) that he is not ignorant because he "knows very well his own tiny portion of the universe;" but

(3) that he is really a "learned ignoramus," one who is not ignorant "in the fashion of the ignorant man, but with all the petulance of one who is learned in his own special line."

It is possible to take this to heart without pleading guilty to the entire indictment, but it is not possible to doubt that every profession and every special calling harbors a full complement of illiterates. I do not except my own, and I do not except yours.

I submit that neither our institutions nor our civilization can be maintained single-handed by the boys in the back room in the College of S. L. & A.; that society is entitled to expect more from the special callings than it gets — more in citizenship, and more in general knowledge; and finally, that all of us will be better men if we give the matter some attention.

Prerequisites, survey courses, core curricula, all the helpful educational expedients discussed by deans — all will fail without the determined support of those who pursue the special callings. The support, if it comes, will have to be rooted in the conviction that there is more to knowledge than specialism, that real education begins when formal education ceases, that the taking of courses is not essential to knowledge and understanding, and that, although it is possible (and not uncommon) for lawyers to be hacks and for doctors to be high class plumbers, neither condition is necessary or desirable.

THE LEARNED TRADITION IN MEDICINE

The fact is that your profession has an advantage in this regard because there is, in the history of medicine, a magnificent tradition of learning going back in England to such men as Linacre, Sydenham and Locke, learned physicians of the 15th, 16th and 17th centuries: Linacre, personal physician of Henry VIII, founder of the Royal College of Physicians, grammarian, teacher of Erasmus and Sir Thomas More; Sydenham, whom I need not identify in this company; and Locke, chiefly known as a philosopher, but nevertheless the man who (according to Pepys Diary) operated on Shaftsbury and inserted in his lordship the silver tube which was thereafter known as Shaftsbury's spigot.

There is no need for a list, but let me give you some random examples from my own acquaintances.

1. *Rabelais* — We may start with Rabelais, physician, demonstrator in anatomy and director of Hotel Dieu, the city hospital at Lyons; one of the very great writers of all time, a fit companion for Shakespeare and Cervantes, a genuine man of the Renaissance.
2. *Sir Thomas Browne* — Physician, philosopher, essayist, moralist, the author of the *Religio Medici*, a best seller since 1635 and now available to all in paperback.
3. *Oliver Wendell Holmes, Sr.* — Physician, incumbent of the chair of anatomy at Harvard, an early student of puerperal fever, the author of those fine, familiar Atlantic Monthly essays entitled *The Autocrat of the Breakfast Table*.
4. *Axel Munthe* — Physician, born in Sweden, educated in France, practiced in France and Italy, died in the royal palace at Stockholm; an enormously interesting and complicated character, a raconteur, a perceptive psychologist, a man of learning, an aesthete and something of a philosopher; his book, *The Story of San Michele*, 1,000,000 copies sold, translated into 20 languages.

5. *Oliver St. John Gogarty* — Physician, fellow of the College of Surgeons of Ireland, playwright, poet, essayist, conversationalist; the title of his reminiscences — “*As I was Going Down Sackville Street.*”

6. *Sir Charles Sherrington* — Physiologist, whose descriptions of the liver fluke, the *anopheles* and the malaria parasite, the structure of the eye, are literary classics.

And one more who deserves special comment.

The annual address of the president of the British Classical Association for 1919 had the title “The Old Humanities and the New Sciences,” — a topic of natural interest to a membership consisting mostly of scholars in the field of humane letters. This speech was remarkable on account of its author. The presidential chair, ordinarily occupied by a distinguished classical scholar, was, on this occasion, held by Sir William Osler, a physician, Regius Professor of Medicine at the University of Oxford. Here was a man who began life in an Anglican parsonage in the Canadian backwoods, on the voyageur route to Georgian Bay, who attained distinction as a student and teacher at McGill, who completed one medical career at Johns Hopkins as of 1905, and who for fifteen years had pursued another at Oxford. In the contemporary world of 1919 no one familiar with Osler’s professional status could doubt his place in the world of medicine, as it then was. On the other hand, none reading or hearing his address could doubt his qualifications to occupy the chair of the Classical Association.

It is beyond my competence to discuss Osler’s place in the hierarchy of medicine. I mention him for other reasons. His speech came to my hands about 40 years ago, when I was an undergraduate at this University. As sometimes happens in chance encounters, it made an indelible impression. What he was and what he said (consistent with each other) seemed to me a warrant of what is possible in the pursuit of a profession. I was later to read, and re-read,

Harvey Cushing's monumental biography of Osler, with its epigraph from the *Religio Medici* on the title page and its fitting recognition of the influence of Sir Thomas Browne and others of his kind. The impression still remains. This biography is good reading for a lawyer. Perhaps it is good reading for medical students.

I offer these matters in evidence as a reminder that you are the residuary legatees of a great tradition.

What then is a specialist to do? Holmes says it this way:

“. . . if a man is a specialist, it is most desirable that he should also be civilized; that he should have laid in the outline of the other sciences, as well as the light and shade of his own; that he should be reasonable, and see things in their proportion. Nay, more, that he should be passionate as well as reasonable—that he should be able not only to explain, but to feel; that the ardors of intellectual pursuit should be relieved by the charms of art, should be succeeded by the joy of life become an end in itself.”†

This is more easily said than done. I suggest that it is worth the effort.

And with this I am done, save for a comment regarding your Nu Sigma Nu Foundation, which seems to me to be admirable in its great design to pass along to succeeding student generations the benefits which each has received. If you can bear another quotation, I give you of Francis Bacon, Lord Chancellor of England, scientist, essayist, philosopher, and Elizabethan, the last modern man to claim all knowledge as his province. He said, concerning professional responsibility:

“I hold every man a debtor to his profession; from the which as men, of course, they do seek to receive countenance and profit, so ought they of duty to endeavor themselves by way of amends to be a help and ornament thereto.”

It is clear that your foundation has been conceived in that spirit.

†Quoted from Collected Legal Papers, *Harcourt, Brace & World, Inc., 1920*

Staff Meeting Report

Results of Gastric Freezing for Peptic Ulcer *

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INTRODUCTION

Gastric freezing as a definitive treatment of the peptic ulcer diathesis evolved from the earlier experience (1958) of gastric cooling (stomach temperature 10 to 15°C.) for the treatment of upper gastrointestinal hemorrhage. The first attempts at permanently depressing gastric secretion with prolonged cooling were performed by Nicoloff et al. (1961); however, mucosal edema and early return of gastric secretory responses indicated the impracticality of this approach.

The surprising tolerance of stomachs of dog and man to withstand gastric freezing was demonstrated clearly in subsequent observations by Peter et al. At inflow temperatures of $-20^{\circ}\text{C}.$, the entire stomach wall is frozen, and blood flow to the stomach ceases. An hour's gastric freeze at this temperature produces no evidence of gross injury to the gastric mucosa, other than temporary edema and hyperemia.

In dogs with isolated gastric pouches, something akin to a physiological gastrectomy is achieved by local gastric freezing. Antral pouches become unresponsive to perfusion with warm peptone. Canine Heidenhain pouches frozen

* Presented at the Staff Meeting of the University Hospitals on November 23, 1962

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12 months ago have remained unresponsive to all gastric stimulants to date.

Mechanism—The mechanism of gastric secretory depression appears to be direct parietal and chief cell injury with resultant impaired secretory capacity. Histologically, there is evidence of microthrombi in small vessels, particularly venules, and evidence of injury to vagal and subserosal nerve networks and to ganglion cells in Auerbach's plexus.

Indications—Gastric freezing has been employed as a definitive treatment for various manifestations of the peptic ulcer diathesis, including duodenal, gastric and stomal ulcer, and stenosing esophagitis. The vast majority of the 190 patients whose stomachs have been frozen were candidates for surgery for duodenal ulcer because of intractability, previous episodes of hemorrhage, or prior perforation with recurrent ulcer symptoms.

Contraindications—Pyloric obstruction with any degree of gastric retention is considered a contraindication to gastric freezing. Gastric ulcer also constitutes a contraindication to freezing, because of the possibility of malignancy. Patients with gastric ulcers which have proved their benignancy by healing have been considered candidates for freezing, as prophylaxis against recurrence.

Results—Following a freeze of 45 minutes or an hour, with the gastric wall temperature maintained in the range of $-12^{\circ}\text{C}.$, dramatic and immediate relief of ulcer pain has been observed uniformly. Continued symptomatic relief persists in approximately 85% of duodenal ulcer patients. X-rays quite regularly demonstrate healing of active ulcer craters within 2 to 6 weeks.

An immediate marked secretory depression, which persists for several months, is observed in approximately 75% of patients. Twenty patients (13.7%) have had recurrence of ulcer symptoms and two additional patients (1.4%) have continued to have high levels of gastric acidity and have been controlled satisfactorily by a second freeze.

Complications—The procedure has proved safe both in the dog and in extended clinical application in patients seeking relief from the peptic ulcer diathesis. A few complications have been observed, some of which we have regarded as minor: (1) In 11 patients an episode of melena of short duration occurred a few days after the freeze; of these, 8 came from the Minnesota area and were merely observed by us and treated conservatively; 3 returned to their homes, where gastric resection was recommended by their surgeons and accepted by the patients. The reported lesions showed evidence of some hemorrhagic infiltration. (2) Development of a gastric ulcer following the gastric freeze for unobstructed duodenal ulcer (5 patients). This complication, we have come to believe, is due to the jet-thrust effect of a high flow rate (1200-1600 cc/min.) through an open-ended tube upon a localized area in the stomach. Since sealing the open end of the tube and providing lateral vents, we have not experienced this complication. There have been no deaths attributable to gastric freezing. Three patients in the series have died following operations remotely after the freeze. One of these occurred in our own hands as a sequel to repeated attacks of pancreatitis, 9 months following an antecedent gastric freeze.

Other Applications—The indications for gastric freezing for a primary gastric ulcer are less well defined. Our limited experience with this facet of the problem has concerned essentially patients in whom the gastric ulcer has healed completely, employing freezing largely as prophylaxis against recurrence. In addition, a few patients with marginal ulcers and stenosing esophagitis have been treated with excellent results, both in terms of symptomatic relief and healing of ulcer craters.

CONCLUSION

Our experience with gastric freezing suggests it to be a safe, simple, and useful device which may come to supplant

surgery in the management of many of the manifestations of the peptic ulcer diathesis.

TABLE I. TOTAL CLINICAL EXPERIENCE (11/1/62)

Condition	Number Patients	Symptoms Controlled (Per cent)
Duodenal ulcer	146	83
Stomal ulcer	15	87
Benign gastric ulcer	13	91
Stenosing esophagitis	2	100
Miscellaneous	14	100
Total	190	

TABLE II. PRESENT STATUS OF 143 PATIENTS UNDERGOING GASTRIC FREEZING FOR UNOBSTRUCTED DUODENAL ULCER

	Asymp- tomatic	Too soon since freeze for evaluation	Symp- tomatic	Operated Upon	Total No. Patients
Early Series					
October, 1961 to January 1, 1962	14(9)*	0	0	1**	15
1 Hour Series					
January, 1962 to September, 1962	65(13)*	6	7	9**	87
45 Min. Series					
September, 1962 to November 1, 1962	Too recent for evaluation		0	0	41
Total					143

* Figure in parentheses indicates number of patients in this group frozen more than once

** Of the 10 patients operated upon, three developed some gastric retention 6-12 weeks following their freeze, contra-indicating re-freezing for recurrent ulcer symptoms. Of the remaining seven, three were operated on at other institutions for postfreeze melena, which is not considered an indication for surgery by us. Of the remaining 4 patients, 2 were operated upon for gastric ulcers, one of which antedated the gastric freeze; the remaining 2 patients had undergone a gastric freeze 9 and 5 months respectively prior to the surgery

Staff Meeting Report

Quantitative Measurement of the Peripheral Circulation*

MELVIN J. GOLDBERG, M.D.†

In the Department of Physical Medicine and Rehabilitation, three quantitative indirect methods of evaluation of the peripheral circulation have been used. These are plethysmography, skin thermometry and oscillometry. The three techniques vary in their applicability and the types of conditions in which they give useful information.

When blood flow is to be measured precisely, it is necessary to have the patient under standardized conditions because of the multiplicity of factors influencing the circulation. Stabilization of the skin temperatures at the desired ambient air temperature in a controlled temperature room is measured with skin thermocouples and usually requires 1-2 hours.

In an effort to learn more about the responses in normal living conditions, Darla Bjork on a student fellowship this past summer studied skin temperatures of the toes and feet at the normal hospital temperature which was found to be 26.5°C. (81°F.). During standing, toe temperatures ranged from 24.5°C. to 34.9 regardless of the type of footwear. The range for each subject varied an average of approximately 5°C. on repeated tests. When the subjects were ambulatory with ordinary footwear, there was further rise of temperature of 1°C.

Venous occlusion plethysmography has been considered one of the most accurate methods of determining blood through the intact extremity. Plethysmography is based on the principle that the increase in volume of an organ en-

* Presented at the Staff Meeting of University Hospitals on November 9, 1962

† Medical Fellow, Dept. of Physical Medicine & Rehabilitation, University of Minnesota Hospitals

closed in a fluid-tight chamber will be equal to the arterial blood flow to that organ when venous outflow is obstructed. Plethysmographs have been constructed by the Department for studying circulation in the foot, the hand, and the segmental areas of limbs. The plethysmograph is an air-filled plastic box. After sealing the hand or foot in the plethysmograph, recordings are made by inflating the venous occlusion cuff and then opening a Statham P58 strain gauge. A Sanborn Model 150 recorder then gives a permanent record of the electrical equivalents of the increase in pressure due to the change in volume in the plethysmograph.

Studies in this laboratory of blood flow through the foot of normal young men at an ambient temperature of 26°C. showed variations in blood flow from 0.92 cc. per 100 cc. tissue per minute to 5.32 cc. per 100 cc. tissue per minute. The variation in blood flow of any one patient may be as great as 100 percent from day to day.

One type of circulation research study in which plethysmography has been proven of value was a study of the vascular response to Dihydroergocorine, Hydergine, and Priscoline which showed that all three drugs cause an average increase in blood flow in the foot from 2.3 to 7.8 cc. per 100 cc. tissue per minute. Oral Priscoline in 100 mg. doses appeared to be the most effective drug. The increase of circulation persisted for more than five hours rather than for the much shorter periods which have been reported previously.

Skin temperature has also been used as an index of circulation and particularly of vascular tone. Skin temperature studies are carried out by the use of 15 iron-constantan thermocouples taped to various locations on the body. The temperature of the skin may vary from the ambient air temperature to the body core temperature. The distal parts of the extremities show the greatest variation from body core temperature. The arterial blood in the extremities is not constant at body temperature. It may fall as low as 25°C. Skin temperature differences of less than 1°C. usually are not significant when compared to corresponding areas on opposite sides of the body. Comparisons of temperature between patients have little or no meaning.

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Skin temperatures are of little value in showing the degree of obstruction of an artery or the adequacy of circulation from a surgical point of view, but they are valuable in demonstrating normal or abnormal neurovascular tone by the response to reflex heating.

Oscillometry is a method of evaluating the peripheral circulation which has a number of attractive features. The equipment is portable. It can be performed at the bedside. It is rapid and the stabilization of the patient is not considered to be necessary. The oscillometer consists of a pneumatic cuff attached to a differential air pressure gauge which magnifies and indicates the vascular pulsations in the vessels under the cuff. Various models differ in sensitivity and reliability. We have found the instrument made in Germany on the Pachon principle to be quite satisfactory.

The readings taken at the six locations on each leg require 20-30 minutes.

Doctor Troedsson of the Veterans Administration had studied non-diabetic atherosclerotic males and has established norms for the particular oscillometer we use.

OSCILLOMETRIC INDICES

	Instep	Above Ankle	Below Knee	Above Knee	Mid-thigh	Upper Thigh
Lower Limit of Normal	½	2½	4	3½	2½	2½
Slowly Healing Foot Ulcer	Trace	¼	½			
Non-Healing Foot Ulcer	0	¼	½			
Gangrene	0	0	⅓			
Healing Below-Knee Amputation			1½			
Non-Healing Below-Knee Amputation			½			

Many tests were checked with arteriograms, operative findings and pathological reports and were found to correlate with the site and extent of the organic vascular disease. The progression of the disease can be followed by periodic recording of the oscillometric indices. An evaluation can be determined for medico-legal cases.

A study performed during the past year showed no correlation between the oscillometric index at the instep or above the ankle and the blood flow in the foot, as determined with the plethysmograph. It appears that factors other than those studied are involved. It is possible that the correlation between the oscillometric index and the blood flow will appear only when maximal blood flow is measured.

SUMMARY

Three methods of evaluation of the peripheral circulation have been discussed. Venous occlusion plethysmography, performed under controlled environmental conditions, gives a precise measurement of blood flow measured in cc. per 100 cc. tissue per minute. Skin thermometry can be used most effectively to measure the neurovascular activity. Oscillometry has proven valuable in assessing atherosclerotic disease and in establishing the level of arterial obstruction.

Staff Meeting Report

Current Knowledge of Serum Bactericidal Actions*

LOUIS H. MUSCHEL, PH.D.†

Although its precise significance has been difficult to assess, the antimicrobial action of serum has been long recognized as a factor in the total complex of resistance to infection. Once a parasite breaks through the skin or epithelial lining of viscera serving as a portal of entry, the bactericidal or viricidal activities of serum or plasma represents the first body defense met by the invading parasite.

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Serum bactericidal activities are divided usually into two distinct groups. The components of the first group which are called beta-lysins are heat stable (60°C. for 30 to 40 minutes) and therefore independent of complement (C'). Recent findings indicate that these heat-stable bactericidal substances, or at least certain of the components required for their activity, are not really serum or humoral substances but are derived from blood platelets and formed during clotting. This activity may well be absent, therefore, in circulating plasma. The organisms susceptible to this bactericidal system include Gram-positive bacteria such as *Bacillus anthracis*, *Bacillus subtilis*, *Diplococcus pneumoniae*, and *Streptococcus pyogenes*. Several investigators have reported a nonspecific increase in the bactericidal power of serum against these organisms during the acute phase of various illnesses with a subsequent return to normal levels upon recovery. These substances are not increased by immunization, and, thus, in a sense, represent an immunologic paradox. Absorption of serum with one Gram-positive organism nullifies its killing power against other Gram-positive bacteria, but leaves unaltered its effect on Gram-negative bacteria. Little is known of the mode of action or significance of these thermostable bactericidal substances.

In contrast to these heat stable, platelet-derived substances, the activity of the second group of bactericidal substance is relatively heat labile primarily because it is C' dependent. Serum bactericidal action, mediated by C', is generally of a greater order of magnitude, and is exerted probably exclusively on Gram-negative organisms. It depends upon at least two substances, antibody (Ab) and C'. Gram-positive bacteria are generally insusceptible, but trypanosomes, leptospira, and treponema are destroyed by the Ab-C' system.

Titration of serum for bactericidal activity are confused often by a failure to recognize the dual role of Ab and C'. Bactericidal Ab titrations may be performed in the presence of an excess of C' so that the latter reagent is not limiting. The bactericidal Ab titer of a serum may be considered as the reciprocal of the amount of serum causing 50 per cent killing. Only 0.001 μ g. of rabbit Ab nitrogen is required for

an endpoint against *Salmonella typhosa* strain 0901 and this reaction constitutes perhaps the most sensitive method available for the measurement of Ab. Bactericidal C' may be similarly titrated with an excess of antiserum.

C' is present in all mammalian sera. Similarly, the so-called normal or natural bactericidal Abs against many of the Gram-negative organisms are also invariably present in sera. Although we are concerned with normal serum from animals that have not been immunized, a "normal" animal or human may have had immunological experiences beyond the control of the investigator. These antibodies are often present even in sera or germ-free animals, but such animals are not entirely free of antigenic stimuli. In any event, whatever their origin, these natural antibodies are invariably present in normal animals. They act similarly to immune antibodies in the bactericidal reaction, and despite many reports to the contrary, they possess marked specificity of action.

The mechanisms involved in the bactericidal reaction are not well defined although clues are provided by certain experimental findings. The requirements for Mg^{++} and Ca^{++} are similar to the cation requirements for immune hemolysis. This has been interpreted as analogous to a cofactor requirement for an enzymatic process. Furthermore, calculations of the percentage of bacterial cell covered by Ab available for the bactericidal reactions indicates that less than 1 per cent of the cell surface need be covered by Ab.

Several studies indicate that the cell walls of susceptible bacteria constitute the locus for bactericidal action. The toxic O antigens of the bacteria, for example, inhibit specifically the bactericidal power of both normal and immune serum. Thus, the endotoxins, located in the cell wall, constitute the major target antigens for both normal and immune serum in the systems studied. Although only a small percentage of the surface area of an organism need be covered by Ab for bactericidal action, the lysis of the cells, or in the presence of stabilizing media, the formation of bacterial protoplasts, by the Ab-C' system in conjunction

with lysozyme also indicates cell wall involvement in serum bactericidal action. Apparently the Ab-C' system may expose the mucopolysaccharide lysozyme substrate on the walls of Gram-negative bacteria or, possibly, the action of the Ab-C' system may destroy or inactivate an inhibitor of lysozyme activity.

The paradox of continued infection in diseases such as brucellosis or typhoid fever despite the presence of bactericidal antibody is attributed generally to the intracellular growth of the microbes. The conversion of certain Gram-negative organisms to protoplasts by serum may also contribute to the survival of these organisms. By analogy with viable penicillin protoplasts, it is conceivable that the action of the antibody-complement system and lysozyme *in vivo* does not result invariably in a lytic and, therefore, bactericidal effect, but may elicit the production of protoplasts or viable L forms.

Many investigations have attempted to assess the significance of the bactericidal reaction in host defense mechanisms. Serum resistance is an important determinant of mouse virulence with Gram-negative organisms as tested by intraperitoneal challenge or of rabbit virulence by intravenous challenge. In humans, strains resistant to serum are more apt to be isolated from blood, whereas sensitive strains are prone to occur in urine or stool. Burned patients often experience infections with Gram-negative bacteria insusceptible to serum. Recent studies have suggested also that the kidney's peculiar vulnerability to coliform bacterial infections may be related to that organ's anticomplementary action.

Finally, the combined inhibitory effects of various antibiotics and of serum have been determined against several Gram-negative bacteria. In general, the combined activities of the two groups of reagents can be predicted from the activities of the separate components on the hypothesis of joint, independent action (additive inhibitions). Moreover, the development of antibiotic resistance seems to have little, if any, effect on an organism's susceptibility to the Ab-C' system.



Alumni Survey



CLASS OF 1952

The Class of 1952 is remembered as the "last of the MB's." From 1918 through 1952, the Medical School awarded the Bachelor of Medicine degree upon graduation, and conferred the Doctor of Medicine degree after completion of internship. Starting in 1953, the M.D. was awarded directly upon graduation, a practice which had been followed prior to 1918.

Many of the Class of 1952 were enrolled under the "accelerated" wartime curriculum, and their actual graduation dates range from Oct. 1, 1951 to June 14, 1952. In the interest of consistency, the MEDICAL BULLETIN refers to all graduates by their year of graduation from the Medical School.

The Class of 1952 consisted of 115 members. Of 103 who answered the survey, 41 are in general practice. Twenty are surgeons, and the remainder practice in other specialties. Five are full time medical educators.

Richard E. Barnes has practiced general medicine with a group for nine years in Aurora, Minn. His family includes his wife, Patricia, and sons David, 1; Matthew, 8; and daughters Rebecca, 7; and Sara, 4.

George L. Barnard is a neurosurgeon. He spent a year in military service, and was a resident in neurosurgery at UCLA 1953-59, before settling in Idaho Falls, Idaho. He is single and lives at 444 Ronglyn Ave.

John L. Bonner recently began the practice of ophthalmology at Grand Rapids, Minn., completing his residency training at University Hospitals in July, 1962. John was a varsity hockey player at the University of Minnesota 1949-50. He married Patricia Ann Kennigan of Duluth. Their children are Ann, 7; Tim, 6; Jeanne, 5; Dan, 4; and Therese, 2. They live at 316 1st Ave. S.W.

Herman D. Bentz practices in Anoka, Minn. as a general surgeon. He received his M.S. in Surgery at Minnesota in 1960, and served two years in the Air Force. His wife is the former Joyce Frederick. Children include Pam, 7; Steven, 6; David, 5; and Wendy, 1. They live at 909 Washington St.

Carl O. Bretzke has been in general practice in Hutchinson, Minn. for the past eight years. He lives at 1019 W. Lewis Ave. with his wife, Marylin, and children Margit, 9; Carl, 8; Gwen, 6; and John, 4.

Roger W. Brockway invites visits by former classmates at his newly constructed family home on Lake Pokegama, five miles south of Grand Rapids, Minn. He's in general practice with another physician, and has been located in Grand Rapids for eight years. His wife was Beverly Haugan, formerly of Albert Lea, Minn. They have a son, David, 10, and a daughter, Anne, 8. "Other members of the family," he writes, "include Benji, a Siamese cat, and Paint, a pinto filly." The family likes ornithology, hunting, and camping.

John H. Bouma says after five years his family has found its "real home here in Washington, D.C.," where he is a psychiatrist practicing in Federal service and in part time private practice. His wife is Adriana L. De Haan, whom he met at the University of Minnesota. They want their children, Sheila, 10; Dana, 8; Dirk, 6; and Paula, 5, to attend the University some day. "A pleasant climate here but I miss Minnesota's fishing and pheasant hunting," he writes. The family home is at 9904 Cable Dr., Kensington, Md. John is also an instructor in clinical psychiatry at George Washington U. Medical School.

Louis A. Buie, Jr. lives at 4729 Wilford Way, Minneapolis 24, with his wife and four children, Brad, 8; Steve, 6; Marsha, 4; and Paula, 3. He practices with a group of four surgeons, after completing his residency training at the Mayo Foundation in 1960.

James L. Canine likes stamp collecting, amateur radio, and numismatics, which he enjoys after his day of general practice in South St. Paul, Minn. He has been there nine years and has been in new offices since the last part of 1961. He lives at 2304 Isalona Lane, with his wife, Helen, and sons James, 11; Robert, 9; Paul, 6; and Joseph, 2.

William J. Carr says he's "completely satisfied with the general practice of medicine" in St. Anthony Village, a northeast Minneapolis suburb. Married to the former Ann Hudak of Minneapolis, he's active in civic and church activities, and likes skiing. The family circle includes Peter, 11; Beth, 9; Susan, 4, and Chris, 3, all at home at 4021 Silver Lake Terrace, Minneapolis 21.

Frank J. Carthey is in general practice at New Ulm, Minn., where he lives at 31 Camelsback Rd. with Georgia, his wife, and Joseph, 7; Daniel, 5; and Shannon, 4. Another child was expected this fall. Frank likes fishing and golf, and is active in the Minnesota Academy of General Practice.

Sherman B. Child is an ardent tennis enthusiast and an officer of the Minneapolis Academy of General Practice. Practicing in Minneapolis for eight years, he now has two partners and lives at 2315 Newton Ave S. He and his wife, Mary, have two daughters and one son.

Paul V. Cummiske is a dermatologist in Mankato, Minn., where he has practiced three and one-half years. He lives at 104 S. 4th St., and spent four premedical years in military service. He is unmarried.

Arthur E. Davis, Jr. arrived in Raleigh, N. C. on July 1, 1962 and began teaching and the private practice of pathology. He formerly practiced in St. Cloud, Minn. At home with him at 1209 Cowper Dr., Raleigh, are his Iowa-born wife, Carrol, and Karla, 8; Arthur, 7; Joseph, 6; Debbie, 5, and Pammie, 3.

Gary R. Davis is in the second year of a psychiatry residency in Los Angeles, Calif. He was formerly in general practice, and lives at 16801 Kalisher St., Granada Hills, Calif. Soon to start psychoanalytic training, he's very interested in painting, having won the "Best of the Show" award at the Los Angeles Physicians' Art Society Show in 1961. His wife is Eileen Coleman of Los Angeles. They are parents of Joanne, 8; Marilyn, 6; and Carol, 5, with another child expected early this fall.

Jerome J. DeCosse will move to the Upstate Medical Center, Syracuse, New York, on Jan. 1, 1963 to become an assistant professor of surgery. He is now completing two years of general surgery, cancer surgery, and surgical research at Sloan Kettering Memorial Cancer Institute, and lives at 345 E. 68th St., New York City. He married Sheila Flynn of New York. Their children are Stephen, 4; Carol, 3; David, 2; and Philip, 8 mos.

James DeGeest has been in general practice in Miller, S. D. for the past five years. He married Shirley Dristy of that city, and they are parents of Sally, 13; Jill, 11; Peter, 9; Steven, 7; and Julie, 5.

Richard A. DeWall is chairman of the Department of Surgery at Chicago Medical School, a post he assumed Oct. 15, 1962. (See article elsewhere in this issue). He had been a general and thoracic surgeon at the University of Minnesota since 1954. He is the father of three daughters, Beth, 8; Amy, 4; and Melissa, 2. His wife is Diane Prettyman of Kansas City, Mo.

Norman J. Diamond is in general practice in California, and lives at 3421 Tanglewood Lane, Rolling Hills Estates, "a rural home on Palos Verdes peninsula." He has practiced in Alaska with the U.S. Public Health Service, and still likes to play tennis and softball. He is married to Myra Okney, who was from Minneapolis. Their children are Lynne, 9; Susan, 8; Cathy, 6; Mark, 4; Nancy, 2; and Carol, 1.

Robert E. Doan is an internist who has practiced in Wayzata, Minn. for the past six years, and is a clinical assistant professor at the Medical School. In the family home at 115 Ridgeview Dr., are his wife, Viola, and Nancy, 9; Tom, 7; Peter, 5; and Julia, 2.



JAMES DOKKEN

James H. Dokken has been in general practice in Windom, Minn. since 1953. He lives at 637 16th St., with his wife, Tory, formerly of Cokato, Minn., and children, Paul, 8; Jane, 5; and Ann, 4.

Robert V. Edwards is a staff psychiatrist at the V. A. Hospital, Sheridan, Wyo. He took a three-year residency at Minneapolis V. A. Hospital, and has been with the V. A. for six years. Hobbies include outdoor sports and smoking fish. Married to Jean Hegy of Minneapolis, Bob is the proud father of five children.

Russell J. Eilers lives at 4545 Wornall Rd., Kansas City 11, Mo. He is an associate professor of pathology, and director of clinical laboratories at the University of Kansas Medical Center. He served in the Navy during World War II.

Vernon D. Erickson has been in general practice for eight years in Grand Rapids, Minn., after taking a one year residency in Internal Medicine at Minneapolis General Hospital. "I enjoy it and have no thought of change," he writes, also mentioning church activities, Kiwanis, golf, and his growing family, which includes Marcia, 11; Pamela, 9; Stephen, 8; and Glen, 6. His wife is the former Carole Boos of Minneapolis. The family home is at 1623 W. 9th St.



VIRGIL FALLON

Virgil T. Fallon has "found general practice rewarding" during the past eight years in Dawson, Minn. He likes to return to the Medical School for refresher courses. He toured Europe in 1961.

Al Fetzek practices general medicine with three other family doctors and one surgeon in a group at Edina, and lives at 6121 Wooddale Ave. in that Minneapolis suburb. He is married to Mary Jean Gulck of Minneapolis, and has two sons, Steven, 5; and David, 2.

Donald P. Fox is in the third year of a surgery residency at the Minneapolis V.A. Hospital. He expects to return to Tanganyika in 1964, where he previously spent three years as a medical missionary. His wife is the former Gloria Anderson of Minneapolis. Their children are Philip, 12; Daniel, 10; Nancy, 8; Andrew 5; and Suzanne, 3, all in the family home at 5541 43rd Ave. S., Minneapolis.

William R. Glenny is in the private practice of pathology, and lives at 8 Duck Pass Rd., North Oaks, St. Paul, Minn. His wife is the former Gretchen Essen of Two Harbors, Minn. Their children are Robb, 5; Gretchen, 3; and Ian, 2.



MARVIN GOLDBERG

Marvin E. Goldberg completed a residency in radiology at Minnesota in 1957, and now practices at Mt. Sinai Hospital, Minneapolis, in association with Dr. Samuel B. Feinberg. He is also a clinical instructor in radiology at the Medical School.

Roy H. Good is in general practice in Northfield, Minn. He is married to Helen Simonson of that city. They have four children and live at 111 4th St.

Francis J. Grimmell has been in general practice for nearly 10 years in north Minneapolis. He lives at 10626 40th Ave. N., with his wife, Mary, and Jeffrey, 9; Gregory, 7; Derek, 5; and Laura, 2.

William H. Grohs has been in general practice in Duluth, Minn. since completion of his internship. He married Dorothy Gerberding of St. Paul, Minn. Their children are Christine, 13; Jeff, 11; James, 9; and Carol, 5. The family home is at 1209 W. Catherine St., Duluth.



PAUL GUSTAFSON

Paul O. Gustafson is an orthopedic surgeon, practicing in association with the Evans and Reily Orthopedic Clinic, 1011 Madeira Ave., Minneapolis 24. "I'm continuing my work in children's scoliosis at Gillette State Hospital, and enjoy golf, swimming, and charcoal sketching," he writes. Paul is married to Mary E. Knox of Winnipeg, Canada. They have three daughters, including identical twins, Mary and Jean, 10; and Diane, 7. They live at 4440 Fondell Dr., Edina, Minn.

Jack F. Haas and his family enjoy boating and swimming

together, as well as other outdoor recreation. They live at 4 Fareway Dr., Northfield, Minn., where Jack has been in general practice for nine years. The family includes his wife, Rosemary, and Mary, 11; Ruth, 9; Frederick, 8; Richard, 6; and Philip, 3. "If we ever retire, he writes, "we will do so at Leech Lake, Minn., and live in a house trailer where we can be close to the woods and wildlife."

C. Lee Harris practiced six years of general medicine in Las Cruces, New Mex., but is now in the third year of radiology residency at Long Beach, Calif. V.A. Hospital. He lives at 10271 Geraldine Road, Garden Grove, Calif., with his wife, Lorna, and Jeffrey, 11; and Marcia, 9.

John A. Hartwig is an orthopedic surgeon since completing a residency at the Mayo Foundation five years ago. He lives at 4724 Wilford Way, Minneapolis 24, and is a clinical instructor at the Medical School. His wife, Mary, is from North Dakota. Their children are David, 7; Ann, 5; and Paul 2.

Samuel B. Haveson is a radiologist, practicing with a group in California. He lives at 11831 Spinning Ave., Inglewood, and is a clinical instructor at the U.S.C. Medical School. A special field of interest for him is neuroradiology. Sam's wife is Helen Rubin, formerly of North Dakota. Their children are Susan, 9; Joseph, 8; and Steven, 3.

Paul H. Hedenstrom has been a resident in surgery since 1959 at Ancker Hospital, St. Paul, under the Medical School's teaching program. He lives at 2158 Roth Pl., White Bear 10, Minn., with his wife, Bette, and children Robert, 8, and Mary, 6.



DUANE HEDINE

Duane R. Hedine is presently at the Hines V.A. Hospital, Hines, Ill., where he will complete a four year residency in urology on July 1, 1963. He was in general practice for six years in Whitefish, Mont. previously, and will return to the Pacific Northwest for private urologic practice next year. He now lives with his family at 2120 S. 4th Ave., Maywood, Ill. It is composed of his wife, Edna, and Terese, 10; Karen, 8; Kristian, 6; Karl, 4, and Judson, 9 mos.

William G. Heegaard is associated with a group of physicians in Alexandria, Minn., where he has practiced general medicine for the past eight years. With his wife, Elizabeth, in the family home at 901 Westwood Drive, Alexandria, are Jennifer, 10; Roger, 8; and Jeffrey, 5.



DEAN HEMPEL

Dean J. Hempel is a pediatrician, practicing in association with another physician. He lives at 97 Woodland Circle, Minneapolis 24, having completed a fellowship in pediatrics at the Mayo Clinic in 1959. His wife, Verona, is from Casselton, N.D. Their children are Monty, 12; Susan, 9; Mark, 6; and Shelly, 3.

Kenneth G. Henry has spent nine years in general practice in Owatonna, Minn. He was joined in practice in 1961 by his brother, Dr. John C. Henry (Med. '60). Ken lives at 915 14th St. N.E. with his wife, Doris, and Thomas, 9; Mary, 7; and Sue, 5.

John A. Higgins is an internist at the Mayo Clinic, and an instructor in medicine in the Graduate School, Mayo Foundation. John received an M.S. degree in Medicine from the University of Minnesota in 1956. He lives at Rte. 2, Merrihills, Rochester, Minn., with his wife, Audrey Fiegel, of Rochester, and Kathryn, 12; Robert, 8; Nancy, 6; and Susan, 22 mos.

Edward G. Huppler is a general surgeon in Watertown, S.D., and teaches at South Dakota State College. He received an M.S. degree in Surgery from the University of Minnesota in 1956, following a fellowship in the Mayo Foundation, Rochester. Ed is married to the former Sylvia Torstad of Minneapolis. Their children are Sue, 13; Eddie, 8; Kathy, 6; Tom, 5, and Bob, 2. They live at 612 Second St. N.W., Watertown.

Edward G. Hustad is in the private practice of anesthesiology since completing a residency at the Medical School in 1960, and two years as chief of anesthesiology, Minneapolis V.A. Hospital. He was also in private general prac-

tice in Montevideo, Minn. previously. He lives at 5801 McGuire Rd., Minneapolis 24, Minn. with his wife, Dorothy. Ed is on the attending staff at Minneapolis General Hospital, and is a clinical instructor at the Medical School.

William C. Jackson has been in general practice for ten years. He is located in White Bear, Minn. in association with a group. The family home is at 9 Oak Knoll Drive. He married Mary Wasowicz of St. Paul. They have five sons — Edward, 10; Michael, 8; William, 7; John, 2; Joseph, 1 — and a daughter, Mary, 5.

Bruce W. Jarvis is engaged in research and teaching at the University of West Virginia Medical School. He is director of the Blood Bank and Hematology Laboratories in the Department of Pathology, a position he assumed June 1, 1962. He lives at 27 Citadel Rd., Morgantown, W. Va.

Carolyn A. Johnson has been in general practice, full time with her father in St. Paul, Minn. for the past ten years. She's married to Clarence R. Wesenberg, assistant director of the Psycho-educational Clinic, University of Minnesota. They are parents of three sons: Nicholas, 6; Nathaniel, 4; and Noel, 6 mos. The family home is at 1316 Keston St., St. Paul 8.

David A. Johnson is a radiologist, practicing with a partner at the Huntington Memorial Hospital, Pasadena, Calif. He lives at 1982 Windover Road in that city with his wife, Fae, formerly of Minneapolis. His hobbies include fencing, golf, and gardening.

Marvin Johnson has been in general practice in Dassel, Minn. with Dr. Joseph C. Houts (Med. '51) since 1955. They built new offices three years ago, and plan to stay in Dassel. Marvin's wife is the former Mary Ann Hanson. Their children are Barbara, 10; Bruce, 7; and Craig, 4. Dad's hobbies include woodworking, hunting, fishing, and golf.

H. Wayne Johnston is in general practice in association with the Siegel-Johnston Clinic, Virginia, Minn. He's married to Jeanne Hammerbeck of Duluth. Their children are Jenifer, 12; and Renee, 6. The family home is at 703 13th St. S., Virginia.

Donald A. Jones practices orthopedic surgery with a mixed specialty group of 40 physicians in Hawaii. He also teaches at the Shrine Hospital in Honolulu, and lives at

4319 Kilauea Ave. He married Jacqueline Ginn of Phoenix, Ariz. in 1953. Their children are Gloria, 8; David, 6; Karen, 5; and Cynthia, 1. Don obtained his Board certification in January, 1961.



THE KALLENBACH KIDS

Rudolf W. Kallenbach has been in general practice for eight years, although he took a one-year residency in psychiatry following his internship. He practices alone and lives at 28594 Swan Island, Grosse Ile, Michigan, enjoying skiing and boating. His

special medical interests are allergy and cardiology. Married to the former Jacquelyn Mutsch of St. James, Minn., Rudy is the proud father of Louise, 11; Rolf, 9; Barbara, 7; Laurie, 5; and twin sons Lee and Lance, 4.

Donald W. Klass is a consultant in physiology (electroencephalography) at the Mayo Clinic in Rochester, Minn., a post he took about 4 years ago. He also teaches in the Mayo Foundation, Graduate School.

Robert P. Koenig is in the private practice of ophthalmology in St. Cloud, Minn., and is a clinical instructor at the University of Minnesota Medical School. He was a resident in ophthalmology at the University from 1957 to 1960. In the family home at 702 10th Ave. S., St. Cloud, are his wife, Patricia, and John, 11; Martha, 9; Peter, 8; William, 6; Richard, 3; and Mary, 2.



LYLE V. KRAGH

Lyle V. Kragh is engaged in the practice of plastic surgery, having received an M.S. degree in this field from the University of Minnesota in 1959. He is a clinical instructor at the Medical School, and lives at 5312 Ayrshire Blvd., Minneapolis 24, with his wife, Esther, and their children, Carl, 10; Jean, 6; Patricia, 5; Rebecca, 3; and Thomas, 2.

Gordon E. Lee is in general practice in Glenwood, Minn. in association with a classmate, Dr. Robert Letson. The partnership is now nine years old. Gordon's wife is the former Amy Strom of Dawson, Minn. They have three sons — William, 7; David, 6; and Richard, 3.



R. J. LEIBERMAN

Robert J. Leiberman says he enjoys a busy general practice in suburban Minneapolis, with a good deal of obstetrics, and many young adults and children among his patients. "I'm also busy as plumber, carpenter, electrician, painter, and general handyman and assistant to the chief of the household," he states. The latter would be Winnifred, his wife. Their children are Wendi, 11; Kristin, 10; Robert, Jr., 7; and Carin, 5. Family home is at 5151 Belmont, Minneapolis 19.

Robert D. Letson is Gordon Lee's partner in general practice in Glenwood, Minn. Bob spent two years in the Army medical corps service in France, and will begin an ophthalmology residency at University Hospitals in July, 1963. He's married to Patricia Anderson, a former dietician at University Hospitals. They have two boys — David, 2; and Thomas, 4 mos.



ROBERT LETSON

Maurice L. Lindblom remains in general practice in Richfield, a Minneapolis suburb, and he now lives at 4721 Hibiscus Ave., Minneapolis 24, with his wife, Shirley, and Todd, 5; Lisa, 4; and Ann, 1. He served four years as Richfield Health Officer and plans to build a new office building soon. His hobbies are Civil War history, gardening, music, and tennis.

Mark B. Listerud is a general surgeon in Wolf Point, Mont. He practices alone, and lives at 100 Main St. He took a surgical residency at King County Hospital, Seattle, Wash., and is now a Fellow of the American College of

Surgeons. Mark married a Washington girl, Sarah Mooney, and they have four children: John, 6; Matt, 4; Ann, 3, and Mark, 10 mos.

Arthur G. Litman lives at 1320 Knoxville Ave., Long Beach, Calif., and practices radiology with a group in that city. He is also a consultant in radiology to the Long Beach V.A. Hospital, and Ft. McArthur Army Center. His wife, Margaret, is from Lake Benton, Minn. Their children are Diane, 8; Tracy, 6; David, 4; and Lauren, 1.

Jerome G. Lommel has been a pediatrician in a suburb of Modesto, Calif. since finishing a residency at the Mayo Clinic in 1955. He is on the staff of four hospitals, and has a partner-physician. In the family home at 1700 Locke Rd., Modesto, are his wife, Rosemary, and Steven, 6; Lisa, 4; and Heidi, 10 mos.

J. A. Malerich, Jr. is in general practice in West St. Paul, Minn. with a group, and lives at 2158 Charlton Rd., Sunfish Lake 18, Minn. "We have our own office building, and are trying to obtain a third doctor," he writes. His wife is the former Helen Marzolf of St. Paul. Their children are Lea, 5½; and Danette, 4.

Ralph H. Mallinger is in general practice alone, and lives at 555 E. 29th St., San Bernardino, Calif. He is married to a North Carolina girl, Myde Powell, and they are parents of Rickey, 7; and Ronnie, 5.



THE MCGREGOR FAMILY

Gordon W. McGregor practices with another general physician and lives with his family at 19231 Victory Blvd., Reseda, Calif. Gordon is one of the members of his class who was in military service following Medical School. He was a navy medical officer at Oakland, Calif. and at Pearl Harbor. Mrs. McGregor is Marjorie Rudisuhle, a graduate nurse from the University of Minnesota. They have three sons, Robert, 6; Jack, 4; and Todd, 3.

Kenneth K. Matsumoto plans no change from his present practice of internal medicine and gastroenterology in Beverly Hills, Calif. He holds teaching affiliations with the U.C.L.A. Medical Center, V.A. Hospital, Cedars of Lebanon Hospital, and Mt. Sinai Hospital in Los Angeles. His wife, June Shintani, is from Los Angeles. Their children are a daughter, Reiko, 2; and a son, George, 4 mos. Ken served as a Navy medical officer in the U. S. and Far East from 1952-1955.

Donald M. Mayberg lives at 4503 Golf Terrace, Minneapolis 24, and is a psychiatrist, practicing at the Minneapolis Clinic of Psychiatry and Neurology. He is also a clinical instructor at the Medical School. A veteran of two "hitches" with the Air Force, Don is married to Verle Wright of Houston, Tex. The family includes Steve, 15; Sue, 13; Marc, 11; Nancy, 9; and Barbara, 4.

Bryson Roy McHardy practices with a group of radiologists in Sioux Falls, S. D. His address is Box 99B, Rte. 2, Sioux Falls. He took his radiology training at Michael Reese Hospital, Chicago, from 1956 to 1959. At home with him in Sioux Falls are his wife, Hazel, and Bryson Roy, Jr., 10; and Vickie Ann, 8.

Clifford Molzahn is an ophthalmologist, practicing for the past 3 years with a group in Redlands, Calif. He took his residency training at University of Minnesota Hospitals, and now lives at 16 N. San Mateo St., Redlands, with his wife, Valerie, formerly of St. Paul.

James R. Monnahan practices alone as a radiologist in Provo, Utah. One of his hobbies is flying, which he uses in his hospital consulting practice. Another is skiing, according to his communication to us from Box 531, Provo. Jim's wife, Marian, is from Denver, Colo. Their children are Rian, 3; and Kelly, 1.

Donald R. Mueller is a resident in radiology at Minneapolis V.A. Hospital, a training program he began in January, 1961, after 7½ years of general practice in Bagley, Minn. He expects to continue his residency until January, 1965. Don's wife is the former Bonnie Hobbs of Taylors Falls, Minn. Their children are Jean, 17; Julie, 15; Jac, 13; Jan, 9; and Jon, 5.

Roger C. Murray lives at 1017 Summit Ave., St. Paul, Minn., and is a general surgeon. He completed surgery residencies at the University of Michigan in 1956, and the University of Wisconsin in 1959. Roger is active in the Jaycees and likes golf and hunting. His wife, is Ann Dalton of Norwood, Mass. They have six daughters—Mary, 8; Kathy, 7; Shauna, 5; Ann, 3; Nancy, 1½, and Patricia, 7 mos.

Marvin M. Muske is in general practice with a group in a north Minneapolis suburb. He lives at 2631 Major Ave. N., Minneapolis, with his wife and two children. A third was expected shortly.

Floyd F. Myrick is a general surgeon in practice in Seattle, Wash., who writes that "all phases of my life have been rewarding, gratifying, and mostly pleasant, since graduation." Responsible for some of his happiness are his wife, Delores, formerly of Minneapolis, and the children—Robin, 14; Rinda, 12; John, 7; and Robert, 3. Floyd took his surgery training at Hines V.A. Hospital.

Raymond A. Narverud is married to Dr. Chrysanthia Kubota, who practices internal medicine with him, both in association with the Permanente Medical Group in Calif. They live at 125 Farollon Dr., Vallejo, Calif. with their children, Arthur, 2½; and Robert, 5 mos.



ROBERT H. NELSON

Robert H. Nelson has been in general practice for nine years, six of which he has spent in Benson, Minn. His spare time interests are photography, flying, space medicine, and his family, which includes his wife, Martha, and Susan, 10; twins Robert and Elizabeth, 9; Nancy, 5; and Peter, 1. "I'll probably remain here in general practice," he writes.

Wilhma B. Nelson lives at 3205 S. Park Terrace, Albany, Oregon. She is not in practice, but is married to a surgeon, and is the mother of Dulcie, 12; Karen, 9; Barbara, 5; and Larry, 3. She says they recently moved to Oregon, and "all of us are greatly enjoying living in the West."

Richard E. Payne is a pediatrician in a group practice in Virginia, Minn., his location for the past seven years. He is not married.

Douglas Perkins settled in general practice in Alexandria, Minn. following his internship and is now associated with a group of eight general physicians there. He also married Nancy Mason of that city, and lives at 914 Douglas, Alexandria. The Perkins children are named Polly, 6; Peter, 3; and Susan, 1.

Isaac M. Prlina is a urologist with the East Range Clinic in Virginia, Minn., a post he took five years ago. He lives at 14 More Drive, with his wife, Vivian, and Julie, 8; Mike, 7; Paula, 6; John, 4; and Roberta, 3.



SHELDON C. REED

Sheldon C. Reed went into solo practice of obstetrics and gynecology in Minneapolis early this year, after 5½ years of group practice. He teaches at Minneapolis General Hospital, and spent a three year residency there 1953-1956. The family home is at 6000 Tenth Ave. S., Minneapolis. Mrs. Reed is the former Vera Grinde, who was nurse at Fairview Hospital. Their children are Kimberly Sue, 4; Sheldon, Jr., 2; and Lesley Rene, 1.

Donald E. Roach says he is "very satisfied with his general practice in St. Paul's Midway district with a four-man group." He also recently moved into a new home at 3979 Glenview, St. Paul 12, Minn., sharing that happiness with his wife, Ruth, and Donald, 10; Nancy, 9; and Susan, 6.

Robert J. Rotenberg and his wife, the former Lee Paper of St. Paul, live at 2256 W. Lake of the Isles Blvd., Minneapolis, with their 2-year-old son, Mitchell. Bob has been in general practice for ten years, and was chief of the medical staff at North Memorial Hospital this year.

Paul Royce is an assistant professor of medicine at Albert Einstein College of Medicine, and lives at 120 Hillside Ave., Mt. Vernon, N.Y. Formerly of Brainerd, Minn., Paul earned a Ph.D. in Physiology from Western Reserve in 1959, and took his present post 18 months ago. He was a Navy med-

ical officer from 1954 to 1956. Paul's wife is Jacqueline Marofsky of St. Paul, Minn. Their children are Sarah, 4; Rachel, 3; and Ethan, 11 mos.

Charles M. Samet practices privately as an internist and does research in antibiotics at the North Shore Hospital, Manhasset, N.Y., while living at 7 Fourth Rd., Great Neck, N.Y. He and his wife, Rochelle, have a daughter, Rhonda, 4½. "Medical practice in this area," he writes, "is slowly changing from solo to group — a trend I favor."

Raymond W. Scallen has a partnership practice with another Minneapolis internist, and teaches at the Minneapolis V.A. Hospital, and University Hospitals. He completed a residency in 1956, and now lives at 110 W. Elmwood Pl., Minneapolis, with his wife, Mary, and Ann, 11; Mary, 10; Raymond, 8; and Catherine, 6. The family enjoys sailing as a hobby.

Irwin F. Schaffhausen is an orthopedic surgeon in private practice, and is a clinical instructor at the Medical School. He is married to Dr. Mildred J. Schaffhausen, a classmate who practices pediatrics, also in the Minneapolis area. They live at 109 W. Minnehaha Parkway, Minneapolis 19, and their children are Gail Ann, 9; James, 6; and Lee Ann, 3.

Mildred J. Schaffhausen is a pediatrician in private practice. (See listing of Irwin F. Schaffhausen.)

Daniel P. Schwartz is assistant medical director of the Yale Psychiatric Institute, New Haven, Conn., and is an assistant clinical professor in the Yale University School of Medicine. He lives at 25 Morse St., Hamden 14, Conn., with his wife, Patricia, and sons Gregory, 6; and Stephen, 4.

Robert I. Shragg lives at 2237 Noble Ave., Robbinsdale, Minn., and has practiced in that Minneapolis suburb since 1955. He has been a general practitioner since 1953. Bob is married to Sarah Bernstein of Omaha, Neb. Their children are Karen, 8; Marla, 6; and Martin, 3.

Nadine G. Smith is a dermatologist practicing in Minneapolis, and is married to Dr. Arthur W. Ide, Jr. They live at 541 Turnpike Rd., Minneapolis 16, with their children, Genet, 5; Arthur, III, 4; Kiki, 2; and Warner, 4 mos. Nadine is a clinical instructor at the Medical School.

Vernon L. Sommerdorf practices general medicine with a group of eight doctors in St. Paul. He lives at 1176 E. Jessamine, and is married to Norma Seaquist of Minneapolis. Their children are Marianne, 10; Delores, 8; and Philip, 2. He has been in general practice for nine years.

Elliott B. Springer is "still a bachelor!" He is an associate radiologist at the City of Hope Medical Center, Duarte, Calif., and lives at 245 W. Colorado Blvd., Arcadia, Calif. He has practiced in Duarte since 1958, when he was certified by the American Board of Radiology.

Donald Burton Swenson has a private practice of pediatrics alone in Mankato, Minn., living at 137 W. Glencrest in that city. He teaches at the Mankato State College nursing program, and is married to the former Donna Lou Bell of Waseca, Minn. They have two children, James and Ann.

James V. Testor is a radiologist and head of the department at the new Community Memorial Hospital in Winona, Minn. He took a radiology residency at the University of Minnesota, and also taught here one year. In the family home at 928 W. Mark St., Winona, are his wife, Mary, and Cynthia, 11; Roberta, 9; Gail, 5; and Monica, 4. ("Girls, 4; Boys, 0".)

Leonard B. Torkelsen likes to ski—on the water in the summer and on snow in the winter. He's associated with the Baldwin Clinic, Baldwin, Wis. in general practice, a field he entered in 1954 after completing a one-year residency in general surgery. Len's family traveled in Europe during 1961. It includes his wife, Elaine, and Todd, 13; Judith, 11, Joan, 11; and Peter, 7.

Paul H. Westphal writes from Whittier, Calif. that he "enjoyed Minnesota's SECOND appearance in the Rose Bowl football game." He practices urology in Whittier, and lives at 16702 Sausalito Dr., with his wife, Judy, and daughter, Judy Lynn, 8. Paul has been there three years after completing a residency at Long Beach V. A. Hospital, Los Angeles County and Los Angeles Children's Hospitals. He likes snow and water skiing.



PAUL WESTPHAL

Benjamin Wittels is associated with the Department of Pathology at Duke University Medical Center, Durham, N.C. He and his wife, Martha, have a son, Evan, 2, and live at 1300 Carolina St. They have been at Durham for one year.

Melvyn E. Witthaus "lives and practices in White Bear, Lake, Minn.," where he has been a general physician for the past five years. The family home is at 121 Wildwood Ave. His wife, Donna, is from St. Paul. Their children are Lise, 10; Marc and Craig, 8 (twins); and Marni, 5.



JOHN WOHLRABE

John C. Wohlrabe is a resident in psychiatry at Washington University (St. Louis) School of Medicine, where he moved in June 1961 after eight years of general practice in southern Minnesota. He lives at 1336 Midland Dr., University City 30, Mo., with his wife Lillian, and John, Jr., 9; Lisa, 6; Heidi, 4; and Meta, 1. His hobbies are camping, photography, and politics.

William C. Woyda is a general surgeon, practicing with three other surgical associates in Minneapolis since 1960. He spent three years in general practice in Elk River, Minn., before taking a surgery residency at Minneapolis V.A. Hospital. Bill lives at 1708 Haeg Dr., Minneapolis 20, with his wife, Dorajane, and Charles, 9; Paul, 7; and Ann, 5.

Arthur J. Wyatt practices general medicine in Anaheim, Calif., and lives at 9592 Orange Ave. in that city. He has been in general practice nine years, moving to Anaheim in 1959. The Wyatt family includes his wife, Ruth, and Janet, 15; Georgia, 8; Michael, 7; and David, 2. Dad's hobbies are boating, flying, and occasional hunting.

The following were also members of the Class of 1952, but did not respond to the Survey:

*Herman Eelkema
Paul Finley
Marshall Brown
Joseph E. Scallon
Carl Swendseen
Roger Anderson*

*Victor Gilbertsen
A. Sigrid Gilbertsen
Robert Erickson
Elbert Gamble
Harold Kadesky
Richard Kogl*

Medical School News

ANCKER HOSPITAL REVAMPS STAFF; RENEWS TIES WITH UNIVERSITY MEDICAL SCHOOL

Ancker Hospital, the City-County Hospital in Saint Paul, Minnesota, is now a completely integrated unit of the University of Minnesota Medical School teaching program.

The first major step in formalizing this arrangement came with the creation of a Joint Educational Committee. This committee is composed of members of the Ramsey County Welfare Board, the Ancker Attending Staff and the University. The present officers are: **Hon. Michael F. Ettel**, Chairman; **Delmar Gillespie, M.D.**, Vice Chairman, and **Dennis J. Kane, M. D.**, Secretary. Members include **Robert B. Howard, M. D.**, **Cecil J. Watson, M. D.**, **Donald Hastings, M. D.**, **Harold Flanagan, M.D.**, **Thomas E. Broadie, M. D.**, **John F. Perry, Jr., M. D.**, and **Leo Sachman, M. D.**

On April 1, 1962, Dr. Kane, (Med. '55), was appointed

Director of Medical Education, jointly responsible to Dean Howard's office and to the Ramsey County Welfare Board. In July, 1962, Dr. **James F. Hammarsten**, (Med. '48), was appointed Professor and Chief of Medicine at Ancker. Dr. Hammarsten was formerly



DENNIS KANE

JAMES HAMMARSTEN

Professor of Medicine at the University of Oklahoma and Chief of Medicine at Oklahoma V. A. Hospital. On

October 1st, **Harold G. Muchmore, M. D.**, was appointed Associate Professor of Medicine and Chief of Infectious Disease Section. **Dr. M. B. Shook** was appointed Chief Resident in Medicine.

A complete reorganization of the Department of Psychiatry began on July 1st with the appointment of **Vera M. Eiden, M. D.**, as Professor of Psychiatry and Director of the Department of Psychiatry at Ancker. Dr. Eiden, formerly on the faculty of Johns Hopkins and Yale, resigned as Medical Director of Willmar State Hospital to assume the Ancker post. Four divisions of the department have since been created: 1) Community Mental Health Clinic; 2) Psychiatry Inpatient Service; 3) Neurology Inpatient Service; 4) Neurology Outpatient Service. **Gilbert Ross, M. D.** has been appointed Director of the Division of Neurology and Assistant Professor of Neurology. Doctor Eiden has appointed **Frances Olsen, M. D.** as a full time attending psychiatrist and **Dr. James Kincannon** as Clinical Psychologist.



VERA M. EIDEN

Following the resignation of **Dr. Lloyd D. MacLean** to accept a Professorship of Surgery at McGill University, **John F. Perry, Jr., M. D., Ph. D.** was appointed Chief of Surgery at Ancker and Associate Professor of Surgery. On August 1st, **Harlan D. Root, M. D., Ph. D.** was assigned as Deputy Director of the department and Assistant Professor of Surgery. **Ali Hakim, M. D., Ph.D.** has been assigned to Ancker full time in the Department of Neurology. **Charles F. Galway, M. D., M. S.**, is Chief of the Division of Anesthesiology.



JOHN PERRY, JR.

HILL FOUNDATION GRANT STRENGTHENS COMPREHENSIVE CLINIC PROGRAM

The Medical School has received a new grant of \$180,100 for its Comprehensive Clinic program from the Lewis W. and Maud Hill Family Foundation, St. Paul, Minn. The grant will finance the acquisition of additional faculty for the Comprehensive Clinic during the next three and one-half years. It supplements previous Hill Foundation grants which underwrote a curriculum study in 1959, and helped establish the Clinic itself the following year.



RICHARD MAGRAW

Dr. Richard M. Magraw, director, said the Comprehensive Clinic teaching program would be strengthened by the addition of (1) a full time assistant professor for the Medicine clinic; (2) a full time instructor for the Pediatric clinic; and (3) part time staff physicians for the Urology, Gynecology, Orthopedics, Allergy, and Ophthalmology clinics, all of which are now understaffed.

Under the Comprehensive Clinic program launched June 20, 1960, all medical students in the Junior-Senior biennium of training receive six months of concentrated experience in the care of outpatients at University Hospitals. The student doctors are responsible for integrating all aspects of treatment for approximately 50 outpatients during this period, providing some of the medical care themselves. Each student's work is closely watched by a supervising staff physician. About 125 medical students complete the program each year.

"Additional staff," Dr. Magraw said, "will make possible more individual instruction, and will intensify the learning experience for the student. It will also be possible to further improve the outpatient care provided at the Hospitals."

In renewing its support of the concept of the Comprehensive Clinic, the Hill Foundation said it "welcomed the opportunity to assist the University and the Medical School

in making the Clinic an effective teaching instrument for fulfilling the School's primary function—educating and training future physicians for our state, region, and nation."

The grant was effective November 1, 1962.

Faculty News

RICHARD A. DeWALL TAKES NEW POST

Richard A. DeWall, assistant professor of surgery and co-developer of the DeWall-Lillehei artificial oxygenator, left Minnesota October 15, 1962 to become Chairman of the Department of Surgery at the Chicago Medical School. He was also appointed chief of surgery at Chicago's Mount Sinai Hospital, becoming the 31st "alumnus" of Minnesota's Department of Surgery to receive a high post in a leading medical institution.



RICHARD DEWALL

Dr. DeWall, 35 years old, is a native of Appleton, Minnesota, who graduated from the Medical School in 1952 and joined the faculty as a research associate of Dr. C. Walton Lillehei at Minnesota. He concentrated on surgical research which in 1955 produced the DeWall-Lillehei heart lung machine, opening the way for surgery in a "dry" field. The technique is now used in hundreds of hospitals and helped establish the University as a world reknown center for the treatment of heart disease.

Dr. DeWall has held many fellowships and awards from the American and Minnesota Heart Associations. In 1956 he received the Ida B. Gould Memorial Heart Research Award of the American Association for the Advancement of Science. In 1958, the U.S. Chamber of Commerce voted him one of the year's "Ten Outstanding Young Men."

His wife is the former Diane Prettyman of Minneapolis. They have three children.

**PROF. HERBERT M. BOSCH, PUBLIC
HEALTH ENGINEER, DIED SEPT. 16**

Prof. Herbert M. Bosch, health and sanitation engineer with the School of Public Health since 1952, died Sept. 16, 1962 in Leningrad, Russia, while on a cultural exchange mission for the U. S. Public Health Service. He was 55 years old.

Prof. Bosch was widely known in public health circles, having served with the Missouri and Minnesota State Boards of Health and the W.H.O. in Geneva, Switzerland before taking his post ten years ago at Minnesota. He was decorated by the U. S. and foreign governments for his service with the Allied armies in World War II.

Burial was at his birthplace, Jefferson City, Mo. and memorial services were held Oct. 5 in Minneapolis. He is survived by his widow, Jeanette.

HONORS

Robert L. Vernier, assistant professor of pediatrics, is the recipient of a 1962 E. Mead Johnson award of the American Academy of Pediatrics, honoring him for studies of the microscopic pathology of kidney diseases in children. Dr. Vernier is an Established Investigator of the American Heart Association.

C. Walton Lillehei, professor of surgery, was co-recipient of the 1962 Rogers Memorial Award in the amount of \$1,000.00 presented by the Wisconsin Heart Association. He shared the award with Dr. Lewis Dexter, Boston, Mass., "for excellence in cardiovascular research and teaching."



JOHN BRIGGS

John F. Briggs, St. Paul internist and clinical professor of medicine, was elected in July to the presidency of the American College of Chest Physicians. He assumed his office at the group's 28th annual meeting in Chicago.

Student News

Allen K. Larson, senior medical student from Clarkfield, Minn., is serving as president of the Medical Student Council for 1962-63, as well as president of the Senior Class. The Medical Student Council meets regularly to discuss matters of interest to students, faculty, and the Medical School, and serves as the voice of the student body.

Vice president of the Council is **James House**, senior from Wood Lake, Minn., and Secretary is **Eugene H. Bagley**, junior from Madelia, Minn.

The Council includes all of the class officers, plus three at-large members of the student body who are **John Barry** and **James Good**, sophomores, and **William Torp**, junior.

Class officers for 1962-63 include:

Seniors — **Allen Larson**, president; **James House**, representative; **John Wheeler**, representative.

Juniors — **Eugene Bagley**, president; **Robert Hauck**, representative; **Alvin Shemesh**, representative.

Sophomores — **Harold J. Hofstrand**, president; **Richard Loomer**, representative; **Terrill C. Olsen**, representative.

Freshmen — **Kent Wilson**, president.

STUDENT AMERICAN MEDICAL ASSOCIATION

John B. McMullen, St. Paul, is president of the S.A.M.A., Minnesota Chapter. He served as delegate to the national S.A.M.A. meeting held May 9-13, 1962, in Washington, D.C. SAMA sponsors a weekly medical film program for students each Tuesday at 12:30 p.m. in Room 12, Owre Hall. Mrs. **Robert Hauck** is president of the SAMA Wives organization, which supports various student activities of the Medical School.

ALPHA OMEGA ALPHA

James House, senior from Wood Lake, Minn., is 1962-63 president of the Minnesota Chapter, Alpha Omega Alpha Honorary Medical Fraternity. The fraternity annually elects four undergraduate members to guide the next year's program, during which time senior students are elected to membership. AOA sponsors an annual Medical School Lecture, as well as providing a \$500.00 AOA Scholarship through the program of the Minnesota Medical Foundation.

Medical Foundation News

DR. CORRIN H. HODGSON ELECTED MEDICAL FOUNDATION PRESIDENT

Dr. Corrin H. Hodgson, internist at the Mayo Clinic, is new president of the Minnesota Medical Foundation. He was elected by fellow members of the Board of Trustees on Oct. 24, 1962, and for two years will head this organization which serves the Medical School. He succeeds Dr. Arnold Lazarow, professor and head of the Department of Anatomy, University of Minnesota.



C. H. HODGSON

Dr. Hodgson is a 1931 graduate of the Medical School. He is a native of Fergus Falls, Minn., and has been on the Mayo Clinic staff since 1944. A special field of interest has been diseases of the chest. One of his sons, Dr. C. John Hodgson, graduated from the Medical School in 1960. Another, Stephen F. Hodgson, is a member of the current junior class.

Other new officers of the Foundation include Dr. Vernon D. E. Smith (Med. '30), St. Paul surgeon who was elected vice president; and Dr. N. L. Gault, Jr. (Med. '50), re-elected secretary-treasurer. He is an associate professor of medicine and assistant dean of the Medical School.

The Foundation's Board of Trustees was enlarged to 30 members. Newly elected trustees include Mr. Grady Clark, Mr. Louis M. Cohen, and Mr. York Langton, all of Minneapolis; Dr. Richard L. Varco (Med. '36), St. Paul; and Mr. T. H. Rowell, Sr., Baudette, Minn.

Dr. Donald J. Cowling, president emeritus of Carleton College and longtime trustee of the Foundation, was elected a permanent honorary trustee.

ALUMNI DEATHS

▲ 1916

Dr. Bernard J. Gallagher, Waseca, Minn. Died Oct. 6, 1962, age 73 years. Practiced general medicine in Waseca since World War I until he retired in 1954 after suffering a stroke. He was decorated for his work in World War I, during which time he was captured by the enemy. His survivors include a son, Dr. William B. Gallagher (Med. '47), La Crosse, Wis.

▲ 1919



LAURITZ YLVISAKER

Dr. Lauritz S. Ylvisaker, Bryn Mawr, Pa. Died July 15, 1962, at the age of 72. He served on the faculty of the Medical School while in private practice in Minneapolis following World War I, and in 1928 began a career as medical director in the life insurance field. He retired on January 31, 1961 as vice president and medical director of Fidelity Mutual Life Co., Philadelphia, Pa. A Fellow of the American College of Physicians, he was active in the American Heart Association. Among his survivors is a brother, Dr. R. S. Ylvisaker (Med. '26) of Minneapolis.

Memorial Gifts

Memorial gifts to the Minnesota Medical Foundation have been received recently in memory of:*

Mrs. Grace Alcott
Hopkins, Minn.

Mr. Percy Knudsen
New Berlin, Ill.

Mr. James A. Lannon
St. Paul, Minn.

Mrs. Ellen Helmersen
Ames, Ia.

Mr. Charles Goldberg
Los Angeles, Calif.

Dr. Clarke Barnacle
Denver, Colo.

Memorial contributions are a practical means of honoring the memory of a friend or loved one, while helping the Minnesota Medical Foundation in the advancement of medical education and research.

** We regret an incorrect listing which appeared in the October issue, identifying a gift in memory of Mrs. Stuart Arhelger. The correct listing should have read in memory of Mrs. Gladys Arhelger, Minneapolis, Minn.*

Coming Events

University of Minnesota Medical School

CONTINUATION COURSES FOR PHYSICIANS

1962-1963

University of Minnesota
Center for Continuation Study

November 14-16	Ophthalmology (Refraction)
November 15-17	Orthopedics
November 29-December 1	Cardiovascular Diseases
January 7-11	Introduction to Electrocardiography
January 7-11	Proctology
February 4-8	Internal Medicine
February 11-15	Neurology
March 1-2	Neurosurgery
March 15-16	Trauma
April 15-17	Otolaryngology
April 25-27	Obstetrics
April 29-May 1	Ophthalmology
May 16-18	Surgery
May 27-29	Psychiatry
May 27-29	Otolaryngology
June 3-5	Anesthesiology

The University of Minnesota reserves the right to change this schedule without notification.

Courses are held at the Center for Continuation Study or the Mayo Memorial Auditorium on the campus of the University of Minnesota. Usual tuition fees are \$45 for a two-day course, \$65 for a three-day course, and \$80 for a one-week course.

Specific announcements are sent out about two months prior to each course to all members of the Minnesota State Medical Association and to any physicians who request information for a specific course. For further information write to:

DIRECTOR
DEPARTMENT OF CONTINUATION MEDICAL EDUCATION
THE MEDICAL CENTER (BOX 193)
UNIVERSITY OF MINNESOTA
MINNEAPOLIS 14, MINNESOTA

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When you choose a memorial gift, your contribution, with appropriate details, may be sent to:

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Minneapolis 14, Minnesota