

THE AMERICAN ACADEMY

OF

NEUROLOGICAL SURGERY

TWELFTH ANNUAL MEETING

ROCHESTER, MINNESOTA

SEPTEMBER 28, 29 AND 30, 1950

WEDNESDAY, September 27-

Check in at hotels and have dinner as desired. Each member and guest is to register for the meeting in the lobby of the Hotel Kahler as soon as possible after arrival. Programs, badges, et cetera, will be supplied at Registration desk in Hotel Kahler.

8 P. M.—Informal assembly for members, guests and wives at the home of Dr. Alfred Uihlein, 612 Tenth Avenue S. W., Rochester. Informal motion pictures will be shown of the lion hunt in New Mexico which was attended by Doctor Raney and associates in 1949. Other informal motion pictures will be shown at this time by those who care to bring them. Music, dancing, refreshments. THURSDAY, September 28, A. M. Program-

Operative Neurosurgery and Clinical Demonstrations by the Staff of the Mayo Clinic.

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- 8:30-10:30—Neurosurgery Sixth Floor St. Marys Hospital, operating rooms 9, 10, 11 and 12. Dr. A. W. Adson, Dr. G. S. Baker, Dr. C. S. MacCarty and Dr. H. J. Svien.
- 10:30-12:15-Little Theatre, Sixth Floor St. Marys Hospital.
- CHAIRMAN: Dr. Alfred Uihlein
- 10:30—Cerebral angiography—method and technique.

Dr. J. D. Camp of the Department of Roentgenology and Dr. Alfred Uihlein of the Department of Neurosurgery.

11:15—The importance of roentgenograms in diagnostic and therapeutic nerve blocks.

Clinical evaluation of the hypospray or jet injector (first mass trial).

Nonsurgical procedures for the relief of hip pain.

Dr. J. S. Lundy of the Department of Anesthesiology.

Supportive intravenous therapy with a new category of materials:

- A. Dextran
- B. Gelatin
- C. Periston
- Dr. R. W. Ridley of the Department of Anesthesiology.
- 12:15-Bus leaves St. Marys Hospital for the luncheon.
- 12:30-2 P. M.—Luncheon at Mayo Foundation House. Master of Ceremonies—Dr. W. McK. Craig. Speaker—Dr. Donald Balfour.

Scientific Session 2 P. M. at Mayo Foundation House PROGRAM CHAIRMAN: DR. GUY ODOM

- Radiological Investigation of Trauma of the Upper Cervical Spine. Dr. Delbert Wollin and Dr. E. Harry Botterell, Toronto. (15 minutes).
- 2. The Cervical Ruptured Disc: Report of Eighty Operated Cases. Dr. R. L. McLaurin, Dr. W. B. Scoville and Dr. B. B. Whitcomb, Hartford. (15 minutes).

Presentation is made of a statistical survey of eighty cases of cervical ruptured discs which have been submitted to surgery, including three central herniations with cord signs, emphasizing the lateral herniations. Diagnosis and myelographic and surgical technique are discussed. The laterally placed ruptured cervical disc constitutes a specific syndrome of neck, shoulder and arm pain with radiation into the hand and usually the thumb and first two fingers. The incidence is common, being in the ratio of one cervical disc to six lumbar discs. In all but two cases, the location has been either the 5th or 6th cervical interspace, involving the 6th root with diminished biceps or the 7th root with diminished triceps function respectively. Myelography has been performed in nearly every case and has always been positive in the cases of ruptured discs proved by surgery. The majority of these have been slight root sleeve defects. Surgery has been done in the upright position under procain root block anesthesia, using power drill and making a limited keyhole shaped extradural decompression of the root and adjacent dura. The surgical results have been gratifying in all of the cases of lateral herniation, being consistently superior to the results in lumbar discs in the early postoperative phase. To date, there have been no recurrences. In conclusion, the authors tend to resort to surgery in preference to prolonged conservative treatment because of the evident superiority in the degree and rapidity of relief and the permanence of cure with its consequent economic saving to the patient.

Discussion of papers 1 and 2 by Dr. Guy Odom, Durham, and Dr. Wesley Gustafson, Chicago. (15 minutes).

 Intracranial Actinomycosis: Report of an Unusual Case. Dr. George L. Maltby, Portland, Maine. (15 minutes).

An up-to-date review of the literature on intracranial actinomycosis was prompted by experience with what was believed to be a rare case of cerebral abscess due to the organism of actinomycosis. Having reviewed the literature, this case has proved to be very unusual for at least two reasons: first, its course of spread and entry into the intracranial cavity and, secondly, because of the opportunity to follow the spread over a period of several years. Cerebral metastases from pulmonary diseases are not too uncommon but the direct spread of the infection along cranial nerves into the cerebrum is extremely rare. The spread in this instance was unquestionably along the divisions of the 5th cranial nerve into the ganglion producing a ganglionitis and from there a pachymeningitis and thus to a temporal lobe abscess which was unrecognized until post mortem examination.

Discussion by Dr. Henry G. Schwartz, St. Louis. (5 minutes).

4. Tracheotomy in the Management of Head Injuries.

Dr. Dean H. Echols, Dr. Raeburn C. Llewellyn, Dr. Homer D. Kirgis, Dr. Frederick C. Rehfeldt and Dr. Frank Garcia, New Orleans. (15 minutes).

The use of tracheotomy in fifteen patients with serious respiratory complications following head injuries is described. The authors believe that tracheotomy is superior to any other method of maintaining efficient aeration of the lungs in unconscious patients. Tracheotomy should be performed promptly and without hesitation in every patient unconscious from a head injury if it seems likely that the coma will persist more than twenty-four hours, and if nonsurgical methods of maintaining a good airway appear to be inefficient.

5. Chronic Subdural Hematoma from Indirect Trauma: Report of Two Cases

Dr. John M. Meredith, Richmond. (10 minutes).

Two patients, a middle aged woman and an elderly man, were both operated upon recently at approximately the same time. Each proved to have a large subdural hematoma overlying the left cerebral hemisphere. Accurate histories, with particular emphasis on recent or remote traumatic episodes in the history, revealed that in each instance a fall on the buttocks had been the only traumatic episode, producing immediate progressive symptoms in one patient, and delayed symptoms and signs in the other one. No direct head injury occurred in either case.

In view of the currently held concept of the usual formation of a subdural hematoma, i.e. a blow on the anterior or posterior aspect of the head, producing an agitation of the brain and tearing of one or more short bridging veins that traverse the subdural space from the cortex to the inner surface of the dura near the falx, these cases are of considerable interest; they are certainly unique in our experience.

Both patients recovered postoperatively, one within a short period, the other with a much longer period of disabling aphasia.

Discussion of papers 4 and 5 by Dr. William F. Beswick, Buffalo, and Dr. Joseph P. Evans, Cincinnati. (10 minutes).

6. Intraspinal Epidermoid Tumor: Case Report and Discussion.

Dr. William M. Moore and Dr. Exum Walker, Atlanta. (10 minutes).

The paper discusses the features of various types of intraspinal embryonal tumors and an additional case of intraspinal epidermoid tumor is presented, bringing to 62 the number of cases now recorded. The importance of considering these lesions in the diagnosis of longstanding cases of spinal cord involvement is emphasized.

Discussion by Dr. Arthur R. Elvidge, Montreal. (5 minutes).

EXECUTIVE SESSION FOR MEMBERS ONLY

4:30-5:15 P. M.

6:30-8 P. M.—Cocktails in the Georgian Room, Mezzanine Floor, Hotel Kahler.

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Members and official guests.

8 P. M.—Formal Banquet at Kahler Hotel Cafe, Main Floor. Members and official guests. Toastmaster—Dr. David Reeves. Speaker—Dr. Harry Botterell (Presidential Address). Mayo Foundation Male Quartet. Magician's Show.

FRIDAY, September 28, A. M. Program-

Operative Neurosurgery and Clinical Demonstrations by the Staff of the Mayo Clinic.

8:30-10:30—Neurosurgery Sixth Floor St. Marys Hospital, operating rooms 9, 10, 11 and 12. Dr. W. McK. Craig, Dr. J. G. Love, Dr. Alfred Uihlein and Dr. H. J. Svien.

10:30-12:15-Little Theatre, Sixth Floor St. Marys Hospital.

CHAIRMAN: Dr. George S. Baker

10:30—A plan for control of fire and explosive hazards in the operating room.

Some observations on the recognition and treatment of anoxia. Dr. Albert Faulconer, Jr. and Dr. R. W. Ridley of the Department of Anesthesiology.

11:00—Demonstration and discussion of various types of surgical cameras for use in surgery.

Mr. L. A. Julin, Director of the Photographic Department.

- 11:30—Control of anesthesia by electroencephalography. Dr. R. G. Bickford of the Department of Electroencephalography.
- 12:15-Bus leaves St. Marys Hospital for the luncheon.
- 12:30-2 P. M.—Luncheon at Continental Room, Carlton Hotel. Master of Ceremonies—Dr. G. S. Baker. Speaker—Dr. A. W. Adson.

Scientific Session 2:15 P. M. at Mayo Foundation House PROGRAM CHAIRMAN: DR. JOSEPH EVANS

1. Neurological Complications Associated with Coarctation of the Aorta.

Dr. Robert H. Pudenz, Dr. Leland Brannon and Dr. C. Hunter Shelden, Pasadena. (15 minutes).

The paper deals with two young adult males with coarctation of the aorta and associated intracranial aneurysm. The various problems encountered in management of these patients are discussed and the literature is reviewed to determine the incidence of intracranial aneurysm and subarachnoid hemorrhage associated with coarctation of the aorta. In addition, there is considered the influence of coarctation on intracranial arterial pressure.

Discussion by Dr. Edward W. Davis, Portland, Oregon, and Dr. Jesse Edwards,* Rochester, Minnesota. (15 minutes).

2. The Results of Simple Ligation of the Carotid Artery in the Neck for Intracranial Aneurysms of the Internal Carotid Circulation.

Dr. Francis Murphey, Memphis. (15 minutes).

A review is presented of thirty-seven cases of intracranial aneurysms treated by ligation of the common carotid, internal carotid, or common and external carotid arteries in the neck. It is suggested that this procedure is the simplest and safest, resulting in lessened mortality and morbidity rates.

3. The Effects of Permanent and Temporary Occlusion of the Middle Cerebral Artery in the Monkey.

Dr. John Harvey and Dr. Theodore Rasmussen, Chicago. (15 minutes).

*By invitation.

HARRING PARTY

The right middle cerebral artery was occluded in 9 monkeys permanently, and in 13 monkeys temporarily for periods varying from 10 minutes to 52 minutes. During each experiment a continuous cortical electrogram was obtained, and electroencephalograms were made at intervals postoperatively. The infarcts were later studied histologically.

An adequately extended series of electroencephalograms was obtained from 17 of the animals. In 9 of these animals no marked electrographic changes accompanied occlusion of the vessel. In the remaining 8 animals the degree of change was roughly proportional to the size of the lesion found at autopsy. The characteristic changes in order of their relative frequency of occurrence were (1) a reduction of the amount of normal rapid activity, (2) a reduction of cortical potentials, and (3) the appearance of slow wave activity.

Occlusions of less than 15 minutes' duration produced only temporary motor weakness. To produce a degree of impairment as severe as that associated with permanent occlusion, it was necessary to occlude the vessel for at least 50 minutes.

Clinical seizures were observed in 3 animals, following occlusions of 40, 40 and 30 minutes respectively.

No gross cortical infarction occurred following occlusions of less than 30 minutes' duration.

Hemorrhagic infarction occurred in only 2 animals; in each instance the vessel had been occluded for 50 minutes.

4. Surgical Experiences with the Superior Longitudinal Sinus and the Rolandic Veins.

Dr. Homer S. Swanson, Atlanta. (15 minutes).

It appears, from a review of the literature, that there is general agreement that the superior longitudinal sinus can be ligated anterior to the point of entrance of the Rolandic veins with impunity and that resection of a previously occluded sinus posterior to this point in most instances is not fraught with additional neurological deficit. Whether a patent sinus may be resected posterior to the point of entrance of the Rolandic veins can only be conjectured; there exists no reported instance of a deliberate ligation of the patent sinus to support or to deny this claim. Merwarth has clearly delineated the syndrome of the Rolandic veins but there is no comparable appreciation of the physiological end results which follow the ligation of a patent superior longitudinal sinus.

A review of our personal clinical material has demonstrated that perhaps our previous pessimistic view regarding the neurological handicaps which follow the ligation of a patent sinus or the Rolandic veins might not be correct. This material consists of four instances in which, in order to effect a complete removal of a parasagittal new growth, it became necessary to ligate the major Rolandic veins, three instances of thrombosis of the superior longitudinal sinus and two of thrombosis of the Rolandic veins and four instances of ligation of the superior longitudinal sinus posteriorly for either tumor problems or traumatic lesions. The improvement noted in those cases which survived was in striking contrast to the results previously reported, leading to a revision of our former ideas of the pathological physiology of the Rolandic veins and superior longitudinal sinus.

Discussion of papers 2, 3 and 4 to be opened by Dr. Wallace Hamby, Buffalo and Dr. Edwin B. Boldrey, San Francisco. (15 minutes).

 A Pediatric Assessment of Carotid-Jugular Anastomosis. Dr. Charles F. McKhann, Cleveland. (40 minutes). Discussion to be opened by Dr. Haddow Keith, Rochester, Minnnesota. (20 minutes).

EXECUTIVE SESSION FOR MEMBERS ONLY 4:30-5:30 P. M.

6:30-12 P. M.—Cocktails, Buffet Supper and Dance at the Rochester Country Club. Members, guests and local medical associates of the Neurosurgical Section of the Mayo Clinic. Dress optional.

SATURDAY, September 30, A. M. Program

9:00-11:00—Scientific Session in Plummer Hall, Fourteenth Floor Mayo Clinic Building.

PROGRAM CHAIRMAN: DR. THEODORE RASMUSSEN

1. The Reticular Substance of the Brain Stem and Its Relation to Wakefulness.

Dr. Charles W. Taylor, Toronto and Dr. H. W. Magoun, Chicago. (15 minutes).

2. Studies on the Absorptive Processes of the Cerebrospinal Fluid with Radioactive Phosphorous (P³²) and Its Clinical Applications.

Dr. John E. Adams, San Francisco. (15 minutes).

The uptake of P^{32} in the form of $Na_3H_2PO_4$ by the superior longitudinal sinus has been followed in dogs, in patients undergoing prefrontal lobotomy and in hydrocephalic infants, after instillation into the lateral ventricle and cisterna magna. Curves for the rate of uptake have been established for presumably normal individuals which have been correlated with the rate of excretion of the isotope in the urine.

Evidence has been obtained which suggests that overproduction of cerebrospinal fluid is a casual factor in some cases of communicating hydrocephalus. Further studies indicate that the entrance of the cerebrospinal fluid into the vascular system takes place distal to the pacchionian granulations.

3. Ultrasonic Ventriculography.

Dr. H. Thomas Ballantine, Jr., Boston. (15 minutes).

Work will be reported applying the principles of ultrasonics to the delineation of ventricular pattern.

4. Changes of Plasma Enzyme Patterns Following Lobotomy, Chordotomy and Shock Therapy.

Dr. John D. French, Long Beach, California. (15 minutes).

West has shown that the amounts of 2 proteolytic enzymes in the blood are considerably increased by malignancy and by certain nonmalignant conditions which effect physical or mental stress. The pattern displayed by periodic determination of such enzymes (chymotrypsin and rennin inhibitors) affords a valuable objective means of following the course of malignant diseases and of evaluating the effectiveness of surgical and non-surgical treatment.

The mechanism behind the alteration of these patterns and the significance of the changes is now under investigation by West. In the course of this investigation it became necessary to study the effect on the patterns of pain and anxiety in patients with cancer.

For this reason, 6 patients with cancer, all of whom manifested severe pain and anxiety, were followed before and after lobotomy (4 cases) and chordotomy (2 cases). All those who received lobotomy showed improvement (in 2 instances, striking) in their patterns while in those who had chordotomy no improvement occurred.

To control the experiment, the same operations were made on people with non-malignant disease. Thus, chordotomy was done on 5 paraplegics with severe pain in the lower extremities and lobotomy on 2 patients with severe emotional stress. The results again showed that chordotomy did not affect the enzyme systems while lobotomy produced considerable improvement.

As a further control, 5 patients with severe despressive-anxiety states, but no pain, were followed during the course of electroshock therapy. In all cases improvement in the enzyme patterns was prompt and correlated directly with clinical improvement.

The impressions gained from these preliminary data are that anxiety influences the enzyme patterns considerably and also, possibly, the course of the disease while pain itself has little direct influence as a stress-producing agent. The initial study appears to justify further investigation to clarify the following considerations: (1) The mechanism involved in the alteration of the enzyme system, (2) the usefulness of the test in neuropsychiatric diagnosis and treatment.

5. Spontaneous High Voltage and Rhythmic Low Voltage Discharges from Isolated (and Partially Isolated) Human Cortex.

Dr. Francis Echlin, New York City. (15 minutes).

Using Jasper-Penfield electrodes and a four channel electroencephalograph, electrocorticograms have been made from areas of human cerebral cortex (of schizophrenic patients) after partial or complete isolation of these areas from the surrounding brain except for preservation of their pia-arachnoidal circulation.

Partial neuronal isolation of a block of cortex resulted in a depressing of the spontaneous activity and the appearance of spontaneous bursts of relatively high voltage waves.

Complete neuronal isolation of a block of cerebral cortex caused a marked depression of the spontaneous activity but low voltage rhythmic activity similar to that in the surrounding brain persisted. After 20 to 50 minutes spontaneous paroxysmal bursts of high voltage waves began to appear from the isolated cortex. Some evidence is presented that the paroxysmal dicharges are not due to ischemia or injury. One chronic preparation is under study. The theoretical implications of the findings are discussed.

6. Cerebral Pedunculotomy for the Relief of Involuntary Movements. Dr. A. Earl Walker, Baltimore. (15 minutes).

Report will be made of clinical cases of involuntary movement treated by partial section of the cerebral peduncle. The physiological basis of the relief of the abnormal movements and the preservation of practically normal motor function will be discussed.

SATURDAY, September 30, P. M.

Annual Golf Championship—Rochester Country Club. Golfers' luncheon at the Club 12:30 P. M. Eighteen holes will be played in foursomes. Your home course handicap applies. Low net score wins the Silver Championship Trophy to be competed for annually. Chairman of the golf program—Dr. George Baker. Bring your golf clubs and shoes if possible. Please sign up for this at time of registration.

Tennis at the Rochester Tennis Club.

See Dr. H. J. Svien for appointments.

National Golden Retriever Club Field Trials.

Dr. C. S. MacCarty will arrange for transportation.

Horseback riding, sight-seeing, shopping, fishing, trap shooting, boating on Lake Pepin.

Coon hunting and other big game enterprises available at all times. See Chairman, Dr. R. Raney.

PROGRAM OF THE LADIES' AUXILIARY AND WIVES OF THE OFFICIAL GUESTS

WEDNESDAY, September 27

8 P. M.—Informal evening at the home of Dr. Alfred Uihlein, 612 -10th Ave. S. W., Rochester.

Movies of former meetings will be shown, and the famous lion hunter, Dr. R. Raney of Los Angeles, California, will lecture, by use of a technicolor film, on his experiences with big game in 1949.

Music, dancing, refreshments.

THURSDAY, September 28

10 A. M.—Annual meeting of the Ladies Auxiliary, and wives of the official guests, at the home of Dr. and Mrs. George S. Baker, Orchard Acres, Rochester, Minnesota.

Coffee and canapes a la matin.

Official photographs.

Transportation will be furnished by bus from Hotel Kahler for entire group to and from the meeting. Bus leaves the hotel at 10 A. M. and returns by 12 noon.

- P. M.—Luncheon at the Rochester Country Club. Bridge, Canasta, gin-rummy and golf. Shopping, sight-seeing, sports as desired. Transportation will be furnished to and from the club.
- 6:30 P. M.—Formal cocktail party, Georgian Room, Mezzanine Floor, Hotel Kahler. Members and official guests.
- 8 P. M.—Formal Banquet at Kahler Hotel Cafe, Main Floor. Members and official guests.
- FRIDAY, September 29

The wives of the members of the Neurosurgical Staff have arranged the day.

- 10 A. M.—Tour through Mayo Foundation House and the Mayo Clinic. Guides will be waiting in main lobby of the Clinic building at 10 A. M.
- 11:30 A. M.—Leave Hotel Kahler for beverages at the lake cottage of Dr. and Mrs. J. G. Love, Oronoco, Minnesota.
- 1:15 P. M.—Luncheon at Carroll's White House, Lake Shady. Transportation will be furnished by the wives of the Staff of the Neurosurgical Section at the Mayo Clinic from the Hotel Kahler.
- 3:30-6 P. M.—Shopping, appointments for special necessities, rest.
- 6:30 P. M.—Cocktails, Buffet Supper and Dance at the Rochester Country Club. Members, guests and local medical associates of the Neurosurgical Section of the Mayo Clinic. Dress Optional.

SATURDAY, September 30

- A. M.—Golf at Rochester Country Club. Tennis at Rochester Tennis Club. Shopping for presents to take home to the kids.
- P. M.—Informal luncheons at "hot spots" of your own selection. Boating on Lake Pepin. Fishing, if arranged for. Horseback riding. Informal dinner. Coon hunt arranged by Dr. R. Raney. Informal parties at Rochester Country Club, night clubs, et cetera.

The American Academy of Neurological Surgery

President Edmund H. Botterell

Vice President David L. Reeves

Secretary and Treasurer Wallace B. Hamby

Honorary Members

Dr. Winchell McK. Craig Mayo Clinic Rochester, Minn. Dr. R. Glen Spurling 405 Heyburn Bldg. Louisville, Ky.

Active Members

- Dr. George S. Baker Dept. of Neurosurgery Mayo Clinic Rochester, Minn.
- Dr. William F. Beswick 140 Linwood Ave. Buffalo 9, N. Y.
- Dr. Edwin B. Boldrey Univ. of Calif. Medical School Room 11-C San Francisco 22, Calif.
- Dr. Edmund H. Botterell Medical Arts Bldg. 280 Bloor St., W. Toronto 5, Ontario, Canada
- Dr. Spencer Braden 1342 Hanna Bldg. Cleveland, Ohio

- Dr. Keith Bradford 410 Hermann Professional Bldg. 6410 Fannin St. Houston 5, Texas
- Dr. Howard Brown 384 Post St. San Francisco 8, Calif.
- Dr. Harvey Chenault 200 West Second St. Lexington 6, Kentucky
- Dr. Donald F. Coburn 221 Plaza Time Bldg. Kansas City 2, Mo.

- Dr. Edward W. Davis 806 S. W. Broadway Portland, Oregon
- Dr. Francis A. Echlin 555 Park Ave. New York 21, N. Y.
- Dr. Dean Echols 3503 Prytania St. New Orleans, La.
- Dr. Arthur Elvidge 3801 University Ave. Montreal, Quebec, Canada
- Dr. Theodore C. Erickson 1300 University Ave. Madison 6, Wisconsin
- Dr. Joseph P. Evans Cincinnati General Hospital Cincinnati 29, Ohio
- Dr. James G. Galbraith 1117 South 22nd St. Birmingham, Ala.
- Dr. Everett Grantham 405 Heyburn Bldg. Louisville 2, Ky.
- Dr. Wesley A. Gustafson 700 North Michigan Ave. Chicago 11, Ill.
- Dr. Wallace B. Hamby 140 Linwood Ave. Buffalo 9, N. Y.

- Dr. Hannibal Hamlin 270 Benefit St. Providence 3, R. I.
- Dr. Jess D. Herrmann 521 N. W. 11th St. Oklahoma City 3, Okla.
- Dr. Olan R. Hyndman 621 First National Bldg. Davenport, Iowa
- Dr. William S. Keith 208 West Block Medical Arts Bldg. Toronto 5, Ontario, Canada
- Dr. George L. Maltby 203 State Street Portland 3, Maine
- Dr. Frank H. Mayfield 1502 Carew Tower Cincinnati 2, Ohio
- Dr. Augustus McCravey Medical Arts Bidg. Chattanooga, Tenn.
- Dr. John M. Meredith 1200 E. Broad Street Richmond 19, Va.
- Dr. Edmond Morrissey 330 Medical Bldg. 909 Hyde St. San Francisco 9, Calif.
- Dr. Francis Murphey Suite 525 Physicians & Surgeons Bldg. Memphis 3, Tenn.
- Dr. Guy L. Odom Duke University Durham, North Carolina
- Dr. J. Lawrence Pool 710 W. 168th St. New York 32, N. Y.
- Dr. Robert Pudenz 696 E. Colorado St. Pasadena 1, Calif.

- Dr. John Raaf 912 Medical Dental Bldg. Portland 5, Oregon
- Dr. Aiden Raney 1136 W. Sixth St. Los Angeles 14, Calif.
- Dr. Ruper Raney 1136 W. Sixth St. Los Angeles 14, Calif.
- Dr. Theodore Rasmussen The University of Chicago University Clinics Chicago 37, Ill.
- Dr. David L. Reeves 316 W. Junipero St. Santa Barbara, Calif.
- Dr. R. C. L. Robertson
 411 Hermann Professional
 Bldg.
 6410 Fannin St.
 Houston 5, Texas
- Dr. Stuart N. Rowe 3700 Fifth Ave. Pittsburgh, Pa.
- Dr. Henry G. Schwartz Dept. of Surgery Washington University St. Louis 10, Mo.
- Dr. William B. Scoville 56 Garden St. Hartford, Conn.
- Dr. Hunter Shelden Suite 505 Professional Bldg. Pasadena, Calif.
- Dr. Samuel R. Snodgrass Univ. of Texas Medical Branch Galvaston, Texas
- Dr. Homer S. Swanson Emory University Hospital Emory University, Georgia

- Dr. Alfred Uihlein Dept. of Neurosurgery Mayo Clinic Rochester, Minn.
- Dr. A. Earl Walker Johns Hopkins Hospital Baltimore 5, Md.
- Dr. Exum Walker 133 Doctors Bldg. Atlanta 3, Georgia

Dr. Thomas A. Weaver Suite 521 Third National Bldg. Dayton 2, Ohio :

- Dr. Benjamin B. Whitcomb 85 Jefferson St. Hartford 6, Conn.
- Dr. Barnes Woodhall Dept. of Surgery Duke University Durham, North Carolina

Corresponding Member

Dr. O. William Stewart Ward 5-B Queen Mary Veterans' Hospital Montreal, Quebec, Canada

GUESTS OF THE ACADEMY = 1950 MEETING

- Dr. A. W. Adson Rochester, Minnesota
- ✓ Dr. Kenneth Abbott Columbus, Ohio
- ✓ Dr. John E. Adams San Francisco, California
 - Dr. Eben Alexander Winston-Salem, North Carolina
 - Dr. H. T. Ballantine, Jr. Boston, Massachusetts
 - Dr. Harold F. Buchstein Minneapolis, Minnesota
- Dr. John Eisenbeiss Phoenix, Arizona

- Dr. John D. French Long Beach, California Dr. Lyle French
- Minneapolis, Minnesota Dr. W. James Gardner -
- Cleveland, Ohio Dr.-Jerome-F. Grunnagle
 - Pittsburgh, Pennsylvania Dr. Henry L. Heyl
- Hanover, New Hampshire Dr. Curwood R. Hunter Cincinnati, Ohio

Sir Geoffrey Jefferson Manchester, England

- Dr. J. Grafton Love Rochester, Minnesota
- Dr. Collin S. MacCarty Rochester, Minnesota
- Dr. Donald Matson Boston, Massachusetts
- ✓ Dr. William F. Meacham / Nashville, Tennessee
- √ Dr. Peter Murphy Washington, D. C.
 - Dr. William Peyton Minneapolis, Minnesota
- ✓ Dr. Wallace Ritchie St. Paul, Minnesota
 - Dr. H. J. Svien Rochester, Minnesota
 - Dr. Gordon Strewler Duluth, Minnesota
 - Dr. Charles W. Taylor Toronto, Ontario, Canada
 - Dr. Leonard Titrud Minneapolis, Minnesota Dr. Delbert Wolliu
 - Toronto, Ontario, Canada

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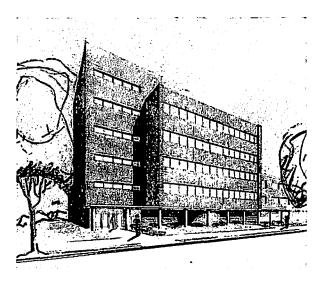


THE MAYO FOUNDATION HOUSE

Mayo Foundation House, at Seventh Avenue and Fourth Street Southwest, was the home of Dr. and Mrs. William J. Mayo until November, 1939, when it was presented by them to the Mayo Foundation for Medical Education and Research as a place in which fellows of the Foundation, members of the staff of the Mayo Clinic, visiting physicians, surgeons, scientists, teachers and distinguished guests would always be welcome.

The building has a number of rooms in which dinners, seminars and the like can be held, and facilities are provided on the second floor for the overnight lodging of distinguished guests of the Mayo Foundation or Mayo Clinic. Dr. William J. Mayo's library, likewise presented to the Mayo Foundation House, is situated in the northeast corner of the first floor.

On the third floor of the Mayo Foundation House is Balfour Hall, so named in November, 1948, in honor of Dr. Donald C. Balfour, director emeritus of the Mayo Foundation. Dr. Balfour came to the Mayo Clinic in 1907 as an assistant in pathology; in 1912 he became head of a section of surgery, and in 1937 he became director of the Mayo Foundation for Medical Education and Research. He retired in October, 1949. One of the unusual features of Balfour Hall is a great stained-glass window in which the salient events in the history of medicine are presented in many colors.



THE MEDICAL SCIENCE BUILDING

Construction of the new addition to the Medical Science Building at Third Avenue and Third Street Southwest began in April, 1949, and is expected to be completed in 1951. It is a five-and-a-half story building 130 by 152 feet, and more than doubles the size of the Medical Building proper, which was completed in 1941.

The new addition to the Medical Science Building will provide quarters for the Section on Pathologic Anatomy, a section concerned with research chemistry, the Section on Anatomy, the Section on Physiology, the Section on Biophysics, a laboratory of dental histopathology, the Section on Engineering and many other units or special endeavors of the Mayo Clinic or Mayo Foundation. The famous human centrifuge, which at the time it was built was the only one in the United States, has been preserved and is a part of the new addition. Both the Medical Science Building proper and the new addition to it are connected to the Mayo Clinic by a subterranean tunnel system.

Directly across the street from the present Mayo Clinic building may be seen the excavation, begun in August, 1950, for the new ten-story diagnostic building. A sketch of this new diagnostic building appears elsewhere in this program. The site of the new diagnostic building was occupied from about 1868 to the summer of 1950 by a large square brick building which originally was a public school and in 1935 became the headquarters of the Mayo Foundation Museum of Hygiene and Medicine. The Museum presently is housed in a temporary structure; when the new diagnostic building is completed the Museum may be moved to the present Mayo Clinic building.