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The  
WASHINGTON UNIVERSITY  
MEDICAL ALUMNI  
QUARTERLY



PUBLISHED IN THE INTEREST OF  
THE UNIVERSITY AND THE ALUMNI

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On the Selection of Medical Students

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Treatment of Severe Hemolytic Streptococcal Infections

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American Surgery in a Changing World

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Vol. V

APRIL, 1942

No. 3

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# The Washington University Medical Alumni Quarterly

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APRIL, 1942

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## On the Selection of Medical Students

CARLYLE F. JACOBSEN\*

The involvement of our country in war has again emphasized the important role which the physician plays in his community and national life. He is called upon to serve under many conditions, sometimes with no hope of financial reward, often in circumstances dangerous to his own health. By the nature of his task and by virtue of a certain wisdom he has acquired, the physician is called to share in an intimate way life's most moving experiences. But what sort of person is this physician?

Those who are giving part or all of their energies to the teaching of medical students rightly feel that the information and the attitudes which they inculcate in their students are determining the future of medical practice. And in no lesser measure the wisdom and experience contributed by the practicing doctor in guiding the neophyte through the internship and residency shape the characters of the future physicians. There is, however, another agency which stands in a position to facilitate or to nullify the efforts of these teachers unless its work has been well done and with a minimum of mistakes. This agency is the committee on admissions, whose duty it is to say which few of the many applicants shall have the privilege of studying medicine.

But what sort of person is this physician? Ideally, he is a man of wisdom, of intellect that has been tempered by experience. He has many facets to his personality; he can meet, understand and sympathize with a variety of people. He is *modestly* secure in the knowledge of his own worth and the worth of his profession. He has integrity. There is soundness in his moral and spiritual values as well as discernment in his judgments. It is no mean task to choose from youths of twenty those with capacity to grow into this mature physician. In making its decision the admissions committee gathers information from many sources: the college record,

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\* Professor of Medical Psychology

letters from teachers and physicians, the medical aptitude test, an interest inventory, and an autobiographical sketch.

The most helpful single item of information is the undergraduate college record. In a real sense, school and college are laboratories of life, and high achievement here reflects abilities and the traits of character favorable to achievement in life. Outstanding success in college, not only in academic efforts but also in social life, requires more than "book learning." Indirectly, it shows satisfactory intelligence, good work and study habits, and capacity to understand and tolerate the vagaries of fellow students. Evaluations from several college teachers are sought for each applicant. Individual personalized letters, rather than form letters, are encouraged.

The appraisal of abilities and other personal characteristics is difficult and it is not unusual that bias, either favorable or unfavorable, creeps into estimates given by teacher, physician, or friend. About fifteen years ago the American Association of Medical Colleges sponsored the first extensive use of aptitude testing in professional schools. Many younger readers have had personal acquaintance with the medical aptitude test. This test, given during the junior or senior year in college, gives an independent, objective rating based on intelligence and training in the fields of biology and chemistry. It is valuable as an additional check on the college record and the judgment of teachers and friends. There are a number of students who, because of immaturity, outside work, or other distracting influences, present mediocre college records; yet they have good intellectual capacities, and constitute good prospects for medical school. There are, on the other hand, a number of individuals of inferior ability who have poor college records, and who are poor prospects for medical school. The medical aptitude test helps to differentiate between these two groups of individuals. In short, one of the basic requirements for satisfactory achievement in medical school is a certain modicum of intellectual capacity. Possession of this minimum can be demonstrated either through college achievement or through special tests. It is probable that no more than four or five students in a class of eighty do mediocre or unsatisfactory work primarily because of intellectual limitations.

Each applicant is requested to write an essay about his achievements in college, the reasons why he wishes to study medicine, and his professional hopes and ambitions. These essays vary from mere listings of college achievements and vague expressions of hopes and ambitions, to well-formulated, insightful biographies. It is probable that applicants do not fully appreciate the information and impressions gained from such essays. Occasionally, this essay is the determining factor in acceptance or rejection from the school.

Each year a few students fail or withdraw from school because the study

of medicine has not yielded the satisfactions they anticipated. Some have never been intensely interested in medicine, and have enrolled only because of family or social pressure. The use of interest inventories, already extensively developed in the field of vocational counselling, promises to give some help in anticipating these problems. For the past three years at Washington University we have been accumulating data and experience with the Strong Vocational Interest inventory. This test consists of some four hundred items covering a variety of occupations, school subjects, amusements, characteristics of people, and the individual's evaluation and appraisal of himself as an adult personality. The applicant in taking this test responds by indicating his liking, disliking, or being indifferent to these several hundred selected items. A few items are presented for illustration:

*Occupations*

Auto salesman .....	L	I	D
Banker .....	L	I	D
Clergyman .....	L	I	D
Photo engraver .....	L	I	D
Physician .....	L	I	D
Social Worker .....	L	I	D

*Amusements*

Golf .....	L	I	D
Bridge .....	L	I	D
Fortune tellers .....	L	I	D
Symphony concerts .....	L	I	D
Detective stories .....	L	I	D

*Abilities and Characteristics*

	Yes	?	No
Am sure of myself .....	( )	( )	( )
Am always on time with my work .....	( )	( )	( )
Show firmness without being easy .....	( )	( )	( )
Can write a concise well-organized report .....	( )	( )	( )

Some of these items may appear to be irrelevant and trivial. The striking fact is that stable, well crystallized interest and attitude patterns have been found to characterize and differentiate various occupational and professional groups. In using this test, we do not act on the naive assumption that when a person says he likes or dislikes a certain item, that he is necessarily giving a factually correct evaluation. For example, when a student says he is able to accept just criticism, we do not know that he is actually able to do so. However, we do get an expression of his attitude on this topic. To illustrate further, why is it that the salesman feels called upon to picture himself as a paragon of virtue, and the doctor, on the other hand, feels more free to admit reservation about his own abilities and attitudes?

The Strong Vocational Interest Test has been standardized for some forty different occupations and professions. The procedure has been to determine empirically the interests and attitudes that characterize the members of a

given professional group, be they chemists, physicians, artists, lawyers, or bankers. The score which a given person taking the test receives, is an expression of the extent of agreement between his expressed interests and the interests which were found to characterize some particular professional group. The grouping of occupational interests is not haphazard. In the following table, some of the principal groupings as revealed by Professor Strong's statistical analysis are summarized.

I <i>Technical</i> Artist Psychologist Architect Physician Dentist Mathematician Engineer Chemist	III <i>Social Welfare</i> Y. M. C. A. Secretary Personnel Manager Social Science Teacher School Sup't Minister	VI <i>Business</i> Accountant Office Worker Purchasing Agent Banker Sales Manager Real Estate Life Insurance Salesman
II <i>Miscellaneous</i> Farmer Carpenter Printer Math.-Science Teacher Policeman Forest Service	IV <i>Musician</i>	VII <i>Linguistic</i> Advertising Man Lawyer Author-Journalist
	V <i>Certified Public                Accountant</i>	

In the first group, designated as Technical, we find the following: artist, psychologist, architect, physician, and dentist. In terms of expressed interest patterns, the men in these five occupations are more nearly like one another than they are like other groups. Closely related are mathematician, engineer, and chemist. These individuals are also included in the technical group. The second group, designated as Miscellaneous, includes scientific farmer, carpenter, printer, math-science teacher in a high school, policeman, and forest service. A group concerned primarily with social welfare follows: Y. M. C. A. secretary, personnel manager, social science teacher, school superintendent, and minister. The musician, and quite different from him, the certified public accountant are unique in their interests. The next group is concerned with business. Detail workers include the accountant, office worker, purchasing agent and banker; while the business contact group is represented by those primarily concerned with selling. Finally, there is a group in which linguistic interest is a common factor: advertising man, lawyer, and author-journalist.

An analysis of interest patterns emphasizes the unique and individual character of each applicant's pattern. A few students have in a high measure the interests that characterize the physician, but show a restriction of interests to this one field. The majority of medical students shows not merely the interest pattern that characterizes the physician but, in addition, inter-

ests and attitudes that characterize the lawyer, the banker, the life insurance salesman, the minister, the teacher, or the personnel manager. A few students show an even greater diversity of interests in that they receive high ratings on ten, twelve, or even fifteen different occupational and professional scales. Intimate acquaintance with these individuals confirms the impression of a rich and diversified personality. Finally, there is a small fraction who show an absence of the interests and attitudes that characterize the practicing physician. This last group contributes more than its share of students who fail or who leave medical school before they have completed their work because of diminishing interest and drive.

Among a group of older doctors, one finds two or three per cent who do not show the attitudes that characterize the typical physician. It is interesting to inquire what some of these men are doing. About eighty per cent of hospital superintendents exhibit the interest patterns that characterize men in industry and business, e. g., personnel managers, banker, purchasing agents or office managers. Only a small fraction expressed the typical physician's attitudes. In another medical specialty, psychiatry, one finds a higher degree of interest in the field of social welfare than is characteristic of medical men in general. The profession of medicine, more than any other profession, offers opportunity for men with diversified abilities and interests. In the examples cited, it appears that these doctors have utilized these deviating interests to their own satisfaction and to medicine's gain. Therefore, when an applicant for medical school fails to show the conventional physician's interest pattern, it is not treated as cause for rejection *per se*. It becomes the occasion, however, for more careful scrutiny to determine whether there are other well organized interests in harmony with the student's life plans.

In preparing these comments for a group of physicians, it may not be amiss to touch on a subject close to the hearts of many. "Are not interests determined by family background, and isn't my son going to show the doctor's interests that characterize his dad?" The answer in most instances is affirmative. Through the cooperation of interested parents, we have had opportunities to study the attitude patterns of father and son. The degree of conformity has been striking. But just as clearly in a few cases, interests of the father and son seem to be at opposite poles. In the development of the adult personality, experiences have intervened to change the more usual course of growth. It is indeed a wise physician father who can freely permit his son to follow his own inclinations rather than force him into the parental mold.

Comments on the most valued and significant personality trait, integrity, has been reserved for the closing paragraph. Soundness of intellect and



some aspects of interest and attitude can be measured reasonably well. But to know the strength of moral fiber, loyalty to ideals, and the personal stability and security that stems from healthy family life, one must depend on the judgment of those honest souls who know the applicant well. The physician has a two-fold opportunity to influence the selection of medical students and the future members of his profession. He can encourage the study of medicine among those young people in his community whom he knows well and favorably. Secondly, when asked for an evaluation of an applicant, his frank and wise statement is of great help to the committee on admissions. The answer to our original question, "What sort of a person is this future physician?" has been found only in part. For each applicant, a mass of data, much of it confidential, is carefully evaluated. It is inevitable that some mistakes are made, that a few good men are excluded and less able students accepted. We can only seek your sympathetic understanding and continued good will if a particular candidate in whom you are interested has not gained admission to our school.

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Observations on the Specific Treatment (Type A Antiserum) of Staphylococcal Septicemia; Second Report. L. A. Julianelle. *Annals of Internal Medicine*, Vol. 16: No. 2, Feb. 1942, p. 503.

The author reviews the treatment of 104 patients with staphylococcal septicemia treated with specific type A antibacterial serum prepared in rabbits. Added to this number were 4 patients with a severe type of infection without septicemia. Of the patients treated 52 survived and 56 died. Five patients in the latter group died of causes other than staphylococcal septicemia from which they had recovered. The author concludes that actual evaluation of the serum will have to await future work from different sources.

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Section of the Spinothalamic Tract at the Level of the Inferior Olive. Henry G. Schwartz and James L. O'Leary. *Archives of Neurology and Psychiatry*, Vol. 47: No. 2, Feb. 1942, p. 293.

Section of the spinothalamic tract in the medulla for relief of high intractable pain has been performed successfully. The fiber tracts, spinothalamic, spinotectal and ventral spinocerebellar, through the brain stem following tractotomy in a case of carcinoma of the breast with metastases was studied. With the Marchi technic the positions of fibers within these tracts have been described.

## Therapy of the St. Louis Children's Hospital: Treatment of Severe Hemolytic Streptococcal Infections\*

ALEXIS F. HARTMANN, M.D., '21†

Toward the end of winter and in the early spring in the temperate zone we may expect the peak incidence of acute hemolytic streptococcal infections. These infections usually begin in the upper respiratory tract and generally prove to be cases of naso-pharyngitis in the infant, tonsillitis in the young child or occasionally scarlet fever, and sinusitis in the adult. The great majority of them prove to be relatively benign and are quickly recovered from without the need of specific therapy. In a significant number, however, extension of the infection occurs and leads to serious complications. In the infant and young child the development of otitis media is specially to be feared, because of the great discomfort it usually produces, because of the danger of permanent loss of hearing, and because of the possibility of further spread of the infection with the development of mastoiditis, petrous apicitis, lateral sinus phlebitis or meningitis.

From a study of the latter two of these conditions just recently completed and to be published in detail elsewhere, two important conclusions may be drawn: (1) Such dreaded complications could probably be entirely avoided, if proper sulfonamide chemotherapy were administered at the *beginning* of *all* acute hemolytic streptococcal infections of the upper respiratory tract; and (2) excellent results may still be obtained after their development if steps are taken to recognize them early enough and to treat them properly.

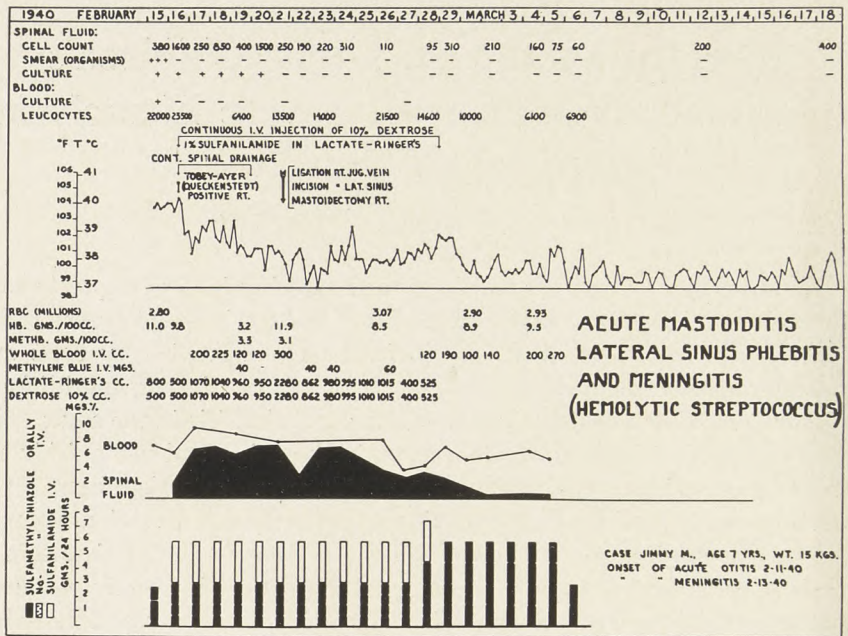
The principles and details of diagnosis and treatment may be considered in connection with the following case, in which both conditions occurred simultaneously and were successfully treated.

### CASE REPORT

This 7 year old boy, Jimmie M., developed a generalized acute upper respiratory infection on February 11, 1940, which included bilateral otitis media. Just two days later meningeal symptoms began and admission to the hospital occurred on the third day of meningitis, February 15, 1940. The initial examination revealed a very seriously and acutely ill boy with spinal fluid literally teeming with streptococci, proven later on culture to

\* This is the first of a series by Dr. Hartman on up-to-date therapeutic procedures. The next will appear in an early issue—Editor.

† Professor of Pediatrics



be hemolytic. Cell count of this initial tap was only 380. The Tobey-Ayer test was already positive on the right side, and the blood culture proved also to be positive on the day of admission. Treatment was started with a single dose of sodium sulfamethylthiazole followed by sulfamethylthiazole given orally. From the second through the fourteenth day of sulfonamide treatment both sulfamethylthiazole and sulfanilamide were administered; the total dosage averaging about 0.4 gm. per kg. body weight per day. The temperature fell steadily after the beginning of treatment, and the boy showed gradual improvement. While organisms could not be seen in the spinal fluid on the second day and thereafter, they continued to grow on culture for the first six days, after which the spinal fluid continued to be sterile. As in previous cases of a similar nature, immediately after treatment the spinal fluid cell count rose as the number of organisms diminished, and then fell. On the sixth day of sulfonamide treatment, after the blood culture had been sterile for five days, and on the first day of sterile spinal fluid, ligation of the right internal jugular vein was made, and then a right simple mastoidectomy was performed with exposure and incision of the lateral sinus. Mastoid cells everywhere were found involved, granulations spread over the knee of the lateral sinus and where exposed the dura was found red and thickened. The temperature then slowly returned toward normal. The spinal fluid continued to show some increase in cell count

but remained without organisms to be seen and always sterile, findings possibly to be explained by some remaining pocket of infection. Strabismus and dilated pupils were the only neurological findings suggestive of continued central nervous system involvement.

As in the previous cases there was need for considerable supportive treatment, especially early in the course of the infection, and for about thirteen days fluid was given by the continuous intravenous injection method consisting of dextrose and lactate-Ringer's solution to which sulfanilamide was added for the total sulfanilamide administration during this period. For the first four days continuous spinal fluid drainage was also effected. The spinal fluid concentrations averaged about 7 mgs. per 100 c. c. during the period when organisms continued to be grown on culture. Also, as in some of the previous cases, a transient leukopenia was noted, the blood count dropping from 23,500 on February 16th to 6400 on February 19th. The dosage of the drug, however, was not reduced, and on February 21st the count doubled. On April 6th the tonsils and adenoids were removed and on April 17th he was transferred to Ridge Farm, our Country Convalescent Department, to complete his recovery. He was finally discharged from the hospital on June 19, 1940, completely recovered except for a dilated and fixed right pupil.

#### DISCUSSION

*Diagnosis of Lateral Sinus Phlebitis.* A positive diagnosis can be made only by actual inspection, which may necessitate sometimes microscopic examination. A presumptive diagnosis of sufficient certainty to justify the often difficult but always important operative part of treatment is usually not hard to make, if we bear in mind the following points:

Every case of otitis media is potentially, if not actually, a case of mastoiditis, and every case of mastoiditis is potentially a case of lateral sinus phlebitis. The latter may occur occasionally within a few days of the onset of otitis media by rapid and direct vascular extension, but usually takes some weeks and develops secondarily to involvement of the mastoid cells and the bony plate directly overlying the sinus. It should specially be remembered that in chronic or frequently recurring otitis media, involvement of the sinus seems frequently to follow an intercurrent acute respiratory infection. Its occurrence is to be suspected if, during the course of otitis media, the patient suddenly becomes more ill, and especially if chills and a septic type of fever develop, which cannot be very satisfactorily explained by another cause, such as pneumonia or pyelitis, for example. If such symptoms are associated with obvious and unilateral mastoiditis, hemolytic streptococcal bacteremia, and a positive Tobey-Ayer test on the side of the mastoid involvement, the diagnosis becomes almost positive.

In a certain percentage of cases, however, mastoiditis may be bilateral, or there may be no external evidence of mastoiditis and x-ray findings indeterminate or pointing chiefly to the wrong side. In fact, lateral sinus phlebitis with severe symptoms may develop after the ears have ceased to discharge and after the drums have healed. In about one-third of the cases the blood cultures will be sterile. In such atypical circumstances, considerable reliance must be placed on the Tobey-Ayer test, and if frankly positive, it should be the determining factor in making the diagnosis. This test was found positive<sup>1</sup> in 30 of 35 instances in our cases prior to 1937 (pre-sulfonamide) and in 17 of 19 since.<sup>2</sup>

*Treatment of Lateral Sinus Phlebitis.* As mentioned earlier, it is my strong belief that not only this condition and meningitis, but serious mastoiditis and otitis media due to the hemolytic streptococcus could be avoided if proper chemotherapy were instituted early enough in acute upper respiratory infections. In not one of our last 19 cases of lateral sinus phlebitis developing since the availability of sulfonamide drugs, was adequate chemotherapy given at any early time during the course of the respiratory infection. In a study of 300 consecutive cases of scarlet fever admitted to the St. Louis City Isolation Hospital in 1939 and treated routinely with sulfanilamide, Bozalis and Barnett<sup>3</sup> noted a total incidence of otitis media of 4.2 per cent, and in almost all instances the otitis developed after discontinuation of the drug, and in 67 per cent responded quickly to renewal of chemotherapy.

If chemotherapy has been denied the patient or inadequately administered, no time should be lost in instituting such treatment. It is now our practice in severe infection such as this usually to administer 0.1 gm. per kg. body weight of sodium sulfadiazine intravenously (2 c. c. per kg. of a 5 per cent solution), and then, if possible, to give orally 0.4-0.6 gm. of sulfadiazine per kg. per 24 hours, in four to six divided doses. If full reliance cannot be placed on oral administration, the intravenous administration of the sodium salt must be continued, and 0.1 gm. per kg. repeated every eight hours should be effectual in maintaining blood levels of 20-40 mg. per 100 c. c. Equivalent amounts of sulfanilamide may also be used and may be given subcutaneously, in concentrations up to one per cent in lactate-Ringer's solution. While sulfathiazole seems to be at least as effective as sulfadiazine, the latter should be considered a better drug not only because of its lesser toxicity, but because of its much better protection against the development of meningitis, due to its greater diffusion into the spinal fluid.

After just a few days of such treatment during which time other indicated supportive treatment such as fluid administration and blood trans-

fusions should be given, one should expect abolition of bacteremia and sufficient control of the mastoid and sinus infection to permit proper surgical intervention without much risk of spreading infection. Surgery should include ligation of the jugular vein in the neck, thorough simple mastoidectomy and incision of the sinus throughout its involved area, if this is possible. The local use of crystalline sulfanilamide, sulfathiazole or sulfadiazine in the wound seems also to be of considerable value.

In a day or two following operation it should usually be possible to reduce the dosage of the drug to 0.2 gm. per kg. per 24 hours. Such a dosage should then be continued for at least a week longer, and preferably for ten to fourteen days, in the uncomplicated cases, and as much longer as seems necessary in those with complications.

With such treatment there should be almost no mortality. With much less intensive chemotherapy, 12 children recovered of our last 13 of definitely diagnosed hemolytic streptococcal origin, and 17 of 19 of all types.<sup>2</sup> In pre-sulfonamide days 15 of our 54 otherwise properly treated children failed to survive.<sup>1</sup>

*Diagnosis of Hemolytic Streptococcal Meningitis.* With the development of suspicious meningeal symptoms and signs, a diagnostic lumbar puncture is indicated. The advantage gained by early accurate diagnosis far outweighs the danger of the production of meningitis by lumbar puncture in the presence of bacteremia, which seems much more theoretical than real.<sup>4</sup> Advantage should be taken of performing the Tobey-Ayer test at this time. The spinal fluid should be immediately cultured, its cells counted, and bacterial stains made of the centrifuged sediment. While it is not wise to make a positive diagnosis on stained smears alone,<sup>5</sup> the finding of purulent spinal fluid with or without organisms justifies the institution of sulfonamide chemotherapy in exactly the way recommended for the treatment of lateral sinus phlebitis. The higher dosage of 0.6 gm. per kg. per 24 hours for the first few days is to be preferred.

In the great majority of instances infection in the upper respiratory tract is the original cause of meningitis, with spread to the meninges occurring directly from the middle or inner ear, the mastoid, the petrous pyramid, by way of the peri-carotid veins, or from the paranasal sinuses. Occasionally a hematogenous route seems to occur from a more distant focus both in the presence and absence of respiratory infection.

If the necrotic, coalescent type of mastoiditis exists or is suspected, mastoidectomy should be delayed only long enough to permit sterilization of the spinal fluid and blood, and should be performed with the protection afforded by chemotherapy in full dosage.

Eight of our last 11 infants and children with hemolytic streptococcal

meningitis recovered, with the aid of chemotherapy and (in three instances) mastoidectomy. Two of the three deaths occurred within a few hours after admission to the hospital, one being due to the rupture into the ventricle of a brain abscess.

#### BIBLIOGRAPHY

1. Hartmann, Alexis F. and Cone, Alfred J. Phlebitis of the Lateral (Sigmoid) Sinus in Infants and Children. *S. Med. J.*, V. 30, pp. 487-496, May, 1937.
2. Hartmann, Alexis F. Diagnosis and Management of Severe Infections in Infants and Children. A Review of Experiences Since the Introduction of Sulfonamide Therapy.  
I. Sepsis of Laternal Sinus Phlebitis. (To be published later).
3. Bozalis, George S. and Barnett, Henry L. Sulfanilamide in the Treatment of Scarlet Fever. *J. Mo. State Medical Assoc.*, V. 37, pp. 137-142, April, 1940.
4. Pray, Laurence G. Lumbar Puncture as a Factor in the Pathogenesis of Meningitis. *Am. J. Dis. Child*, V. 62, pp. 295-308, Aug., 1941.
5. Hartmann, Alexis F. Diagnosis and Management of Severe Infections in Infants and Children. A Review of Experiences Since the Introduction of Sulfonamide Therapy.  
II. Acute Hemolytic Streptococcal Meningitis. (To be published later).

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Renal Physiology in Infants and Children. II. Inulin Clearances in New-born Infant with Extrophy of the Bladder; Henry L. Barnett, Anne M. Perley, and Helen G. McGinnis, *Proceedings of the Society for Experimental Biology and Medicine*, Vol. 49: No. 1, Jan. 1942, p. 90.

A 24-hour old infant with extrophy of the bladder provided 2 visible and readily accessible ureteral orifices for this study of inulin clearance in a newborn. The results offer further evidence that the inulin clearance in newborn infants is considerably lower than in adults. The inulin clearances varied directly with the minute volume excretion of urine.

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Nerve Concussion. A. D. Krems, G. M. Schoepfle and Joseph Erlanger. *Proceedings of the Society for Experimental Biology and Medicine*, Vol. 49: No. 1, Jan. 1942, p. 73.

A short segment of nerve which receives an adequate blast from an air pistol responds with a single discharge by the fibers and then an immediate blocking of the transmission of impulses. Repetitive spikes may be initiated by these blocked fibers. The authors then noted that conductivity would return within 3 to 5 minutes spontaneously in all fibers not irreparably damaged. The results of these experiments may be related to cerebral concussion. It is suggested that concussion may be accounted for by stretch blocks of neurones plus excitation at the distorted loci, when there are evidences of excitation.

## American Surgery in a Changing World\*

EVARTS A. GRAHAM, M.D., F.A.C.S.†

In the slow, painful progress of human culture and advancement there have been frequent interludes in which this movement has been stopped temporarily by the catastrophe of war. For a thousand years, however, no threat of an extinction of culture and of the finer qualities of our civilization has arisen equal to that which exists now in the appalling possibility of a victory of Hitler and of his Nazi barbarians. It seems fitting, therefore, that at the meeting this year of this great body of surgeons we should consider soberly some of the consequences upon our profession which the war may have, particularly in order that by thinking of them now we may perhaps be better prepared to prevent their occurrence.

It is almost incredible that the Germany of only fifty years ago in which there originated much of the groundwork of modern science, including many of the important developments of surgery, should have degenerated into its present position of practical denial of the true values of intellectual enterprise.

The Nazi philosophy of the supremacy of brute force can hardly be reconciled with the fundamental ethical principle of attempting to help the weak and the underprivileged patient which has always been the basis, and, may I say the glory, of medical practice at least during the Christian era. Shirer,‡ in his "Berlin Diary" states that on May 6, 1940, Bernhard Rust, Nazi minister of education, said in a radio broadcast, "God created the world as a place for work and battle. Whoever doesn't understand the laws of life's battles will be counted out, as in the boxing ring. All the good things on this earth are trophy cups. The strong win them. The weak lose them." This authoritative statement from the man in charge of education in the Germany of today and possibly of continental Europe tomorrow, if taken at its face value, can mean only that in his opinion the purpose of education is to enable the strong to become stronger in order better to rob the weak. Surely that cannot be, some will say. It is unthinkable that anyone in a responsible position of authority could subscribe to so bestial a philosophy. But is not a sufficient answer to that complacent doubt to be

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\*Presidential address of the retiring president, presented before the Clinical Congress of the American College of Surgeons, Boston, November 3-7, 1941. Republished by courtesy of Surgery, Gynecology and Obstetrics.

‡ Shirer, William L. Berlin Diary, p. 328. New York: Alfred A. Knopf.

† Bixby Professor of Surgery, Washington University School of Medicine.



found in what has already happened in the countries reduced to slavery—Poland, Czechoslovakia, Denmark, France, Norway?

Let anyone picture to himself the consequences if this conception of the ideals of education should dominate the world. In medicine no more humanitarian principles! Gone the charity hospitals! No more bother about crippled children! It is their own misfortune if the poor are sick and the children are crippled. They are the weaklings. They "will be counted out, as in the boxing ring." What of the effect of the glorification of such brutality upon the doctor himself and especially upon the surgeon? Is such a philosophy compatible with the kind of surgical practice with which you and I are familiar? Certainly not. Why carry out all the troublesome details to make an operation as safe as possible? If the patient is strong he will recover anyway, and why worry if the weak does not survive? Doubtless the extreme results on the practice of surgery which I have just mentioned would not occur quickly but in the long run the corroding influence of a philosophy of brute force accepted by the dominant people of the European continent would be bound to degrade the present high standards which have been set up.

If then at the conclusion of this war Nazi influence should dominate the world a recurrence of the Dark Ages would seem to be inevitable so far as education and the progress of science is concerned. The spirit of the Spanish Inquisition would rear its ugly head again. Has it not already done so in those regions which have come under Hitler's control? The atmosphere of freedom necessary for the growth of science and the spread of education would not exist. German surgery since Hitler came to power has been practically sterile.

Those in America who, because of the wide expanse of the Atlantic Ocean, feel secure against the possibility of a successful Nazi military invasion may think that it is of little concern to us here whether or not Europe adopts the Nazi ideology. But I cannot agree with that opinion. It is admitted probably by everybody that if Hitler is victorious in the European conflict it will be necessary for the United States to remain on a war footing indefinitely. This will mean not only a large army and navy but large taxes also. We have become accustomed to depend on private benefactions for much of the support of our universities and hospitals. It is common knowledge, frequently expressed, that already the reduction of private contributions has seriously handicapped many of our institutions. If those contributions become still less because of higher and higher taxes for the support of a huge preparedness program, radical changes in the whole scheme of higher education and of the support of scientific research will probably be necessary. It seems hardly possible that either education or

research would be supported on the same generous scale if that support were dependent largely on government grants. Certainly much of the freedom to which we have long been accustomed in the privately supported institution would be curtailed with all the restraints, delays, and red tape necessitated by dealing with government clerks.

More important though might be the spread of the demoralizing Nazi theories of education to this side of the Atlantic which might be accepted under the impulse of necessity in competition even if they were considered undesirable. As long as three years ago reports from Germany indicated that the medical course had been shortened by a year and a half because of the demand for more medical officers in the Army. Is it inconceivable that such pressure might be made in this country for a shorter and "more practical" training if we are forced to stay indefinitely on a war basis? The close integration of the world which has been brought about by modern transportation and communication has made it difficult even for an educational system of one country to be uninfluenced by that of another strong and dominating nation.

That science knows no political boundaries is a common remark. An idea expressed in one country is elaborated in a second and built upon in a third to emerge as something practical and perhaps utilitarian. Great accomplishments are necessarily the products of many minds and hands. Surgical science in its development has been no exception to this rule. The evolution of modern surgery has been the work of all the enlightened peoples of the world, and the chief contributions to it have been made by those who have lived in atmospheres of the greatest intellectual freedom. If Europe continues to live in slavery and the rest of the world becomes an armed camp there will be little prospect of any notable advance in any of the sciences or cultural activities even on this side of the Atlantic.

At a time like this when international hatreds are strongly aroused it is well to recall some of the epoch-making contributions which have served to create our modern surgery. Although it is difficult, if not impossible, to date the beginning of any great movement, to say who actually started it, it seems reasonable to state that the birth of the modern scientific spirit of surgery can be traced more definitely to the immortal Englishman, John Hunter, than to any other individual. Before his time, and for that matter during his life (1729-1793), there was no experimental approach to surgical problems and no accurate knowledge of the pathological conditions present. Surgical operations for the most part consisted of amputations, the opening of abscesses, and the removal of superficial tumors. Hunter, however, by his resort to the experimental method, his careful study of pathological specimens, his observations on comparative anatomy and on

embryology established a scientific basis without which the surgery of the present day could not have developed. While Hunter was inaugurating the new sciences of experimental pathology and experimental surgery in England the army surgeon in Germany, according to Garrison, was still being called *Feldscherer* because it was his duty to shave the officers.

To Great Britain, of course, also must go the credit of creating the anti-septic principle in surgery, carried to a revolutionary success by Lister, but later modified by the German, von Bergmann, into the technique of the present day asepsis. Lister's discovery, as everyone knows, made it possible for the first time to perform an operation on a patient without the previous fear of wound infection. The tremendous practical value of that work is likely to overshadow its other aspects. To me, however, some of those other aspects are of the greatest importance. Lister was a man of the same mental stripe as John Hunter. He was both a logical thinker and an experimentalist. From experiments which ran over a period of about twelve years he reached certain tantalizing conclusions about the nature of wound infection but he was unable to go further on his own knowledge. For example he had concluded that: (1) putrefaction caused suppuration, and wound infection did not occur without suppuration; (2) suppuration (decomposition) was in some manner caused by the presence of air; (3) the gases in the air were not responsible. What could it be in the air that was responsible, if not the gases? In 1865 his colleague at the University of Glasgow, Dr. Thomas Anderson, the professor of chemistry, called his attention to the papers of Pasteur on fermentation and putrefaction. Now he found the answer to his question. This to my mind is a splendid example not only of the interdependence of one nation upon another in science but of the interdependence of one science upon another. Was it not a revolutionary idea in itself at the time that a surgeon could receive help from a chemist on a "practical" problem like the healing of a wound?

Another major British contribution to the development of modern surgery has been the part played by the trained nurse. It seems doubtful to me that the art of surgery could have reached its present high plane without the sympathetic devotion to the patient and the careful attention to details which can be given only by intelligent women. The fact that Florence Nightingale and Joseph Lister were contemporaries has been of the greatest importance to us.

Germany through the influence of its great universities on medicine during especially the latter half of the nineteenth century and in the present century until the World War did much to extend the development of the scientific spirit in surgery. The older members of this audience will recall how eagerly the German surgical journals were read before the World

War to learn of the latest developments in both the art and science of our profession and with what authority we at least in this country considered the German masters to speak. In looking back now, however, to the period nearly thirty years ago when German surgery was at its peak it would seem that what inspired us and fascinated us most was the spirit of scientific inquiry which was developed in that country to a greater degree than in any other up to that time. The best German university surgical clinics were centers of experimental investigation and were influenced by, at the same time as they themselves were influencing, other medical sciences, notably physiology and pathology. With the advent of antiseptic and aseptic surgery the German and Austrian surgeons seized eagerly upon the opportunity to extend the occasional previous attempts to explore the possibilities of abdominal surgery. As a result particularly of the work of Billroth and his distinguished pupils, notably Mikulicz, Czerny, Woelfler, Gersuny, and von Eiselsberg, visceral surgery was added to the field of the surgery of the extremities. Billroth, however, made another important contribution, namely, a plan to educate young men to be surgeons comparable to or even to excel the "chief." It seems strange to us that the idea was so late in being proposed. Yet outside of the German and Austrian universities it was slow to take root. Even the great Lister had no disciples of the sort who were trained and developed in the well known surgical clinics of Germany and Austria.

In spite of the development of the science of surgery to a high degree in Germany, no individual giants arose comparable in stature to John Hunter or Lister. Contributions of others who were not surgeons, however, did greatly influence the science and art of surgery perhaps as profoundly as those of Hunter and Lister. I refer especially to the contribution of the x-ray by Roentgen and to the development of the new bacteriology by Robert Koch.

The United States has had an important share in the development of modern surgery. It is customary to say that our greatest contribution has been surgical anesthesia. There can be no question that this was of the first magnitude, ranking with Lister's antiseptics as one of the principal foundations upon which modern surgery was erected. Yet it seems to me there have been other American contributions almost, if not quite, as noteworthy, although less dramatic.

The elaboration of the nature of and the present treatment of surgical shock has been largely accomplished by Americans, although no single name in this connection stands out so prominently as with each of the other epochal discoveries previously mentioned. Until the beginning of this century only the haziest of ideas existed among the surgeons of the world as

to the nature of this serious and frequent complication of severe injuries and of major operations. Crile's researches published in 1899, although not the first, and although later shown to be partly wrong in their conclusion, nevertheless focused the attention of surgeons on this subject and had great influence in arousing their interest. The more recent work of the American surgeons, Blalock, Phemister, Scudder, and others has added greatly to our knowledge of the fundamental mechanism of the production of shock. The contribution of Lewisohn of the harmlessness of the transfusion of citrated blood furnished a practical method for the better treatment of shock. The most recent development of using dried plasma instead of whole blood has been chiefly made by workers on this side of the Atlantic. The first experimental use of it for this purpose was by Bond and Wright of the University of Pennsylvania in 1938. As a result largely of the American contributions to this subject, a danger ever present in serious operations which is scarcely less important than that of infection has been practically banished from modern operating rooms.

As a sort of corollary to both the principles of the prevention of wound infection and the protection of the patient against surgical shock there stands the necessity of the gentle handling of tissues in order to accomplish a healing of the wound as nearly perfect as possible. To Halsted of Baltimore no less than to his Swiss contemporary, Kocher, belongs the credit of the passing of the rough and ready slapdash surgery which was prevalent a generation ago. Americans who had come under the influence of the careful, painstaking, deliberate, and almost bloodless operating technique of Halsted were usually amazed when visiting the well known German surgical clinics of the time to see the surgeons wearing rubber boots, the disregard of hemorrhage, the rough handling of the tissues, the careless closure of the wounds, and the shocking anesthesia. These sights usually made an indelible impression that the German surgeons, although perhaps greatly interested in the science of surgery, had failed to cultivate its art.

In order that the public may profit by developments in any science it is necessary of course that those developments should be placed at the disposal of a large number of people. The important surgical advances which were rapidly developed after the advent of Listerism would have been of very little use to the general public if there had not been a considerable body of surgeons trained to make use of them. The system of training young surgeons put into effect by Halsted at the Johns Hopkins Hospital, the so-called graded resident system, appeals to us Americans as being in principle the best method yet proposed. The fact that it is being used extensively in this country and elsewhere has been of incalculable value in raising the general level of surgical practice.

There must not only be well trained surgeons to carry the new developments of our profession to the public but there must also be facilities for the use of those developments. The United States and Canada have been leaders in the creation of a sort of hospital which until very recent years was unknown in those countries which followed European customs. The idea that the hospital is an institution for only the poor has been prevalent for centuries in Europe. As modern medicine developed, necessitating complicated apparatus and equipment for diagnosis and treatment, the remark was frequently made by our European colleagues that the middle class and the rich, who were taken care of either in their own homes or in the institutions known as nursing homes, were denied the medical care received by the poor. The North American idea, however, fortunately for us and for our patients, has been that a hospital could serve all classes in the community. Long ago surgeons here stopped performing major operations in the patient's homes except in isolated instances. There is no country in the world in which good hospital care is so rapidly available for all classes of patients as it is in the United States and Canada. But it was not always so. Some hospitals would like to cut corners by all sorts of economies which might make them unsafe for the surgical care of unsuspecting patients by even well trained surgeons. It is necessary to compel such institutions to live up to certain standards if they wish to maintain their good reputation with the public. The hospital standardization program carried out by the American College of Surgeons for nearly twenty-five years under the very able leadership of Dr. Malcolm MacEachern has been unique. No other organization in the world has performed the same function. Its influence in maintaining a high standard of surgical practice in North America has been incalculable. Perhaps it would be no exaggeration to say that the hospital standardization program has been no less powerful than the trained nurse in carrying the benefits of modern surgery to the general public.

My purpose in mentioning some of the outstanding developments which have created what we know as modern surgery has been to emphasize its internationality, rather than to attempt to give a brief historical review. I have, therefore, omitted many important discoveries and contributions which others might think deserve to be mentioned in a discussion of the parts which the leading countries of the world have had in establishing the science and art of our profession.

It is unthinkable that this structure so laboriously created should be destroyed, but to preserve it will almost certainly be the responsibility and obligation of those of us who live on this side of the Atlantic at least until such time as the world has recovered from the exhaustion which will follow the struggles for the crushing of Hitlerism. From force of circumstances

the surgical world will surely look to America for leadership. We must be prepared to accept that responsibility.

Although surgery is international in its scope, its development in different countries has been characterized by differences of emphasis and by differences in point of view which have resulted in a more or less distinctive and characteristic quality of the surgery in the principal nations. Thus, for example, British surgery in many respects differs from our own and the German surgery. Likewise, American surgery differs from the German. There is, of course, nothing surprising in this fact. Each of the three nations mentioned has a different culture and different traditions, and distinguishing features can be recognized in many intellectual activities, as in their methods of general education, in their music, their art, their architecture and so on.

Our own surgery more closely resembles that of the British than any other. The differences are somewhat intangible and difficult to describe; yet they are apparent. They can perhaps best be summarized by stating that we are more theoretical and less practically minded. We are a younger nation and, therefore, less conservative. The British surgeon is a master clinician in the application of the older art of physical examination to diagnosis and he is unexcelled in technical operative skill. He has carried on splendidly the tradition of anatomy as the foundation stone of surgery. We Americans, on the other hand, as a result of the changes in our undergraduate medical curriculum, have almost forsaken the gods of our fathers, anatomy and pathology. We have been seduced by the newer and more alluring gods of physiology and biochemistry. We have become more interested in function than in structure. It has been an amazing revelation to the American Board of Surgery to find that a generation of young surgeons has grown up whose ignorance of the anatomy and of the pathology of the structures with which they are dealing is abysmal. The wonder is that such men can be doing as good surgery as they undoubtedly are doing. Although the revelation shakes one's faith somewhat in the necessity of a sound knowledge of anatomy and pathology, nevertheless, it is difficult to believe that these same men would not be doing much better surgery if they did have a sounder knowledge of those subjects.

It is probably an inevitable characteristic of a young rapidly developing nation to become ambitious to equal or to excell the accomplishments of older nations. The spirit of inquiry and of experimental research prevalent in the better German clinics before the First World War found favorable soil on this continent when it was transplanted here by many young men who saw in the rapidly developing sciences of physiology and chemistry many applications to clinical problems. It is not surprising, therefore, that

the stream of publications appearing in the German journals had a profound influence on American surgeons. Moreover this influence came at a time when we in this country were most able to take advantage of it. From the beginning of this century on, more and more opportunities were presented to young men to undertake original experimental work. After the great awakening and the revolution in medical education which followed the publication of the Flexner report in 1910, together with the work of the Council on Medical Education of the American Medical Association, these opportunities were greatly multiplied. Experimental investigation and the spirit of scientific inquiry became glorified. The older, more drab and less fertile disciplines of anatomy and pathology became seemingly of less importance to the ambitious young surgeon. His desire was to startle the world with a new and important discovery. Not much chance of doing that in the intensively cultivated and exhausted soils of anatomy and pathology. The urge to get into print to make his name known obsessed every young surgeon who was ambitious to get along. Positions of prestige and influence were often filled on a basis of the candidate's publications more than on any other qualification. Sometimes the list would be regarded as more imposing if the number of the published articles exceeded those of the rival candidate, without a sufficient regard for their quality. Is it any wonder then that this urge for recognition resulted in a dimming of the lights of anatomy, pathology, and the old established methods of physical examination of the patient?

One of the American characteristics most frequently noted by foreigners is our tendency to undertake a new project or to accept a new idea with the utmost vigor and enthusiasm. Our acceptance of the value of the spirit of research in medicine was no exception. The movement in this country developed into a veritable surge, and large numbers of young men crowded into the research laboratories to find out something new. The printing presses were overworked to publish the volumes of work produced and scores of new medical journals appeared. There was little excuse for any Milton to be mute and inglorious. It was to be expected that most of the ambitious young investigators would be unfitted by nature to startle the world with any epoch-making discovery. On the other hand some, yes even some of the young surgeons, have made very important fundamental contributions to our knowledge not only of physiology, both normal and abnormal, but even of pathology and of the forsaken subject anatomy, especially the anatomy of the nervous system. Others have added smaller stones to the building of our edifice. The spirit of research overflowed from this country into neighboring countries and back to Europe. With the benefactions of the Rockefeller Foundation distributed throughout the world there was



scarcely a civilized country in which the spark of original investigation was not kindled into flame if it existed at all. Never before in the history of the world has there been anything remotely approaching the flood of scientific discoveries which has occurred in the last twenty years. Perhaps there will never be another period like it. In any case there is bound to be a recession of the wave. Almost certainly this recession has already begun. In all those parts of the world touched by the withering hand of Nazism research activities are impossible. England and Russia are handicapped by their struggle for existence. Only the nations of North and South America are so far free to carry on the spirit of research, and one wonders how long can this go on. Historians often have pointed out the wavelike character of the great cultural advances. During a relatively short period of time enormous progress is made, to be followed by a long period of relative inactivity or actual recession. Notable examples are the so-called Age of Pericles, the Alexandrian Period, and the Elizabethan Era. In view of the present chaotic conditions of the world, it would seem to require much optimism to assume that the period of unprecedented scientific advance through which we have just passed will continue with undiminished tempo.

Along with the recent period of enormous research activity there has been an immense improvement in the quality not only of the best but also of the average surgery practiced in this country. Better medical schools, more and better facilities for a long term specialized education of the young surgeon, more widely distributed well equipped hospitals have all had an incalculable effect in making good surgery available for the mass of the population. The high standards set for certification by the specialty boards have been a very stimulating influence in keeping the practice of the various surgical specialties on a high level. The development of group practice brought to a remarkable state of efficiency by the Mayo Clinic and emulated by many other clinics has also been a factor in improving surgical practice.

The influence of the American College of Surgeons has carried much weight in improving the average surgical practice throughout the country. Its splendid work in improving the hospitals of the United States and Canada has already been mentioned. Also important have been its recently increased standards of admission to fellowship, the work of its recently appointed committee on graduate education, its official journal, and its annual meetings where the surgeon out of touch with the medical centers of the country can come to learn of the new developments in surgery.

At the meeting this year an innovation in the program was made. The Forum on Fundamental Surgical Problems was created. This symposium of ninety short presentations of experimental work on surgical problems was arranged largely by the efforts of Dr. Owen H. Wangensteen. It can

almost certainly be said without fear of denial that never before at any surgical meeting in any country has there been a program presenting so much original work, mostly by younger investigators. It constitutes, therefore, a unique event. Moreover, it represents, it seems to me, one of the chief characteristics of modern American surgery, the spirit of inquiry and the utilization of all the sciences for the solution of surgical problems. It is a characteristic of which we American surgeons can justifiably be proud. It removes surgery from the realm of mere craftsmanship and translates it into a science. It is this experimental attack which constitutes the front line of surgery. Does not this program show that the spirit of the immortal John Hunter still survives? His memorable words to Jenner should be recalled, "I think your solution is just; but why think? Why not try the experiment?"

In the foregoing remarks an attempt has been made to emphasize the fact that the development of modern surgery has been due to important contributions from several nations but yet that the practice of surgery has certain national characteristics which make it different in different countries. Reasons have been advanced for assuming that the recent unprecedented period of scientific progress is certain to be checked, if it has not already been, regardless of the outcome of the war. A Nazi victory, however, will mean almost certainly for a time a more or less complete destruction of the scientific spirit throughout the world. It has been emphasized that attempts to preserve our present high standards and to carry forward the light of progress will fall most heavily on those of us who live in the Americas, South as well as North.

Let us now briefly consider some of the ways by which these standards can be preserved. I should say that it is of the utmost importance that the surgeons of North America and of Latin America come to know each other better and to develop a spirit of more sympathetic mutual understanding. The surgery that is being practiced in the centers of Latin America is not excelled anywhere, and an increasing volume of original work of very high order is being produced. The knowledge of this work has been only slowly diffused in North America because of difficulties in language. Likewise, for the same reason, our surgery has not been so well known to our southern neighbors as the continental surgery. Would not a regularly meeting Pan-American surgical congress with the cooperation of the American College of Surgeons provide a stimulating and helpful influence in preserving and fostering the spirit of surgical progress at least on this side of the Atlantic while Europe is recovering from the disaster of war? By meeting in different countries and at stated times, either annually or less often, there would certainly arise an inspiration from personal con-

tact and from developing friendships and respects among those most actively engaged in the advance and practice of our profession. More of us North Americans would come to possess a knowledge of Spanish and Portuguese, and more of the South Americans, English. There would be a freer interchange of medical literature, of ideas, and of students. The American College of Surgeons already has a membership of 225 from Latin America. It could well be more nearly representative of all the Americas, both in membership and in its governing bodies, so that truly it would be an all embracing American College of Surgeons, thoroughly international in its point of view and administration. This suggestion may seem too radical, but we must be prepared to make radical moves if we wish to counteract the results of the swiftly moving tragedy in Europe.

In a discussion of the preservation of our highly developed modern surgery, it is necessary to touch upon our duties and obligations to the armed forces of our country in a program of preparedness for war. The Army particularly, and to a less extent the Navy, need more medical officers. We must do all in our power to provide them during the acute emergency. In striving to preserve our programs of training young surgeons we must not hamper the agencies of our government whose defeat would mean the destruction of our national independence. On the other hand, the armed forces should not unnecessarily and ruthlessly interfere with our laboriously developed system of training. Enough of it must be safeguarded to prevent too great a recession from our present standards. I am pleased to say here, to the credit of the wisdom of Surgeon General Magee of the Army and of Surgeon General McIntire of the Navy, that every effort has been made to interfere as little as possible with the training programs. Possibly a plan may be worked out whereby the young medical officers, after a limited service, can be released to finish their periods of training in the civilian hospitals.

Possibly greater dangers to the safety of our resident system will come from the governing bodies of our civilian hospitals when the specter of hard times leers at them. We must, however, hold fast to the principle of the system, even if some modifications become necessary. We must not forget that surgery is a science as well as an art and must constantly advance. Above all, to be true to our profession, we must remember that the practice of surgery is based on humanitarian principles. Come what may, we shall not subscribe to the philosophy of the supremacy of brute force.

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## Report of Conferences

### PATHOLOGY

REPORTED BY DR. EDWARD SMITH

#### Miliary Tuberculosis

History No. 92712: A 46 year old negro janitor entered the Barnes Hospital on October 10, 1941 complaining of slight fever, headache, loss of appetite, weakness and loss of twenty pounds in weight. The patient dated the onset of the illness from immediately after an injection of typhoid vaccine one month previous. He had worked until shortly before admission despite his weakness. The family history and past histories were irrelevant. Systemic review revealed only that the patient had had nocturia six or seven times nightly during the present illness.

Upon admission the temperature was 38.5 degrees centigrade, the pulse was 100 per minute and the respiratory rate was 20 per minute. The patient was thin, muscular, and listless. The neck was not stiff. The lymph nodes generally were slightly enlarged. The chest and heart were essentially normal. The blood pressure was 115/80. The abdomen and extremities were normal.

Laboratory data: There were 5,000,000 red blood cells per cubic millimeter of blood and 15 grams of hemoglobin per 100 cubic centimeters of blood. The white blood cell count was 3,280 per cubic millimeter. The differential count was: eosinophils—3%, basophils—1%, juvenile cells—4%, stab cells—35%, segmented neutrophils—27%, lymphocytes—22%, and monocytes—8%. The urine and feces were negative upon examination including culture for pathogenic bacteria. The blood serum did not agglutinate the organisms of typhoid fever, paratyphoid fever, brucellosis or tularemia. A lumbar puncture was done and the initial pressure was 190 millimeters of water with normal dynamics. Examination of the spinal fluid showed an anti-complimentary Wasserman reaction, a total protein content of 101 milligrams per cent, a sugar content of 52 milligrams percent, and a negative Pandy test. In the spinal fluid were 50 lymphocytes per cubic millimeter.

The headache became worse and the neck became stiff. A second lumbar puncture on the fourth hospital day showed 80 lymphocytes per cubic millimeter of spinal fluid, an increasing content of protein to 254 milligrams percent, and a decreasing sugar content of 33 milligrams percent. There was no pellicle on the spinal fluid after standing. A Guinea pig was injected subcutaneously with a sample of the spinal fluid. An X-ray film

of the chest showed many regularly and diffusely scattered, small, fairly soft shadows throughout both lung fields.

In the last few days before death the patient became stuporous and irrational. Except for the stiff neck and for ptosis of the right eyelid there were no positive neurological signs. The temperature and pulse remained high and the patient died on November 20, 1941 after sixteen hospital days.

The guinea pig which was inoculated with cerebrospinal fluid was reported positive for tuberculosis.

W. U. Autopsy No. 9458: In the upper lobe of the left lung was a calcified nodule 4 millimeters in diameter and diffusely scattered throughout all lobes were soft, gray nodules 1 to 2 millimeters in diameter. Throughout the liver, spleen and both kidneys were similar but fewer gray nodules. The lateral lobes of the prostate were soft, gray and caseous. Similar caseous material was present in the lymph nodes of the mesentery and in the lymph nodes along the lumbar portion of the spinal column. There were nodules 1 millimeter in diameter in the arachnoid over the brain, most numerous over the base of the brain where there was also a small amount of thick gray exudate in the subarachnoidal space. Microscopically the nodules in the lungs, liver, spleen, and kidneys were composed of a small center of necrotic material surrounded by a zone of radiating epithelioid cells mixed with lymphocytes and fibroblasts. An occasional Langhan's type of giant cell was present in the zone or in the center. The caseous material of the prostate gland, epididymis and lymph nodes was surrounded by the same type of tuberculous granulation tissue. The brain showed tuberculosis meningitis over the vertex as well as over the base. Acid fast bacilli were found in the nodules in the lungs.

Discussion: Miliary tuberculosis is most common among members of the lower age groups. However, the occurrence in older individuals is not rare. In this case the calcified nodule in the lung is evidence of previous contact with the tubercle bacillus and shows that the patient had controlled his first infection in that particular focus. The presence of active fibrocaseous foci in the prostate, epididymis and abdominal lymph nodes suggests a clinically quiescent disease which may have been a part of the first infection or may have been acquired subsequently. Tuberculosis of the prostate or epididymis has never been recognized as a solitary primary focus of tuberculosis and is regarded here as part of the disease beginning long before the hematogenous dissemination of the organism. The miliary tuberculosis which was clinically the outstanding part of the disease probably arose recently as the result of any or several of the caseous foci breaking into the blood stream.

### Chloroma

History No. 1078. An 8 year old white boy entered the St. Louis Children's Hospital on June 1, 1941. The child had complained of weakness and loss of weight for several weeks. In another hospital two weeks before admission to the St. Louis Children's Hospital, a physical examination had revealed a subcutaneous nodule about one centimeter in diameter located two centimeters lateral to the outer canthus of the right eye. After biopsy the nodule had decreased in size in response to therapy with radium. Upon admission to the Children's Hospital the child was weak and pale and showed an area of sloughing lateral to the right eye. Above the eye was a firm fixed subcutaneous nodule 5 millimeters in diameter. The liver and spleen were both moderately enlarged to palpation. The patient was alert, oriented and cooperative but showed a complete paralysis of the right side of the face. The tongue deviated to the right when protruded and there was complete absence of the superficial abdominal and cremasteric reflexes. The knee jerks and ankle jerks were absent and there was no response to stimulation of the soles of the feet. Below the level of the fifth dorsal vertebra there was a marked disturbance of sensation.

Laboratory: The white blood cell count was 10,350 cells per cubic millimeter and the cells were predominately of the immature and blast cell type. There were 3,000,000 red blood cells per cubic millimeter of blood and 8 grams of hemoglobin per 100 cubic centimeters of blood. There was a marked diminution in the number of platlets in the blood. Studies of the sternal bone marrow obtained by aspiration showed an abnormal predominance of blast cells interpreted as being of the myeloid series. A review of the original biopsy from the right temple and consideration of the studies of the peripheral blood and sternal bone marrow confirmed the diagnosis of myelogenous leukemia of the chloromatous type.

Treatment, consisting of the administration of bone marrow extracts and estrogenic substances, brought about no beneficial change in the course of the patient. The blood picture remained essentially the same over the five week course in the hospital. In the last three weeks the paralysis extended to include the entire lower half of the body. There was loss of control of the sphincters of the urinary bladder and anus and after repeated catheterization the urine contained pus and blood cells. The patient died July 11, 1941 after several days of high fever and stupor.

W. U. Autopsy No. 9296: Scattered beneath the pale skin of the entire body and on the serous surfaces within the body were many petechiae and ecchymoses. The bone marrow of all bones was soft and was red with a green tint. The spleen was moderately enlarged, weighing 280 grams, was purplish red and moderately firm. The Malphigian corpuscles of the spleen

were of usual prominence. The lymph nodes throughout the body were large, soft and greenish pink. In the epidural tissue and in the dura mater around the spinal cord in the region between the levels of the fifth and eighth dorsal vertebrae was tissue which was greenish gray and moderately soft. This tissue surrounded the nerve roots and compressed the spinal cord by filling and distending the epidural space. There were small masses of similar greenish-gray tissue beneath the epicardium, scattered in the kidneys and in the wall of the urinary bladder. The lungs showed multiple abscesses and fibrinous pleurisy. The heart muscle contained a small abscess and there was a subacute fibrinous pericarditis. The lining of the urinary bladder was necrotic and hemorrhagic.

Microscopically the bone marrow showed rare elements of normal marrow and was composed predominantly of immature cells of the myeloid series. The cells were larger than ordinary neutrophilic leucocytes and had large round or oval, moderate staining basophilic nuclei with clumps of chromatin tending to be peripherally arranged. The cytoplasm was faintly acidophilic, was less abundant in amount than the nucleus, and showed no granules. The same type of cells infiltrated the spleen and lymph nodes but did not destroy the general architecture of these organs. The immature cells formed the nodules in the kidneys, urinary bladder and heart, as well as forming the masses in the epidural space. The spinal cord showed gross and microscopic necrosis at the levels of the fifth and sixth thoracic segments. The brain was not examined.

Anatomical diagnosis: Myeloid leukemia of the chloromatous type; Leukemic infiltration of the spleen, lymph nodes, kidneys, heart and urinary bladder; chloroma involving the dura mater of the fifth, sixth, seventh, and eighth thoracic segments of the spinal cord; Myelomalacia of the fifth and sixth dorsal segments of the spinal cord; Necrotizing cystitis. Hemolytic staphylococcus aureus was grown aerobically and anaerobically from cultures of the heart's blood and from cultures of the abscesses in the lungs.

Discussion: Myeloid leukemia, a disease primary in the bone marrow, is usually manifest clinically as a result of changes in the blood and blood-forming tissues. In a few cases, however, leukemic cells are present as masses which press upon surrounding organs. The common sites for such masses are in the periosteum of the orbit and the dura mater of the cranium and spinal canal. The parenchymatous organs may also be involved. The case presented above is an example of the effects of the space consuming chloroma in the spinal canal. The abscesses in the lungs and heart are an example of the infections to which patients with leukemia are vulnerable. The paucity of normal cells for defense allows widespread invasion and destruction by such omnipresent organisms as staphylococci.

**PEDIATRICS**

REPORTED BY DR. HENRY L. BARNETT, '38

**Capillary Bronchitis in Infancy**

A two year old white male infant was admitted to the Children's Hospital on March 10, 1942 because of an acute illness of two days duration characterized by fever, cough, and rapid respiration. The onset of the illness had not been abrupt, but had gradually developed following four or five days of general indisposition with rhinitis, anorexia, and malaise. Physical examination on admission revealed an acutely ill-looking child. The temperature was 38° C. There was a suggestion of cyanosis of the nailbeds but the color of the mucous membranes was good. The most striking feature in the appearance of the child was the character of the respirations, which were exceedingly rapid. There was marked dyspnea. There were signs of a diffuse infection of the upper respiratory tract and of a bilateral otitis media. The chest appeared to be in a position of full inspiration and percussion showed a slightly hyperresonant note. Auscultation revealed diminished air entry throughout with a prolongation of the expiratory phase of respiration and with showers of subcrepitant rales mixed with coarser moist rales. Fluoroscopy showed bright lung fields with no areas of consolidation. The patient was placed in a steam room; given parenteral fluids; and allowed to breathe a 30 per cent carbon dioxide mixture five minutes out of every hour. He was given an initial intravenous dose of 2 cc. per kilogram body weight of 5 per cent sodium sulfadiazine, following which he received 0.05 gram per kilogram of sulfadiazine every six hours. Pneumococci were recovered from the sputum; the blood culture was negative. The child remained acutely ill for three days following which there was gradual improvement in his condition associated with a gradual fall in temperature.

Discussion: The treatment of infants and children who have, as a major element in their disease, obstruction of the tracheobronchial tree by thick, tenacious secretions occupies an important place in pediatrics because it is frequently encountered in a variety of serious conditions. Important among these is the disease usually termed capillary bronchitis, most of the symptoms and findings of which are included in the case presented. It is called by a variety of names but it is characterized by an inflammation of the smallest ramifications of the bronchial tree with plugging of these capillary bronchioles by tenacious secretion. It usually occurs in infants. In these infants, as well as in older children, it may be associated with a laryngotracheitis, in which there is laryngeal obstruction in addition to the lower type of bronchial obstruction. It is also a serious component of the dis-



ease entity associated with cystic fibrosis of the pancreas, and its plays an important part in the production of symptoms in pertussis.

The treatment of this type of bronchial obstruction has logically been directed toward efforts to liquify the secretions. If successful, this is followed by dislodgement of the inspissated plugs, drainage of the obstructing secretion, and aeration of the affected portion of the lung. In this effort to increase endobronchial drainage, three methods have become recognized as useful. A commonly used means consists of the administration of expectorants. The liberal administration of parenteral fluids to insure hydration of the patient and maintaining a high humidity in the atmosphere about the patient by the means of steam have appeared clinically to be most important in this phase of the treatment.

The effect of these and of other procedures on the character of the secretions has recently been subjected to extensive study by Basch, Holinger, and Poncher (*Am. J. Dis. Child.*, 62: 981-990, Nov. 1941; *Ibid*: 1149-1171, Dec. 1941). Studying the chemical and particularly the physical property of viscosity of the sputum, they found that the expectorant drugs liquify the sputum consistently, as was evidenced by a decrease in the measured viscosity. Inhalations of carbon dioxide serve as a most efficient expectorant. The most efficient therapeutic regime which may be initiated to clear the bronchial tree of its pathologic secretions was found to be a combination of inhalations of carbon dioxide and steam and the administration of expectorant drugs.

One further point in their investigation may be of practical importance. Oxygen has long been used in such cases whenever cyanosis was present. Studying oxygen in the same manner as above, they found that it increases the viscosity of the sputum most markedly and consequently may be regarded as an antiexpectorant. The addition of 5 per cent carbon dioxide to oxygen inhalations does not compensate for this action of oxygen. They believe that these results must be carefully considered when oxygen is to be employed therapeutically in such cases.

From their study it would appear that inhalations of carbon dioxide should be added to the measures previously employed in the treatment of bronchial obstruction due to tenacious secretions. In addition it may be advisable to limit the use of oxygen to those cases in which the cyanosis is marked and to combine it in those cases with all of the means known to liquefy the secretions.

The bacterial organisms (or possibly virus) mainly responsible for such infections is always difficult to determine. Pathogenic organisms, particularly pneumococci, streptococci, staphylococci, and *Hemophilus influenzae* are recovered from a large enough percentage of the cases, however, to make

the administration of one of the sulfonamide drugs seem advisable. Although the results obtained with the sulfonamides is not as prompt as in most conditions in which they are known to be efficacious, the observed and reported decrease in the mortality in such cases with the administration of these drugs would further tend to indicate their use. Because the exact organism cannot often be determined early, and particularly because it may often be a mixed infection, the drug of broadest coverage is preferable. Of the drugs available at present, sulfadiazine would appear to be the drug of choice in such infections, and should be given as early as possible in the course of the infection and in full dosages.

### MEDICINE

REPORTED BY DR. EDWARD H. REINHARD, '39

#### Diseases Incident to the Bite of a Rat

Three patients from the Homer Phillips Hospital were presented. All of them gave a history of having been bitten by a rat prior to the onset of their symptoms.

Case 1. A 17 year old negro male was admitted to the hospital 24 hours after being bitten on the left hand by a rat. The following day the site of the bite was swollen, red, and painful. Temperature on admission to the hospital was 37.6° C. Diagnosis was non-specific infection of a bite-wound. Treatment consisted of hot packs. Recovery was progressive and was complete in 5 days.

Case 2. C. E., a 65 year old married negress, was awakened from her sleep on the night of Oct. 26, 1941 by a burning, stinging sensation in her right upper eyelid. Just as she opened her eyes she saw a rat jump off the bed. On getting up she noticed that there was a small abrasion on the eyelid. Mercurochrome and carbolated vaseline were applied and the wound healed promptly and apparently completely. Fifteen days later she noticed a purplish discoloration at the site of the bite. About this same time she noticed general malaise, weakness, chilly sensations, and anorexia. During the next 24 hours she felt progressively worse and the swollen area on her eyelid became larger and more painful, finally breaking down to form an ulcer with profuse foul discharge. Soon the whole right side of her face was markedly swollen; the eyelids being swollen shut. The patient was admitted to the hospital 4 days after the onset of these symptoms.

Examination revealed an elderly, obese negress. Temperature 39° C., pulse 110, respiration 26. The whole right side of the face was considerably swollen. On the right upper eyelid there was an indurated ulceration

measuring 1.5 cm. in diameter and covered by a dark brown crust. Surrounding this crusted ulcer was an area of purplish discoloration extending out about 2 cm. Swelling of the surrounding tissues was such that the eye was completely closed, but on opening the eye with the fingers a mild conjunctivitis was noted. The lips were dry and parched. The anterior and posterior cervical lymph nodes on the right side were enlarged and tender. There was a faint systolic murmur heard over the entire precordium. The remainder of the physical examination was negative.

Laboratory data: The blood and urine were normal. The Kahn test was negative. The N. P. N. was 24 mg% and icterus index was 5. Routine agglutinations were negative. The ulcer on the eyelid had healed so that no serum could be expressed for darkfield examination. Darkfield examination of the blood revealed no spirochetes.

Diagnosis: Rate Bite Fever. The incubation period, symptoms, and physical findings were all characteristic of this disease and failure to find the spirochete was due to fact that the ulcer had healed. Twenty-four hours after admission to the hospital the patient began to sweat profusely and temperature dropped by lysis. The swelling of eyelid and face promptly subsided and she remained well thereafter. Treatment was symptomatic throughout. There were no further paroxysms of fever and local inflammation such as frequently occur.

Case 3. F. D., a 27 year old negro laborer, was washing his hands in his back yard on Oct. 20, 1941 when a rat ran up his right leg and bit him on the thigh. He crushed the rat to death and on shaking the body out of his trousers noted that the rat's mouth was bloody and one tooth had been knocked out. Presumably the bite on the patient's thigh was also contaminated with the rat's urine. The bite healed over and the patient felt perfectly well until 4 days later when he suddenly had a shaking chill alternating with fever. He began to "hurt all over" and developed a severe headache. Anything he took by mouth was promptly vomited. He developed a slight cough productive of a small amount of mucoid sputum and began to have slight pain under the lower part of the sternum on breathing. Five or six days after the onset of these acute symptoms he began to feel better but noted for the first time that the whites of his eyes were yellow. At about the same time his urine became dark yellow. Two days after the onset of jaundice he was admitted to the hospital.

Examination revealed a well developed young negro with a small completely healed wound on the right anterior thigh. The inguinal lymph nodes were enlarged bilaterally but more so on the right. There were 6 small vesicles on the lips and several of these were hemorrhagic. The heart, lungs, and abdomen were negative. The liver was not palpable.

Laboratory data: W. B. C., 8000; R. B. C., 2,600,000; Hemoglobin 9.3 gm.; differential normal except that the red cells were pale with many target cells present. The urine was deep yellow in color and microscopically many clumps of yellow pigment could be seen. Gmelin's test for bile pigment was positive and Erlich's test for urobilinogen was positive up to a dilution of 1:30. Darkfield examination of the blood revealed one spirochete with tightly wound coils and pointed ends. Unfortunately no other spirochetes could be found and subsequent examinations were negative. A week after admission (patient was then clinically well) specimens of both blood and urinary sediment were injected intraperitoneally into guinea pigs. Animals did not become sick and on autopsy 10 days later no spirochetes were found in the livers. Antigen was not available for agglutination test.

Diagnosis: Weil's disease. Recovery was uneventful and there was no after fever.

Discussion: These three cases were all seen within a period of two months. They are of interest in that they illustrate the only three diseases commonly occurring as the result of a rat bite in this part of the world. It should be noted that almost if not all cases of Weil's disease reported in this country have resulted from contact with water contaminated with rat urine (bathers, sewer workers, etc.). Our case followed a rat bite but, as pointed out in the history, the bite was probably contaminated with rat urine.

## UROLOGY

REPORTED BY DR. JUSTIN CORDONNIER, '28

### **An Operative Case of Horse-shoe Kidney with Good Functional Results**

Although horse-shoe kidney is far from being a rare anomaly, its occurrence is infrequent enough to make it a fascinating surgical problem. In most instances, the pathology and symptoms are produced by an obstruction to drainage of the renal pelvis, on one or both sides. Generally, the lower poles are nearer the spine than is normal, and there is a failure of rotation of each kidney. Mechanically, this position tends to produce an angulation at the ureteropelvic junction, with resulting interference in drainage and a consequent hydronephrosis, which may be accompanied by persistent infection. If one has the good fortune to discover the malformation early, a great deal can be accomplished by corrective surgery. The following case is presented because of the clinical problem involved, and the good functional result obtained.

The patient was a white male, age nineteen, who was seen first on December 23, 1940. His symptoms had been of about two months duration. They

consisted of recurrent attacks of right abdominal pain of moderate severity; and moderate urinary frequency, nocturia, and burning. Notable findings on admission to the hospital were an N. P. N. of 58 mgms, and a pyuria. No abdominal masses were palpable. An upper tract study revealed a congenital malformation involving both kidney pelves, with a definite hydronephrosis on the right side. There was a failure of rotation of both kidneys. Although the shadows of the pelves were comparatively high, and no definite isthmus could be made out, it was felt that we were probably dealing with a horse-shoe kidney. Urine from the right kidney contained numerous white blood cells and colon bacilli. There was a definite decrease in function on both sides, the output of phenolsulphonphthalein was 2½ percent on the right and 5 percent on the left, in ten minutes. Since there was a definite right hydronephrosis, with infection and lowered function, it was felt that an attempt to improve the drainage on the right side was imperative.

The usual right kidney incision was made, but was carried considerably farther forward than usual. The kidney was exposed extraperitoneally, and the lower pole was found to be elongated and thinned out with a fibrous attachment to the lower pole of the kidney on the opposite side. There was a sharp angulation at the ureteropelvic junction with many adhesions between the pelvis and ureter. These adhesions were freed, thereby permitting a correction of the acute angulation. The fibrous isthmus was then divided. A right nephropexy was done, the lower pole being fixed upward and outward, thereby eliminating the angulation at the ureteropelvic junction, and establishing free drainage of the pelvis. No attempt was made to correct the rotation of the kidney.

The post operative course was moderately stormy. Recurrent infection occurred on the right side for a period of about three months. The right ureter was dilated at regular intervals. The urine eventually became clear, and the patient was symptom free. About three weeks after operation, the N. P. N. was 33 mgms. percent.

Recently, the patient returned for examination because he wished to enter the Army Air Corps. He had been in excellent health for the past six months. There had been no urinary symptoms, nor was there any abdominal discomfort.

At this time, the urine was clear microscopically. A study of the upper urinary tract was made. There was no infection on either side. Renal function showed a ten minute excretion of phenolsulphonphthalein of 8% on the right side and 9% on the left, with an appearance time of three minutes on each side. Pyelograms showed a definite diminution in the size of the right renal pelvis. The calices were much more sharply outlined than

previously. The lower pole of the kidney had remained well up and out, facilitating drainage. There was no ptosis in the upright position.

Discussion: The outstanding feature of this case is the fact that we were dealing with a congenital anomaly, with an acute angulation at the ureteropelvic junction on the right side, and a resultant hydronephrosis. There was apparently no obstruction to drainage on the left. By means of a simple division of the isthmus and a nephropexy, in such a way as to establish adequate drainage, an excellent result was obtained. It is noteworthy that no attempt was made to alter the rotation of the kidney. A comparison of the pyelograms, before and after surgery, shows that the only change in position of the kidneys is that of a movement of the lower pole on the right side upward and outward, thereby preventing a recurrence of the acute angulation at the ureteropelvic junction. The fact that drainage is adequate is well established by diminution in the size of the pelvis, absence of infection, and improved function. By means of a comparatively conservative operation an otherwise unfavorable outcome has been prevented.

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Bacteriophage Therapy. IV. Effect of Bacteriophage in Experimental Staphylococcal Septicemia in Rabbits. S. E. Culkin, D. D. Douglass, and J. Bronfenbrenner. *J. of Infectious Diseases*, Vol. 70: No. 1., Jan.-Feb. 1942, p. 92.

A study of the effect of bacteriophage in the treatment of experimental staphylococcal septicemia in rabbits revealed that unfavorable effects may be avoided by careful selection of noninvasive staphylococci for preparation of the bacteriophage. However bacteriophage prepared with the view of avoiding presence of spreading factor is of no value in controlling massive staphylococcal septicemia in rabbits.

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Local Implantation of Sulfanilamide and Its Derivatives in Wounds, Samuel P. Harbison and J. Albert Key: *Arch. of Surgery*, Vol. 44: No. 1, p. 22.

Wound healing in experimental animals does not suffer appreciably from local implantation of a moderate amount of sulfanilamide powder. These wounds in the abdominal wall, stomach, and duodenum when tested exhibited approximately the same tensile strength as similar wounds in which no sulfanamide had been implanted. There is no tendency to formation of adhesions in the peritoneal cavity of the rat following the introduction of the sulfonamides.

## Editorial

### THE MEDICAL SCHOOL IN AN ALL-OUT WAR

The days when wars are waged on certain days of the week and an armistice is declared for week-ends and holidays belong to the past. Even consideration for human life and the humane practices of a few decades ago have been lost in the urge to conquer and destroy. No one, child or adult, farmer or laborer, man or woman, soldier or civilian can escape the impact of modern war. All individuals and all groups of individuals must participate in the national effort. Medical schools are no exception.

In the establishment and maintenance of a large army, the doctor and medical science play a large role. The slogan "Keep 'em flying" connotes not only that there are sufficient planes and mechanics but that the pilots are in perfect health. Time lost from sickness and wounds must be kept at a minimum. The first signs of epidemic disease must be detected. Perhaps the slogan "Keep 'em well" best reflects the hope of medicine. The Army and Navy need doctors this year, next year and every year until America is victorious.

These demands can be met in part by an acceleration of the education of physicians. More physically fit young men must be trained in a shorter period of time. Too often since September 1939, the world has lacked statesmen to see the problem four or five years hence. If we do not start now there will be no five years hence to worry about. At a special meeting of the American Medical College Association in Chicago on February 14, 1942, schools were urged to telescope the medical schedule into three years. The sum-total effect of the acceleration by the 67 schools in the United States will be to give to the nation 12,500 physician-years of service in the next three years. Surely this is a project worthy of full support.

But, this small part by the medical schools in the program of an all-out war will not be accomplished without sacrifice. The faculty will teach eleven months a year. Research will suffer. Each course will be given four times in three years. The students will not have as much time for reflection and reading. Whether or not the high standards of medical education achieved in the last forty years can survive is in the minds of some problematical. Standards are only maintained by eternal vigilance. They will not be lowered in 1942 if we start with the proposition that there will be the same demand and reward for achievement and intellectual ability as in the past. Where there is a will, there is a way.

R. A. M.

## Message from the President of the Alumni Association

April 15, 1942

Another year of school work will soon be finished and the 1942 class given their M.D. degrees. It has always been the custom of the Medical Alumni Association to entertain the graduating class with a banquet. Not infrequently, much to the delight of the Alumni, the class has put on a show to entertain them. There was some doubt about having the dinner this year, but the Executive Committee met on April 10 and voted unanimously to have the dinner. Dr. William Berman and Dr. Leslie C. Drews were appointed to make all necessary arrangements. The Alumni President was authorized to appear before the graduating class and give them an invitation to attend. This has been done. Each of you will receive separate notices for the dinner and for dues. Won't you let your desire to come have sway and be here?

Another subject discussed by the Executive Committee was the Robert J. Terry lecture sponsored by the Alumni. Dr. George Wislocki, Professor of Anatomy at the Harvard Medical School, a very outstanding man, is to deliver the lecture. It was decided to extend a special invitation to the men of this area who were graduated from Harvard Medical School. Also the secretary of each class was asked to contact his classmates and urge them to attend.

The subject of financial help to the Medical School came in for its share of discussion. Again we urge you to give all you can now. Mr. Douglas Martin, an alumnus of the University, has mailed to each alumnus of the Medical School a letter written to friends and sponsors of the University by Chancellor Throop. Please rescue this letter from wherever you have thrown it and, having reread it, remember that you may simply designate that your contribution is for the Medical School and that it will be so used.

May I once again urge you to be sure and attend the Alumni-Senior Banquet May 30.

*Charles A. Stone, M.D.*

President of the Washington University  
Medical Alumni Association



## Message from the Dean of the School of Medicine

The new Editor asks the Dean to review in "about 400 words" some of the current problems of the School. His restriction will explain the brevity of these comments, which otherwise might be the longest piece in this number.

First I must express appreciation to Dr. Robert Moore for accepting the editorship and for planning the new editorial board to represent both School and Alumni; and acknowledge our debt to the former Editor, Dr. H. L. White, who since December, 1940 has been absent on military duty. All will be grateful to Dr. Terry for consenting to remain a member of the board.

The School is bending all efforts to meet added responsibilities imposed by the War. It has already supplied from its staffs over 65 members now on active military duty—in the Army General Hospital No. 21, in the Naval Unit No. 72 and in other services.

To increase and speed up the supply of medical personnel, undergraduate classes have been increased somewhat and schedules have been revamped on a continuous four-quarter basis which allows completion of undergraduate training in three calendar years. New intensive courses for hurried experience in various specialties are being planned. Important research projects, including new undertakings created by War needs must be continued with a minimum of interruption by routine duties. To conduct these programs efficiently with smaller staffs places heavier loads on everybody—loads which each will accept willingly to the limit of his capacity.

It is a great satisfaction to announce the appointment of Dr. W. Barry Wood, Jr. as Professor of Medicine to succeed Dr. Barr. His selection follows a policy very successful in the past—the choice of a young man of fine training who possesses, besides technical ability, personal qualities for leadership in a major clinical department. Dr. Wood will assume his duties in July.

The financial needs of the Medical School continue to mount as endowment yield falls and costs of operation rise. To meet its obligations and to maintain the standards laboriously set up during the past thirty years will require contributions for support from every alumnus and every friend of this institution. Have you made your contribution for next year to the Alumni Association Fund for support of the Medical School?

*P. A. Shaffer, Dean, Washington University School of Medicine*

# Publications by the Staff of the School of Medicine

## WASHINGTON UNIVERSITY

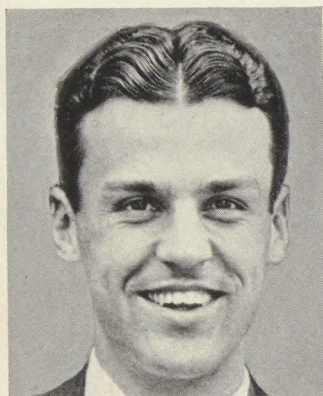
January-March, 1942

- Allen, Willard M. The ovarian hormones and their clinical uses. *J. Missouri State M. Ass'n.* v. 39: 1-5, Jan. 1942.
- Barnett, Henry L., Perley, Anne M., and McGinnis, Helen G. Renal physiology in infants and children. II. Inulin clearances in newborn infant with extrophy of bladder. *Proc. Soc. Exper. Biol. & Med.* v. 49: 90-93, Jan. 1942.
- Bishop, George H. and Bartley, S. Howard. Some features on the optic-nerve discharge in the rabbit and cat. *J. Cellular and Comparative Physiol.* v. 19: 79-93, Feb. 1942.
- Blattner, Russell J. Unilateral paralysis of the diaphragm without involvement of the brachial plexus. *J. Pediat.* v. 20: 223-229, Feb. 1942.
- Blumenthal, Herman T. Homoiotransplantation of spontaneous tumors into mice bearing spontaneous tumors. *Cancer Research* v. 2: 56-58, Jan. 1942.
- Bradley, Frank R. The emergency medical services of civilian protection. *Weekly Bull. St. Louis M. Soc.* v. 36: 259-263, Feb. 27, 1942.
- Bronfenbrenner, J., Sulkin, Edward S., and Douglas, David D. Bacteriophage therapy. IV. Effect of bacteriophage in experimental staphylococcal septicemia in rabbits. *J. Infect. Dis.* v. 70: 92-95, Jan.-Feb. 1942.
- Bronfenbrenner, J. and Harford, C. G. Infection of mice by feeding with tissues containing the virus of St. Louis encephalitis. *J. Infect. Dis.* v. 70: 62-68, Jan.-Feb. 1942.
- Brown, James Barrett, and McDowell, Frank. Internal wire fixation for fractures of the jaw. Preliminary report. *Surg., Gynec. & Obstet.* v. 75: 227-230, Feb. 1942.
- Cady, Lee D. Diabetes insipidus treated with pitressin tannate. Report of case. *J. Missouri State M. Ass'n.* v. 39: 19-20, Jan. 1942.
- Cook, J. V., and Blattner, R. J. Trypan-blue vital staining in studies of virus on chorioallantoic membranes. *Am. J. Path.* v. 18: 163-166, Jan. 1942.
- Cooper, Zola K., and Reller, Helen C. Mitotic frequency in methylcholanthrene epidermal carcinogenesis in mice. *J. Nat. Cancer Inst.* v. 2: 335-344, Feb. 1942.
- Cori, Carl F., Cori, Gerty T., and Green, Arda Alden. Crystalline muscle phosphorylase. (Letter to the Editors) *J. Biol. Chem.* v. 142: 447-448, Jan. 1942.
- Costen, James B. Retrobulbar neuritis in relation to sinus disease. *Surg., Gynec. & Obstet.* v. 74: 594-597, Feb. 1942.
- Cowdry, E. V. The Barnard Free Skin and Cancer Hospital. Research Report. *J. Missouri State M. Assn.* 39: 76-80, March 1942.
- Deakin, Rogers, and Smith, Dudley R. Treatment of gonorrhoea in the female with sulfathiazole. *Am. J. Obst. & Gynec.* v. 43: 296-302, Feb. 1942.
- Drabkin, David L. Spectrophotometric studies. IX. The reaction of cyanide with nitrogenous derivatives of ferriprotoporphyrin. *J. Biol. Chem.* v. 142: 855-862, Feb. 1942.
- Edwards, Joseph C., and Sulkin, S. Edward. Prophylaxis in epidemic influenza. *J. Missouri State M. Assn.* v. 39: 33-36, Feb. 1942.
- Engman, Martin F., Jr., Pfaff, R. O., and Cooper, Zola K. XCVII. Erythema elevatum diutinum: report of a case with histologic and bacteriologic studies. *Arch. Dermatol. & Syphilol.* v. 45: 334-341, Feb. 1942.

- Erlanger, Joseph, Krems, A. D., Schoepfle, Gordon M. (Preliminary manuscript). Nerve concussion. *Proc. Soc. Exper. Biol. & Med.* v. 49: 73-75, Jan. 1942.
- Graham, Evarts A. American surgery in a changing world. *Surg., Gynec. & Obstet.* v. 74: 273-280, Feb. 1942. (reprinted in this number of the Quarterly)
- Graham, Evarts A. The hospital program of the American College of Surgeons. *Bull. Am. Coll. of Surgeons*, v. 27: 21-24, Jan. 1942.
- Helwig, Elson B. Tumor cells in body fluids. An evaluation of diagnosis. *J. Missouri State M. Assn.* v. 39: 73-76, March 1942.
- Jensen, Julius. Cardiovascular syphilis. *Urological and Cutan. Rev.* v. 46: 152-156, March 1942.
- Jostes, Frederick A. Neck pain. The laminagraph as an aid to the diagnosis of atlanto-occipital lesions. *J. Am. Med. Assn.* v. 118: 353-359, Jan. 31, 1942.
- Julianelle, L. A. Observations on the specific treatment (type A antiserum) of staphylococcal septicemia; second report. *Annals of Internal Medicine*, v. 16: 303-326, Feb. 1942.
- Key, J. Albert. Treatment of ganglion by injection of caroid as dangerous procedure. *J. Am. M. Assn.* v. 118: 516-517, Feb. 14, 1942.
- Key, J. Albert. Use of sulfonamides in clean operative wounds. *Proc. Inst. of Medicine of Chicago*, v. 14: 20-21, Jan. 15, 1942.
- Key, J. Albert. Use of sulfonamides in clean operative wounds. *Southern M. J.* v. 35: 55-58, Jan. 1942.
- Key, J. Albert, and Harbison, Samuel. Local implantation of sulfanilamide and its derivatives in wounds: its relation to wound healing and to peritoneal adhesions. *Arch. Surg.* v. 44: 22-26, Jan. 1942.
- Keyes, E. Lawrence. The emergency medical services of civilian protection. *Weekly Bull. St. Louis M. Soc.* v. 36: 263-266, Feb. 27, 1942.
- Krebs, O. S. The prophylactic use of the pessary in the early puerperium. *Weekly Bull. St. Louis M. Soc.* v. 36: 244-247, Feb. 13, 1942.
- Luten, Drew. The favorable prognosis of coronary disease. *Weekly Bull. St. Louis M. Soc.* v. 36: 274-275, March 6, 1942.
- Nielson, Paul E. A study with radioactive phosphorus of the permeability of the rat placenta to phospholipid. *Am. J. Physiol.* v. 135: 670-675, Feb. 1942.
- O'Leary, James L., Smith, Margaret G., and Reames, Harold L. Influence of age on susceptibility of mice to St. Louis encephalitis virus and on the distribution of lesions. *J. Exper. Med.* v. 75: 233-246, Feb. 1942.
- O' Leary, James L., and Schwartz, Henry G. Section of the spinothalamic tract at the level of the inferior olive. *Arch. Neurol. & Psychiat.* v. 47: 293-304, Feb. 1942.
- Roche, Maurice B. Foot conditions. *J. Missouri State M. Assn.* v. 39: 7-11, Jan. 1942.
- Scobee, Richard G. The role of the meibomian glands in recurrent conjunctivitis. (A review with experimental observations). *Am. J. Ophth.* v. 25: 184-192, Feb. 1942.
- Seelig, M. G. The opportunity presented to the Barnard Free Skin and Cancer Hospital today. *J. Missouri State M. Assn.* v. 39: 80-82, March, 1942.
- Taussig, Fred J. Report of Executive Committee of the Barnard Free Skin and Cancer Hospital. *J. Missouri State M. Assn.* v. 39: 82-83, March 1942.
- Wade, Leo J., Quinn, William C., and Lord, Jere W., Jr. Gas gangrene of the abdominal wall. *Surgery*, v. 11: 233-243, Feb. 1942.
- Wade, Leo J., Quinn, William C., and Lord, Jere W., Jr. Welch bacillus infections arising from the stomach and duodenum. *Surgery*, v. 11: 229-232, Feb. 1942..

## News from the Medical School and Affiliated Hospitals

On Saturday, April 4, the Chancellor announced the appointment of Dr. William Barry Wood, Jr. as Busch Professor of Medicine at the Washington University School of Medicine. Dr.



Wood is an Instructor at Johns Hopkins University Medical School and will assume his duties on July 1. He graduated from Harvard College in 1932 and Johns Hopkins Medical School in 1936. He has served on the house staff of the Johns Hopkins Hospital and worked as an assistant in the Thorndike Laboratory at the Boston City Hospital. He is a member of the Committee on Pneumonia of the Surgeon General of the United States Army and for the past several months has studied viral pneumonia in the army camps throughout the South.

His investigations have been largely concerned with pneumonia and with the action of the sulfonamide drugs.

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The meeting of the St. Louis Medical Society on the evening of March 3 was in honor of Dr. Leo Loeb, Research Professor of Pathology in the Washington University School of Medicine. A certificate and a gold medal were presented to Dr. Loeb. The citation read by the President was: "The St. Louis Medical Society presents this certificate of merit to Dr. Loeb in appreciation of his long and distinguished service as a leader of medical science, and in recognition of his original investigations in the fields of endocrinology, cancer, and the ageing processes—contributions that have opened new areas of knowledge and led to a better understanding of human disease." Dr. Loeb spoke on "Medicine and the Community." Other papers in honor of Dr. Loeb were by Dr. William Cramer entitled "On the Origin of Cancer in Man," and by Dr. Robert A. Moore on "The Relation of Pathology to Clinical Medicine."

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On July 1, 1941, Barnes Hospital assumed the responsibility for the maintenance and direction of the laboratories formerly maintained by the School of Medicine. Dr. Paul O. Hageman, Instructor in Clinical Medi-

cine, has been appointed Director of the Laboratories. The entire second floor of the old service building has been remodeled and soon will be ready for occupancy. Air-conditioned animal rooms will be located on the roof of the service building. In addition to the usual laboratories there will be an office and a seminar room. Each intern on the medical service will spend one month in the laboratories. Dr. Hageman will be in charge of serology and bacteriology, Dr. Harold Bulger of blood chemistry and basal metabolism, Dr. Carl V. Moore of clinical microscopy, and Dr. Nathan Womack and Dr. John Hobbs in charge of the combined surgical and gynecological pathology. This will replace the former laboratories of clinical microscopy in 1408, the laboratories for blood chemistry in Oscar Johnson Institute, the bacteriological and serological laboratories in the Clinic Building, the laboratory of gynecological pathology in the Maternity Hospital, and the laboratory of surgical pathology in the North Building.

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The Chancellor of the University announced the following gifts to the Medical School between January 1 and March 31, 1942: from the Scottish Rite Fund, \$2,000 to Dr. George Bishop in continued support of his work on dementia precox; from Commodore Louis D. Beaumont, \$3,000 in continued support of research under Dr. Graham in the Department of Surgery; from various donors, \$6,550 to be used in support of investigations under Dr. Bronfenbrenner's direction in the Department of Bacteriology on the subject of parenteral digestion in relation to anaphylaxis; from the Commonwealth Fund, \$8,750 to the Department of Surgery for Dr. Elman's study of the use of amino acids in the treatment of shock; from the Corn Industrial Research Foundation, \$3,000 to the Department of Pharmacology in support of Dr. Cori's work on enzymatic synthesis of polysaccharides; from the Delta Gamma Fraternity, \$100 as an additional contribution to the fund in the Department of Ophthalmology for the purpose of conserving or restoring children's eyesight; from the National Foundation for Infantile Paralysis, \$2,650 in continued support of poliomyelitis research in the Department of Pathology under the direction of Dr. Margaret Smith; from an anonymous donor, \$1,000 to be used toward a salary; and from Schieffelin and Company, \$1,000 to the Department of Internal Medicine for research work on synthetic estrogenic hormones under the direction of Dr. MacBryde.

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On the occasion of the mid-year Section Meeting of the American Laryngological, Rhinological, and Otolological Society which took place at the Coronado Hotel in St. Louis on January 21, the graduate students, former graduate students, and Staff of the Department of Otolaryngology presented

the University with a portrait of Dr. Lee Wallace Dean, Sr. The portrait is by Miss Myra Deibel. The presentation was made by Dr. Arthur Proetz, who recounted briefly the contributions of Dr. Dean to otolaryngology and



to the Department of Otolaryngology of Washington University which he headed from 1928 until 1940. Under Dr. Dean's guidance the Department enjoyed a pre-eminence in research and teaching which has seldom been equaled. The culmination of his effort was the yearly eight months graduate course in basic otolaryngology. The portrait is the gift of those who were associated with Dr. Dean in the series of graduate courses. Chancellor George R. Throop received the gift for the University. He dwelt in his address upon the renown which had

come to the University through Dr. Dean's activity and praised his accomplishments as a scientist, clinician and teacher. Mrs. Greenfield Sluder graced the ceremony with her presence.

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On June 4, 1941 Barnes Hospital opened a new colored ward in the space formerly occupied by the Department of Physiotherapy in the basement of the east wing of the hospital. There is space for 21 patients together with the usual fixtures of a ward—nurses station, dressing room, doctors examining room, and a diet kitchen. There is a separate entrance directly from Kingshighway. The opening of this ward made available greatly needed facilities. The Physiotherapy Department is now located in the basement of the Rand Johnson Building.

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A blood and plasma bank has been established in the Barnes Hospital under the direction of Dr. Paul O. Hageman, Director of Laboratories, and under the general supervision of the Transfusion Committee. The blood will be drawn by medical and surgical interns from friends and relatives of patients who receives a transfusion from the bank. A technician will be responsible for typing, group matching, serological and bacteriological tests, and the records. Special rooms have been provided for the withdrawal of the blood, the manipulation of the plasma, and storage in a special ice box.

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The Joint Medical Board recommended to the appropriate Boards the following appointments to the staffs of the hospitals: Dr. Edmund A.

Smolik, Assistant Surgeon to the Barnes and Children's Hospitals; Dr. Marshall W. Kelly, Assistant Surgeon to the Barnes and Children's Hospitals; Dr. Hyman H. Fingert, Assistant in Neurology; Dr. Irvin Levy, Assistant in Neurology; Dr. Wayne P. Sirles, Voluntary Assistant in Ophthalmology to Barnes and Children's Hospitals; Dr. Henry Barnett, Assistant Physician to the Children's Hospital; Dr. Paul Fleming, Physician to Out-Patients; Dr. Arthur T. Darrow, Physician to Out-Patients; Dr. L. M. Aronberg, Assistant Surgeon to Out-Patients; Dr. A. O. Brooks, Assistant Physician to Out-Patients; Dr. Glen Harrison, Assistant in Ophthalmology to the McMillan, Barnes and Children's Hospitals; and Dr. Richard Scobee, Assistant in Ophthalmology to the McMillan, Barnes and Children's Hospitals.

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On Monday evening, March 23, the annual Leo Loeb Lecture sponsored by the Phi Beta Pi fraternity was delivered by Dr. John Musser, Professor of Medicine, Tulane University School of Medicine, New Orleans. Before the lecture, a dinner for the members of the fraternity, alumni, and the faculty was served at the fraternity house. The title of the lecture was "The Heart That Is Growing Old."

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New appointments to the staff of the Medical School since January include: Dr. Theodore Weichselbaum, Research Associate in Bacteriology (effective December 1, 1941); Dr. Paul Fleming, Assistant in Clinical Medicine (for the year 1941-42); and Dr. Louis Hempelmann, Jr., Instructor in Radiology (effective January 1, 1942).

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Dr. Willard M. Allen, Professor of Obstetrics and Gynecology, addressed the Sedwich County Medical Society in Wichita, Kansas, January 6, on "Significance of Abdominal Vaginal Bleeding" and "Clinical Use of the Sex Hormones."

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Dr. Lawrence T. Post attended a conference in New York, on March 15, on ophtho-optometric relations. The conference was sponsored by the National Society for the Prevention of Blindness and representatives from the American Ophthalmic Association.

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Dr. Evarts A. Graham, Bixby Professor of Surgery, has been elected a member of the Royal Society of Sciences of Upsala, Sweden, an organization founded in 1710 whose membership is granted on scientific merit. Dr. Graham was the only American among the five members of the society elected at this time.

A motion picture of the human larynx was shown in the auditorium of the Medical School on March 18. This film is one of a series being used in the teaching program of the Department of Anatomy. It was prepared and loaned to the School by Dr. Joel Pressman of Los Angeles.

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Alpha Omega Alpha will this year sponsor a lecture to be given at the school during April. The society will also award a prize for the best research by a student.

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On Thursday afternoon, February 19, a special lecture was given in the auditorium of the Medical School by Dr. Carl Hartman, Professor of Zoology, University of Illinois, on "Two Decades of Primate Studies and Their Influence on Gynecological Thought and Practice."

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The annual meeting of the Club for Research on Ageing was held in Baltimore on Saturday and Sunday, February 28-March 1. Members of the group from the faculty were Dr. E. V. Cowdry, Dr. Willard Allen, and Dr. Robert A. Moore. Papers were presented by Dr. Allen and Dr. Moore on the "Relation of the Sex Hormones to the Ageing Processes."

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Dr. Eugene Kellersberger, '15, General Secretary for the American Mission to Lepers, gave a lecture on "Leprosy in Central Africa" in the auditorium of the Medical School on March 31.

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The post-graduate course offered by the Department of Oto-laryngology has not been scheduled to commence in September as is usually the case because of the lack of applicants. It will not be given unless there are at least six physicians accepted for the work and at present this number has not been reached because of the uncertainty of the future.

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A special meeting of the Association of American Medical Colleges was held in Chicago on Saturday, February 14. This was followed on February 16 and 17 by the annual Congress on Medical Education and Licensure of the Council on Medical Education of the American Medical Association. The medical school was represented by Dr. Philip A. Shaffer and Dr. Robert A. Moore.

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There was recently established at the Army Medical Library in Washington a Medicofilm Service. This makes it possible for physicians and investigators to purchase copies on 35 mm. film of scientific articles not avail-



able in their city. The library of the Washington University School of Medicine has purchased a reader so as to make this service fully available to the faculty and students.

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On Friday, March 6, a Sectional meeting of the American College of Surgeons was held at the Jefferson Hotel, St. Louis. Speakers from the faculty of the School of Medicine included Dr. Evarts A. Graham, Dr. Vilray P. Blair, Dr. James B. Brown and Dr. J. Albert Key.

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Fellows in Chest Surgery under Dr. Evarts Graham this year include Thomas Burford, Yale University, '36; Lawrence Milton Shefts, Rush Medical College, '34, Jacques Bruneau, University of Montreal, '38, Hernon D. Aguilar, from Buenos Aires, Argentina; Aul Mackler, University of Chicago, '37; Mario Besso-Pianetto, from Resario, Argentina; Y. K. Wu, from Peiping, China; and Anibal Roberto Valle, from Buenos Aires, Argentina.

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Dr. Louis Hempelman, '38, who has held a Fellowship from the Commonwealth Fund for the past nine months returned to St. Louis on April 1. He will be in charge of the medical aspects of the cyclotron in the Malinckrodt Institute of Radiology. During the period of the fellowship, Dr. Hempelman studied at the Radiation Laboratory in Berkley and at the Memorial Hospital in New York.

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The Department of Ophthalmology is not accepting applications for post-graduate study because there is not a sufficient number of applicants. The applications that have been received are being filed and in the event that the Army or Navy desires that such a course be given to a group of medical officers, Dr. Post will accept private applicants and has so informed inquirers.

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Dr. Carl F. Cori, Professor of Pharmacology, and Dr. Gerty T. Cori, Research Associate in Pharmacology, delivered a series of three lectures at the University of Michigan, Ann Arbor, on "Intermediary Carbohydrate Metabolism" on March 27 and 28.

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Dr. Lawrence T. Post will be the guest of the Arkansas State Society in April. He will speak on ophthalmological pitfalls before the Eye Section, and on newer phases in ophthalmology before the general group.

Dr. Edward Reinhard has been appointed Resident in Medicine at Barnes Hospital to succeed Dr. Leo Wade who on January 1, 1942 accepted the position of Medical Director of the St. Louis City Hospital.

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Dr. Dan White, Intern in Dentistry at the Barnes Hospital, was called to active duty with the U. S. Navy on January 5. Mr. Granville Sherman, a senior in the School of Dentistry, has been appointed as extern.

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Changes in the staff of the School of Nursing include the resignations of Margaret H. Powers, Social Director and Instructor in Physical Education; Georgia Pyle, Assistant in Nursing; Dorothy G. Macleod, Instructor in Nursing; Susan Vedder, Assistant in Nursing; Mary Rock, Assistant in Nursing; and Margaret Marlow, Assistant in Nursing; and the appointments of Mary Mueller, Assistant in Nursing, Head Nurse of Metabolism Department of Barnes Hospital; Beatrice Portell, Assistant in Nursing, Supervisor of Contagion, St. Louis Children's Hospital; Edna Heman, Assistant in Nursing, Night Supervisor, Children's Hospital; Ruth Bouchard, Instructor in Physical Education and Social Director; Geneva Book, Assistant in Nursing, Infirmary Supervisor; and Lucy F. Hoblitzelle, Assistant Professor of Nursing, Assistant Director of the School of Nursing in charge of the educational program at Barnes Hospital.

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During the year 1941, 1,316 doctors not on the staff of the Barnes Hospital referred 2,394 patients to the hospital.

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Miss Isolde Stoye, who until recently was librarian of the School of Nursing, St. Luke's Hospital, Chicago, visited the library of the School of Medicine.

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The ceremony of unveiling the monument marking the grave of Dr. Joseph Nash McDowell took place Saturday, March 28, 1942, at four o'clock. The proceedings will be published in a later issue of the Quarterly.

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**BUY WAR STAMPS AND BONDS  
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## Faculty and Alumni in National Defense

For the past year the first floor of the clinic has been used several evenings each week for a Civilian Medical Examining Board. Dr. Leon Bromberg served as Chairman of the Board until his departure with the U. S. Naval Specialists Unit No. 72. Dr. Malcolm M. Cook is now in charge of the Board, which consists of from five to twenty physicians. The space has been provided by Dr. John Lawrence, Director of the Clinics, and about 100 men are examined each evening. Until the outbreak of war, the examinations were complete, but since December only a screening type of examination has been given. Blood is secured for Kahn tests and tests are run in the Bacteriological Laboratory of the City Department of Health.

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Base Hospital Unit No. 21 is still located at Fort Benning, Ga. The medical officers have been temporarily assigned to the station hospital as assistants to the more permanent staff. Col. Robt. E. Thomas of the Regular Army has been appointed Commanding Officer and the Unit has been attached to the First Army.

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The library reports that the Victory Book Campaign, sponsored by the American Library Association, Red Cross, and United Service Organization, is to continue until April 1. To date two book trucks have been filled and sent to Fort Leonard Wood, Mo.

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Dr. Frank Bradley, Superintendent of the Barnes Hospital, is serving as Assistant Chief of the Emergency Medical Service for Civilian Defense in St. Louis. Dr. E. Lawrence Keyes, Instructor in Clinical Surgery is Director of Field Services.

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Internal Wire Fixation for Fractures of Jaw, James B. Brown and Frank McDowell; Surg., Gyn., and Ostetrics. Vol. 74: No. 2, Feb. 1, 1942, p. 227.

Brown and McDowell describe an easy and satisfactory method of internal fixation across the fracture line. This mode of wiring is important in those cases in which interdental wiring cannot be done. The indications for the use of the method as well as description of the operation, dressing, and removal of the wires are given in detail.

## Appointments for the Class of 1942

- Anderson, William M., Cramerton, N. C.—St. Louis Children's Hospital, St. Louis, Mo.
- Ascher, Eduard, St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Austin, Dean C., Vermillion, S. Dak.—Duval County Hospital, Jacksonville, Fla.
- Baird, Harry, H., Mars Hill, N. C.—Barnes Hospital, St. Louis, Mo.
- Black, William A., Piedmont, Calif.—St. Luke's Hospital, San Francisco, Calif.
- Blumenthal, Herman T., St. Louis, Mo.—Jewish Hospital of St. Louis, St. Louis, Mo.
- Bressler, Bernard, St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Brickhouse, Robert L., Norfolk, Va.—New York Hospital, New York City, N. Y.
- Brindley, Hanes H., Temple, Texas—Charity Hospital of Louisiana, New Orleans, La.
- Brown, Frank A., Jr., Hsuechowfu, China—Cincinnati General Hospital, Cincinnati, Ohio.
- Brown, Royal L., Koosharem, Utah—U. S. Public Health Service, Washington, D. C.
- Burttram, Hobson D., Tuscaloosa, Ala.—Employee's Hospital of the Tennessee Coal, Iron & Railroad Co., Fairfield, Alabama.
- Busse, Ewald W., St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Callaway, Claude P., Palo Alto, Calif.—Mallory Institute (Boston City Hospital) Boston, Mass.
- Cason, Elbert H., Jefferson City, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Christensen, Jerome J., Salt Lake City, Utah—Iowa University Hospitals, Iowa City, Iowa.
- Crenshaw, James F., Birmingham, Ala.—St. Louis City Hospital, St. Louis, Mo.
- Daman, George A., St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Davis, William J., Portland, Ore.—St. Louis Children's Hospital, St. Louis, Mo.
- Devereux, Edwin E., Fresno, Calif.—San Francisco City and County Hospital, (California Service) San Francisco, Calif.
- Eck, Birkle, St. Louis, Mo.—St. Luke's Hospital, St. Louis, Mo.
- Ellis, Samuel T., Jr., Kansas City, Mo.—Kansas City General Hospital, Kansas City, Mo.
- Eytinge, Ernest J., Redlands, Calif.—Long Island College Hospital, Brooklyn, N. Y.
- Foote, Burton A., Elma, Wash.—Swedish Hospital, Seattle, Wash.
- Freedman, Ruth Schreiber, St. Louis, Mo.—Jewish Hospital of St. Louis, St. Louis, Mo.
- Frerking, Herbert W., Alma, Mo.—St. Luke's Hospital, St. Louis, Mo.
- Gibbel, Melvin I., Girard, Ill.—Research and Educational Hospital, Chicago, Ill.
- Glashow, Jules L., Atlantic Beach, N. Y.—The Bronx Hospital, Bronx, N. Y.
- Grabau, Gene H., St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Graul, Walter P., St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- Groshart, Gene M., Worland, Wyo.—St. Louis City Hospital, St. Louis, Mo.
- Hamlin, Edwin M., Santa Rosa, Calif.—San Francisco City and County Hospital (Stanford Service), San Francisco, Calif.

- Harell, Alex, St. Louis, Mo.—Deaconess Hospital, Spokane, Washington.
- Herdener, Russell L., Moline, Ill.—St. Louis County Hospital, Clayton, Mo.
- ~~—~~Herrmann, Anold J., St. Louis, Mo.—St. Louis City Hospital, St. Louis, Mo.
- ~~•~~Herz, James R., Reno, Nev.—St. Luke's Hospital, St. Louis, Mo.
- ~~—~~Huguley, Charles M., Jr., Atlanta, Ga.—Barnes Hospital, St. Louis, Mo.
- Ishida, Hiraku, Atherton, Calif.—
- Jones, Asa, University City, Mo.—Kansas City General Hospital, Kansas City, Mo.
- Jones, Edward H., Jr., Youngstown, Ohio—Union Memorial Hospital, Baltimore, Md.
- ~~•~~Jones, Wendell L., Missoula, Mont.—St. Luke's Hospital, St. Louis, Mo.
- Keenan, Thomas M., Great Falls, Mont.—The Virginia Mason Clinic, Seattle, Wash.
- ~~+~~Keller, Frank G., Birmingham, Ala.—St. Louis City Hospital, St. Louis, Mo.
- ~~—~~Klinge, Frederick W., St. Louis, Mo.—Barnes Hospital, St. Louis, Mo.
- Kotner, Irvin A., St. Louis, Mo.—Jewish Hospital of St. Louis, St. Louis, Mo.
- ~~—~~Kraft, Edward O., Jr., University City, Mo.—Barnes Hospital, St. Louis, Mo.
- Kreiss, Caroline G., San Mateo, Calif.—University of California Hospitals, San Francisco, Calif.
- Levy, Samuel A., Birmingham, Ala.—Touro Infirmary, New Orleans, La.
- ~~—~~Lockhart, Charles E., Witt, Ill.—Barnes Hospital, St. Louis, Mo.
- Loquvam, George S., Spokane, Wash.—St. Louis County Hospital, Clayton, Mo.
- ~~—~~Love, Frances M., Houston, Texas—St. Louis Children's Hospital, St. Louis, Mo.
- Madonia, Angelo J., Rochester, N. Y.—Highland Hospital, Rochester, N. Y.
- Martz, John C., Kirkwood, Mo.—Research and Educational Hospital, Chicago, Ill.
- ~~+~~McAfee, Chester A., Long Beach, Calif.—St. Louis City Hospital, St. Louis, Mo.
- McCain, French H., Asheville, N. C.—University Hospitals of Cleveland, Cleveland, Ohio
- McCorkle, Elbert L., Marshall, Mo.—Research Hospital, Kansas City, Mo.
- Meamber, Donald L., Yreka, Calif.—San Francisco City & County Hospital (Univ. of Calif. Service), San Francisco, Calif.
- ~~+~~Melgaard Sven R., Fairview, Utah—St. Louis City Hospital, St. Louis, Mo.
- ~~+~~Mihelich, Lewis, Mullen, Idaho—St. Louis City Hospital, St. Louis, Mo.
- ~~—~~Mills, Warren B., Webster Groves, Mo.—Barnes Hospital, St. Louis, Mo.
- Moore, Donald M., Salt Lake City, Utah—Salt Lake General Hospital, Salt Lake City, Utah.
- ~~—~~Mueller, Charles B., Carlinville, Ill.—Barnes Hospital, St. Louis, Mo.
- ~~—~~Neavles, J. C., Webster Groves, Mo.—Department of Pathology, Washington University Medical School, St. Louis, Mo.
- ~~•~~Peck, Chester R., Jr., Malden, Mo.—St. Luke's Hospital, St. Louis, Mo.
- Pillsbury, Ruth M., Berkeley, Calif.—Children's Memorial Hospital, Montreal, Canada.
- Ponka, Joseph L., Morgantown, W. Va.—Henry Ford Hospital, Detroit, Michigan.
- Preston, Richard A., Logan, Utah—St. Louis County Hospital, Clayton, Mo.
- Ransom, Dow H., Jr., Madera, Calif.—Stanford University Hospitals (Lane Hospital), San Francisco, Cal.
- Ray, James C., Sulligent, Ala.—Union Memorial Hospital, Baltimore, Md.
- ~~—~~Reese, William G., Preston, Idaho—Barnes Hospital, St. Louis, Mo.

- Reller, Helen C., St. Louis, Mo.—Barnes Hospital, St. Louis, Mo.  
 Rice, Herman, Cleveland, Ohio—Mount Sinai Hospital, Cleveland, Ohio.  
 Royce, Robert K., Isola, Miss.—Department of Anatomy, Washington University  
 Medical School, St. Louis, Mo.  
 Rubel, Joseph L., Columbus, Miss.—St. Louis City Hospital, St. Louis, Mo.  
 Schneider, Eldee L., Dodge City, Kansas—King County Hospital, Seattle, Wash.  
 Shahan, Philip T., Clayton, Mo.—New York Hospital, New York City, New York.  
 Shobe, Frank O., St. Louis Mo.—St. Luke's Hospital, St. Louis, Mo.  
 Showalter, John R., Jr., Glendale, Mo.—St. Louis City Hospital, St. Louis, Mo.  
 Slaughter, John M., Millerville, Ala.—Union Memorial Hospital, Baltimore, Md.  
 Stillerman, Hyman B., Great Neck, N. Y.—Barnes Hospital, St. Louis, Mo.  
 Stortz, Robert B., Pomona, Calif.—General Hospital of Fresno County, Fresno,  
 Calif.  
 Sutherland, Earl W., Jr., Burlingame, Kans.—Barnes Hospital, St. Louis, Mo.  
 Sweetman, Homer A., Seattle, Wash.—St. Louis City Hospital, St. Louis, Mo.  
 Tillman, Walter W., Jr., Springfield, Mo.—St. Luke's Hospital, St. Louis, Mo.  
 Tompkins, Souther F., Lexington, Va.—Hospital of the University of Penn-  
 sylvania, Philadelphia, Pa.  
 Tongen, Lyle A., Walhalla, N. Dak.—University of Minnesota Hospitals, Min-  
 neapolis, Minn.  
 Turner, Glenn O., Ozark, Mo.—Barnes Hospital, St. Louis, Mo.  
 Utterback, Manly, Perry, Mo.—St. Louis City Hospital, St. Louis, Mo.  
 Watkins, George Linn, Farmington, Mo.—St. Louis City Hospital, St. Louis, Mo.  
 Wear, Thomas R., Haleyville, Ala.—Employee's Hospital of the Tennessee Coal,  
 Iron and Railroad Co., Fairfield, Ala.  
 Weaver, Jack D., Wichita, Kans.—St. Francis Hospital, Wichita, Kans.  
 White, A. George, Ozone Park, L. I., N. Y.—Jewish Hospital of Brooklyn, New  
 York City, N. Y.  
 Withers, Martin S., Clay Center, Kans.—St. Louis Children's Hospital, St. Louis,  
 Mo.

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Crystalline Muscle Phosphorylase: Arda A. Green, Gerty T. Cori, and Carl  
 F. Cori: *J. Bio. Chem.*, Vol. 142, Jan. 1942, p. 447.

The authors have prepared in crystalline form the enzyme which catalyzes  
 the reversible reaction, polysaccharide plus  $PO_4$  to glucose-1-phosphate.  
 This enzyme has been prepared from an aqueous extract of rabbit skeletal  
 muscle and is found to constitute about 2 per cent of the total protein ex-  
 tract. The method of preparation of crystalline muscle phosphorylase is  
 described in this report.

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## Appointments to the House Staff 1942 - 1943

Those who are entering the Armed Forces of the United States deserve every recognition that can be given them. Accordingly the following list is published as recommended at the meeting of the Joint Medical Board on November 28, 1941. An asterisk is placed before the names of those who have resigned to enter the Army or Navy. Subsequent resignations and appointments will be announced in future numbers of the Quarterly.

### IN SURGERY AT THE BARNES AND ST. LOUIS CHILDREN'S HOSPITALS:

Resident—Alfred M. Large, University of Toronto, '36

Assistant Residents—John T. Akin, Jr., Emory University, '40

Harold M. Clarke, University of Rochester, '39

Cyril J. Costello, University of Texas, '39

\*Russell J. Crider, Washington University, '40

Charles L. Eckert, Washington University, '39

Minot P. Fryer, Johns Hopkins, '40

James H. Growdon, Washington University, '40

John H. Mayer, Jr., Cornell University, '39

\*John J. Modlin, University of Nebraska, '38

\*Henry Schwarz, Washington University, '41

Gordon Moore, Washington University, '40

Interns—Harold E. Eisele, Johns Hopkins, '40

Frederick W. Klinge, Washington University, '42

\*John T. Lambert, Columbia University, '40

Gordon S. Letterman, Washington University, '41

Charles E. Lockhart, Washington University, '42

Robert J. McLaughlin, Rush Medical College, '41

C. Barber Mueller, Washington University, '42

D. Elliott O'Reilly, Harvard Medical School, '42

Mordant E. Peck, Johns Hopkins, '41

Howard S. J. Walker, Washington University, '41

\*John Savory, Washington University, '40

McCarthy De Mere, University of Tennessee, '42

Edward Otto Kraft, Washington University, '42

### IN MEDICINE AT THE BARNES HOSPITAL:

Resident—Edward Reinhard, Washington University, '39

Assistant Residents—L. Wayland Macfarlane, Cornell University, '40

Harold Philmore Roth, Western Reserve University, '39

Anne C. Tompkins, Washington University, '41

\*Jack L. Baughman, Washington University, '41

\*Robert Miller, Iowa University, '40

Norman Gale, Kansas University, '40

Interns—Harry H. Baird, Washington University, '42  
William G. Reese, Washington University, '42  
Helen C. Reller, Washington University, '42  
Hyman B. Stillerman, Washington University, '42  
Charles M. Huguley, Jr., Washington University, '42  
Earl Wilbur Sutherland, Jr., Washington University, '42  
Warren B. Mills, Washington University, '42  
Barbara Mae Binkley, Vanderbilt University, '42  
Glenn O. Turner, Washington University, '42  
Tom D. Yocum, University of Rochester, '42

IN DENTISTRY AT THE BARNES HOSPITAL:

Intern—Lee E. Ellman, Washington University, '42

IN PEDIATRICS AT THE ST. LOUIS CHILDREN'S HOSPITAL:

Resident—Gilbert Forbes, University of Rochester, '40  
Assistant Residents—David Goldring, Washington University, '40  
Thomas Black, Washington University, '41  
Mary Bishop, Washington University, '40  
Ben S. Skinner, Washington University, '40  
Junior Residents—Sam Gollub, Washington University, '41  
Jane Erganian, Washington University, '41  
Virginia Lanier, Washington University, '41  
Charles Freeman, University of Oklahoma, '41  
Interns—Frances Love, Washington University, '42  
Martin Withers, Washington University, '42  
William Davis, Washington University, '42

IN OPHTHALMOLOGY AT THE McMILLAN, BARNES AND ST. LOUIS CHILDREN'S HOSPITALS:

Resident—Richard Scobee, University of Texas, '39  
Assistant Resident—E. Norris Robertson, Washington University, '37  
Interns—Virgil A. Toland, Creighton University, '36  
\*William H. Diehl, Jefferson Medical College, '27  
Howard Slaughter, University of Nebraska, '40  
George R. Magee, University of California, '23

IN OTOLARYNGOLOGY AT THE McMILLAN, BARNES AND ST. LOUIS CHILDREN'S HOSPITALS:

Resident—\*William H. Diehl, Jefferson Medical College, '27  
Assistant Residents—Robert W. Godwin, University of California, '41  
Guy O. Pfeiffer, St. Louis University, '40  
Frank A. Ware, Marquette University, '28  
Maxwell H. Mund, University of Maryland, '34  
Francis A. Sooy, University of Colorado, '41

IN OBSTETRICS AND GYNECOLOGY AT THE ST. LOUIS MATERNITY AND BARNES HOSPITALS:

Residents—Carl Goetsch, University of Rochester, '37  
\*Edgar H. Keys, Jr., Washington University, '39



- Assistant Residents—Arthur T. Esslinger, Washington University, '40  
 Ralph B. Woolf, University of Rochester, '39  
 Julius W. Vieaux, Washington University, '35  
 Margaret Ann Carter, Washington University, '38  
 Interns—Claude Young, University of Louisville, '41  
 Charles Robert Sias, University of Rochester, '38  
 French McCain, Washington University, '42  
 Bernice Albert, Washington University, '41  
 Lyle Backman, Rush Medical College, '41  
 \*Dalton C. Hartnett, St. Louis University, '40  
 Wanda Mary Olczak, Indiana University, '38  
 Silas E. Ross, Washington University, '41  
 William L. Topp, Washington University, '41  
 Howard Eugene McKnight, University of Cincinnati, '41

IN PATHOLOGY AT BARNES, ST. LOUIS CHILDREN'S, ST. LOUIS MATERNITY AND  
 ST. LOUIS COUNTY HOSPITALS:

- Resident—Irving Goodof, Boston University, '41  
 Assistant Residents—Robert E. Stowell, Stanford University, '41  
 Charles S. Williams, Washington University, '41  
 Interns—William Anderson, Washington University, '42  
 Jackson Neavles, Washington University, '42  
 Barbara Binkley, Vanderbilt University, '42

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Tumor Cells in Body Fluids. An Evaluation of Diagnosis. Elson B. Helwig. The Journal of the Missouri State Medical Association. Vol. 39: No. 3, March, 1942, p. 73.

Microscopic examination of the sediment of fluids from serous cavities provides a useful procedure for determining the presence of a neoplasm. The diagnosis of "tumor cells present" carries a high degree of accuracy, whereas a report of "no tumor cells present" is of less diagnostic value. It is noted that red blood cells and fibrin are found in both verified positive and negative fluids and therefore cannot be significant. There may also be cells in mitotic division or cells with vacuoles in either positive or negative fluid. Atypical mitotic figures and bizarre multinuclear cells are indicative of malignant cells. Helwig states that desquamated cells from the lining of the serous cavities may be confused with tumor cells and that cells arranged in clumps or acini should be accepted as tumor cells only when pronounced pleomorphism is exhibited.

## News of Alumni

1886

B. F. Stockett, 2700 Larimer St., Denver, Colo., writes that he is still in active practice at the age of 80, and that his health is fair. He sends best wishes to all his friends and classmates.

1895

On October 27, 1941 Dr. Sandor Horwitz was completely exonerated of the charges made against him for violation of the Civil Service Code. Dr. Horwitz will continue as District Health Superintendent of District No. 7 of the State of Illinois with headquarters at Peoria. His many friends never had any doubt of the innocence of Dr. Horwitz and express to him their confidence and hope for many more years of useful service.

1910

Col. Robert M. Hardaway of the Army Medical Corps is stationed at the N. S. General Hospital, Brigham, Utah.

1917

Clarence J. Brown is a Captain in the Medical Corps of the U. S. Navy, and is on foreign service.

1918

Hugh W. Maxey has been appointed Surgeon and Directing Head of the Missouri State Penitentiary Hospital at Jefferson City.

1919

Lloyd J. Thompson is a Major in the 39th General Hospital (Yale Unit) and has been ordered to active duty on April 1 at Walter Reed General Hospital, Washington, D. C.

1923

J. Paul Frick, Lt. Col. in the Army Medical Corps, is on active duty at Fort Leonard Wood, Mo.

1925

Lieut. Commander George E. Nesche is stationed at the U. S. Naval Hospital, Mare Island, Calif.

F. Bertram Zener, who limited his work to Obstetrics and Gynecology in Portland, Oreg., is Major, M. C., stationed at Vancouver Barracks, where he is Chief of Professional Services of the Station Hospital.

1927

Major John S. Wier is Commander of the 48th Medical Battalion, Second Armored Division, stationed at Fort Benning, Ga.

George C. Saunders, who practiced Eye, Ear, Nose and Throat in Portland, Oregon, prior to his induction, is Captain, M. C.

William M. Marbut is now a Major, M. C., stationed at Barnes General Hospital, Vancouver, Wash., in charge of Out Patient Service.

1928

Paul I. Robinson holds the rank of Lieutenant Colonel, M. C., and is stationed in Washington, D. C. in the capacity of Fiscal Officer for the Surgeon General.

Lt. Col. Wilford F. Hall is Executive and Personnel Officer, Office of the Air Surgeon, Army Air Force, Washington, D. C. Under the reorganization of the War Department the Air Surgeon heads the entire Medical Service and Medical Activity of the Army Air Force.

Howard R. Hildreth, was guest of honor of the Colorado Ophthalmological Society January 17. His paper was on "Incisions for Cataract Surgery."

1929

Lt. Walton C. Finn has been called to active duty at Sheppard Field,

Wichita Falls, Texas. Dr. Finn is married and is the proud father of four children.

1930

Major L. Gordon Livingston is at present "somewhere in Australia." Mrs. Livingston, who was the former Given Bonham, R. N., writes that he was ordered to the Philippines in October, 1941, and when she next heard from him in February he telephoned from Australia. The Livingstons were married in 1932 and have twins, a boy and a girl, age 6.

1932

Stanley F. Hampton and Ahden Brantley Knight were married on March 25. Captain Hampton is in General Hospital Unit No. 21 stationed at Fort Benning, Ga.

1933

Charles Morrison Schroeder is a Lieutenant in the Army Medical Corps. on foreign service.

Robert T. Terry received a promotion to the rank of Major. He is still stationed at Letterman General Hospital in San Francisco.

C. S. McLemore is located at 605 Lincoln Rd., Miami Beach, Fla., and is practicing Ophthalmology and Otolaryngology.

Robert S. Smith, 411 First National Bank Bldg., Boise, Idaho, writes that he received his F. A. C. S. in 1940—also the third addition to his family who is known as Mickey.

F. Craig Johnson gives as his address 1773 Williams, Denver, Colo.

1934

Everett S. Sanderson is Head of the Department of Bacteriology and Public Health at the University of Georgia Medical School. During the past several months he has given a number of talks on venereal diseases to various lay, civic and school groups. In April at the State Symposium on Health

Problems of Georgia he is to discuss the "Teaching of Public Health in Medical Schools."

Leonard G. Rosenthal, Major in the Army Medical Corps, is stationed at Barnes General Hospital, Vancouver, Washington. Dr. and Mrs. Rosenthal are receiving congratulations on the birth of their son February 13, 1942.

Capt. Leon S. Thomas, M. C., is on duty at the Station Hospital Section I, Fort Lewis, Washington.

1935

Capt. Nathan K. Jensen is Chief of Surgical Services, Station Hospital, Camp Crowder, Mo. Mrs. Jensen, the former Evelyn Dixon, and their daughter Mary, age three, are with him at their home, 107 Hickory St., Neosho, Mo.

Paul Kisner is a Captain in the Army Medical Corps and stationed in the Camp Area Laboratory in Omaha, Nebr.

1936

Henry Howard Meadows, Jr., holds the rank of Lieutenant (jg) in the Navy Medical Corps.

Kenneth E. Pletcher recently received a promotion from the rank of First Lieutenant to that of Captain. Captain Pletcher is Assistant Surgeon at the Station Hospital, Carlisle Barracks, Pa.

Howard K. Edwards is medical director of Eastern Air Lines, Inc., and resides at 1714 Biscayne Blvd., Miami, Fla. Dr. Edwards is married and has one child, a boy.

1937

Eldred Gann recently received a promotion to the rank of Major in the Army Medical Corps. For the past two months Major Gann has been on duty at the Air Surgeon's Office, Army Air Force in Washington, D. C.

Joseph A. Fiorito is resident in Obstetrics and Gynecology at the New Haven Hospital in New Haven, Conn.

Dr. Fiorito served for a short time in the Army Medical Corps at the Walter Reed General Hospital in Washington, D. C., but received an honorable discharge in October, 1941. He expects to open an office in New Haven for the practice of the above specialties in July.

1938

Capt. Alfred Golden, M. C., has been on duty at the Army Medical Museum in Washington, D. C. since November, 1940. Capt. and Mrs. Golden have a son, David Alfred, born on October 18, 1941.

Capt. Harold Freedman, Fort Benning, Ga., was married on December 21, 1941, to Ruth Schreiber, '42.

1940

Margaret Orr Huntington and Dr. Ruell Allen Sloan were married on

February 16. Dr. Sloan is a graduate of the Rochester University School of Medicine and is at Children's Hospital, Boston, Mass. Dr. Huntington is an interne in medicine at Barnes Hospital.

Pending his call to active military duty, Robert M. Smith will continue his assistant residency at New Haven Hospital, New Haven, Conn.

Frank Luther Davis, Jr., and Elsie Mae Staley were married on March 6. Dr. Davis is resident in surgery at the Baltimore City Hospital.

1941

John A. Putnam is at the Detroit Receiving Hospital, but expects to go into the Army soon. He was a recent visitor in St. Louis.

John H. Beatty is interning at Detroit Receiving Hospital. Rumor hath it that he is to be married in June.

## Information, Please

The Alumni Office would appreciate information concerning the whereabouts of any of the following:

- |                                 |                               |
|---------------------------------|-------------------------------|
| Harvey Dexter Bingham, '38      | Summer B. Kingsley, '40       |
| George Lloyd Calvy, '37         | Seymour J. Kranson, '34       |
| John William Connell, '22       | Paul H. Lefkowitz, '32        |
| William S. Curtis, '40          | Maude L. Lindsey, '24         |
| Frank Seymour Luckey, '07       | Theodore Ayres Lynn, '38      |
| George Seeley Gilpin, '12       | Michael K. O'Heeron, '35      |
| Ralph E. Dalton, '29            | Wlater Edwin Owen, Jr., '37   |
| Merrill Clark Davenport, '36    | — Eleanor Johnson Rector, '36 |
| Edward Henry Diehl, '98         | Samuel C. Roth, '25           |
| Adolph William Faulbaum, '03    | — Mary M. Schmeckebier, '34   |
| — Israel J. Flance, '35         | G. H. Schmidt, '77            |
| Oscar Fritjoff Foseid, '39      | Alvin Charles Schopp, '37     |
| Naokazu Fujimori, '04           | — Adrian H. Scolten, '31      |
| George B. Garrison, '17         | Daniel Smith, '87             |
| Leo Joseph Geppert, '39         | Wilcox G. Thorne, '10         |
| Hyman William Gierson, '38      | Thomas N. Toomey, '15         |
| Ralph Greenberg, '34            | Hugo Otto Wagner, '25         |
| Lewis Joseph Gumper, '38        | T. B. Waters, '89             |
| John Edmund Helm, '39           | Charles Edward Windus, '38    |
| William Bennett Hildebrand, '39 | Charles Alfred Wright, '99    |
| Louis G. Jekel, '34             | Hazarabed B. Yacoubi, '91     |
| — Marshall Wilton Kelly, '36    |                               |

## Student News

REPORTED BY CHARLES HUGULEY '42

Approximately 90 medical and dental students have applied for commission in the United States Naval Reserve Medical Corps. These students have been given physical examinations by the Navy Medical Board and are being interviewed. Following this procedure the applications are sent to Washington, D. C. These students will on acceptance receive a provisional commission as Ensign. At commencement they will be given the Commission of Lieutenant (jg.) and be subject to call. The Navy has provided ensigns with manuals of assignments for correspondence courses in Naval Customs and Regulations.

Plans are being prepared for informal exercises for the senior class at the Medical School on Monday evening, June 1. The parents and friends of the Senior class are invited. At 8:30 p. m. in the auditorium there will

be a short address by some nationally known medical man. Following the exercises an informal reception will be held on the lawn and in the student lounge. Alumni are cordially invited.

The following senior students have been elected to Alpha Omega Alpha: Charles Huguley, Charles Lockhart, Robert Brickhouse, Helen Reller, HIRAKU Ishida, Hyman Stillerman, Frank Brown, William Anderson, Jackson Neavles, George Daman, and Melvin Gibbel. Three juniors were elected to the society: Gordon Todd, Raymond Rose, and Ernest Rouse.

On Saturday, April 4, the Sophomore Class held an informal party at the Forest Park Hotel. Several students showed a remarkable ability as actors in the skit which was presented.

Marriages: Homer Sweetman, '42, to Margaret Ann Marlow; and Don Huelsmann, '43, to Barbara Pickel.

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The Ovarian Hormones and their clinical uses, Willard M. Allen. The Journal of the Missouri State Medical Association. Vol. 39, No. 1, Jan. 1942, p. 1.

The author states that in many instances ovarian hormone therapy cannot be on any other than an individual case basis and even then the method is one of trial and error. Treatment involves recognition of the fact that the adrenal gland also produces true female and male sex hormones as well as the reproductive organs and placenta. There is a group of substances which produce an indirect effect by stimulating the gonads. This latter group of gonadotropic hormones is of no avail if the gonads are not present.

The application of these substances in the treatment of certain types of vaginitis, unpleasant symptoms of the menopause, amenorrhea, and severe dysmenorrhea is described. The problems of prevention of lactation and production of growth of the breast by local application are touched on. Dosage and specific use of the hormones are discussed.

## In Memoriam

- Harry B. Andrew, '96, New Salem, Ill.; died April 5, 1941.
- Charles S. Austin, Mo. '87, Carrollton, Mo.; aged 79; died December 18, 1941.
- Henry Lee Banks, '90, Hannibal, Mo.; aged 77; died January 10.
- Edward H. Brandt, '88, Warrenton, Mo.; aged 75; died December 11, 1941.
- Arthur N. Brown, Mo. '87, Richland, Texas; died in December, 1941.
- John McHale Dean, '96, St. Louis, Mo.; aged 66; died December 8, 1941.
- Earnest G. Earnheart, Mo. '99, Oklahoma City, Okla.; aged 68; died February 21.
- John Carson Halpin, St. L. '83, Springfield, Ill.; aged 84; died January 20.
- Augustus Monroe Jones, Mo. '82, Enid, Okla.; aged 85; died December 25, 1941.
- Charles Edward Marquis, '23, Oakland, Calif.; deceased.
- Winfred B. Post, Mo. '97, Carthage, Mo.; aged 70; died December 22, 1941.
- Edward J. Viedt, Mo. '93, St. Louis, Mo.; died April 1.
- George T. Weber, Mo. '94, Olney, Ill.; aged 73; died December 26, 1941.
- Marion Grant Wyatt, Mo. '84, Bartlesville, Okla.; aged 77; died December 29, 1941.

# WASHINGTON UNIVERSITY

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George R. Throop, Ph.D., LL.D., Bridge Chancellor

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Walter E. McCourt, A.M., Assistant Chancellor

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The College of Liberal Arts

Frank M. Webster, Ph.B., Acting Dean

The School of Engineering

Alexander S. Langsdorf, M.M.E., Dean

The School of Architecture

Alexander S. Langsdorf, M.M.E., Dean

The School of Business and Public Administration

William H. Stead, Ph.D., Dean

The Henry Shaw School of Botany

George T. Moore, Ph.D., Director

The School of Graduate Studies

Richard F. Jones, Ph.D., Acting Dean

The School of Law

Joseph A. McClain, Jr., A.B., LL.B., J.S.D., LL.D., Dean

The School of Medicine

Philip A. Shaffer, Ph.D., Dean

The School of Dentistry

Benno E. Lischer, D.M.D., Dean

The School of Nursing

Louise Knapp, B.S., A.M., Director

The School of Fine Arts

Kenneth E. Hudson, B.F.A., Director

The University College

William G. Bowling, A.M., Dean

The Summer School

Frank L. Wright, A.M., Ed.D., Director

Mary Institute, a preparatory school for girls, located at Ladue and Warson Roads, is also conducted under the charter of the University.

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Note: Those desiring information concerning any of the divisions listed above should write to the Dean or Director concerned.