

THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

Eighteenth Annual Meeting



CAMELBACK INN
PHOENIX, ARIZONA
November 8th, 9th and 10th, 1956

The American Academy Of Neurological Surgery

OFFICERS 1956

Stuart N. Rowe, M.D	President
Jess D. Herrmann, M.D.	Vice-President
Eben Alexander, Jr. M.D.	Secretary-Treasurer
Mrs. John R. Green	President, Women's Auxiliary

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John R. Green, M. D.

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Edwin Boldrey, M.D., Chairman
Henry Heyl, M.D.
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MEMBERSHIP COMMITTEE

Rupert P. Raney, M.D., Chairman David L. Reeves, M.D. Edward W. Davis, M.D. Joseph P. Evans, M.D.



Thursday, November 8th, 1956

9:00 A. M. - REGISTRATION

Scientific Program

Stuart N. Rowe, M.D., President, Presiding Morning Session — 9:15 A.M.

1. EMBRYOLOGY OF THE PITUITARY.

C. Hunter Shelden, M.D., and Robert H. Pudenz, M.D.

An animated motion picture is to be shown to illustrate the origin and method of development of the anterior and posterior lobes of the pituitary gland. The movie is designated to correlate the embryological with the surgical findings. A brief resume is also shown of the surgical approach and the gross appearance of these tumors.

2. FUNCTION OF THE PITUITARY IN MAN.

D. M. Bergenstal, M.D., Bethesda, Maryland (By invitation)

The function of the pituitary in man, both from the point of view of hypersecretion and hyposecretion of its hormonal substances, has been most difficult to carefully evaluate for our present methods of assay have been so inadequate. The ability of the biochemist to isolate these protein hormones as pure substances has presented a major problem and has made it difficult to obtain pure hormones for an evaluation of their physiological action. An attempt will be made to discuss some of the present tests that are available for the determination of pituitary function and relate alterations in pituitary function to known disease states.

At the present time there seems to be no test or group of tests that will give complete assurance of a total anatomical hypophysectomy. The metabolic properties of exogenously administered pituitary secretions in man has been difficult to determine because of the formation of antibodies of the phenomena of species specificity. Examples of these difficulties will be discussed. The possible control of ACTH excretion by the posterior lobe hormone of the pituitary has been recently suggested by investigators in Italy and the United States. Data from our laboratory regarding this point will be presented. Control of post-hypophysectomy diabetes insipidus has been the major disagreeable side effect. The control of this diabetes insipidus at times has been difficult because of the patient's sensitivity to the pitressin. 20 Minutes.

3. EXPERIENCES WITH PITUITARY ADENOMAS.

Dean Echols, M.D.

This is a brief summary of personal experience with the surgical treatment of hypophysial adenomas of the chromophobe, eosinophilic, and mixed types.

Most patients were operated on because of failing vision, but two had headache only and two had compression of the brain. Mention is also made of those treated by roentgen radiation only.

4. THE USUAL PITUITARY ADENOMA.

Homer S. Swanson, M.D.

Our clinical and surgical knowledge pertaining to adenomas of the pituitary gland stem from the classical descriptions set forth by Cushing. With the wider clinical experience and the accumulated data of many investigators during the past thirty years, it becomes apparent that the hypophysial adenoma exhibits a tendency toward multiple and varied clinical manifestations. Those instances of variance from the anticipated syndrome are of extreme importance because of the diagnostic problems presented and the increased surgical hazards common to this group.

In this presentation, an attempt will be made to delineate the syndrome of pituitary apoplexy. In addition, the problem of extra-sellar extension of the pituitary adenomas will be discussed and brief reference will be made to some of the unusual radiological aspects of the adenomas of the pituitary gland.

10 Minutes.

HYPOPHYSEAL TUMORS — METHODS OF TREATMENT.

Hannibal Hamlin, M.D., and Oscar Hirsch, M.D. (By invitation)

Summary and appraisal of current methods of treatment of the several types of hypophyseal tumors with an effort to formulate where and when transphenoidal — transfrontal and various radiation techniques are indicated.

HYPOPHYSECTOMY.

Lyle A. French, M.D.

This report concerns our experience up to July, 1956, with thirty operations for removal of the pituitary gland in patients with breast cancer. This is a selected group of patients so the therapeutic results are not statistically significant. The preoperative medication and operative procedure will be discussed. At operation a wedge of the anteromedial portion of the frontal lobe is excised. It is felt this improves visualization of the chiasmal region and reduces complications. Subjective improvement has been observed in twenty-two, objective in eighteen, and metabolic in two patients. In five patients there was no evident response to the procedure. The longest duration of objective response has been twenty months post-hypophysectomy. Reactivation then occurred in this patient. Reactivation also occurred in seven other patients demonstrating objective responses after three to eighteen months of improvement. At the present time, nine of the thirty patients are still maintaining the initial objective improvement two to twelve months after hypophysectomy. In five patients temporary rhinorrhea occurred immediately

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NOTES

following the operation, three patients developed a post-operative meningitis and one of these died. A permanent unilateral visual disturbance occurred in two patients postoperatively, in one this was concomitant with development of meningitis; in the other peripheral vision was lost in one eye. In only one patient has there been a loss of smell.

DISCUSSION TO BE OPENED BY:

Dr. Rolf Luft, Sweden (By invitation)

Poolside Luncheon — 12:30 P.M. to 2:00 P.M. Afternoon Session — 2:00 P.M. to 4:00 P.M.

ANATOMICAL CONSIDERATIONS IN STEREOTAXY.

L. V. Amador, M.D., Chicago, Illinois (By invitation)

During the past few years there has been a marked increase in human stereotaxy. Reports in the medical literature reveal that a great many operations upon the subcortical structures have been carried out by investigators here and abroad. The indications for this type of surgery vary from intractable pain to the extra-pyramidal disorders. Because of the importance of the relationship of the deep subcortical structures, we have made an anatomical atlas utilizing 100 brains which have been carefully perfused and sectioned. In this material it has become apparent that although there is some general correlations of structures we could not establish accurate anatomical correlations based upon a plane of the skull or brain. A series of slides will be presented which show the anatomical relationships and variations of the nuclei ordinarily considered in stereotaxic surgery.

Discussion.

FURTHER OBSERVATIONS UPON REGENERATION OF AXONS OF THE SPINAL CORD IN MAMMALS.

L. W. Freeman, M.D., Indianapolis, Indiana (By invitation)

Clinical observations during World War II on patients whose spinal cords had been damaged and who showed subsequent functional return indicated that at least two different explanations were possible — recovery of function in axons showing only temporary physiological arrest, and actual regrowth of severed axons. Experimentation with rats and dogs has detailed some of the factors in the first category. In similar animals, surgical severance of the spinal cord has been followed by return of function, quite definitely as a result of axonal regrowth. The exact origin of these regenerated axons has been the subject of extensive study. An attempt will be made to demonstrate that while good functional results can be obtained by the implantation of centrally connected nerve roots into the isolated distal stump of the divided spinal cord, it is probable that axons of internuncial origin also can and do have the same capabilities.

Discussion

9. LUMBAR SUBARACHNOID PERITONEAL SHUNT FOR HYDROCEPHALUS.

W. S. Keith, M.D., and E. B. Hendrick, M.D. (By invitation)

This is a study of the short term results from this operation. It covers a forty-four month period, from May, 1952, to December, 1955. Fifty-two consecutive cases were studied. Only children under one year at the time of the first operation are included. Two babies with communicating hydrocephalus were later found to have neoplasms. They both died and autopsies were done. Of the remaining fifty cases, seven died, three in hospital and four later at home. Of the forty-three patients who survived, over half have had only one operation, several have had two and a small number have had multiple operations. At least three have marked mental deficiency but the surprising thing about this series is the number of children who have done well and are socially acceptable in their homes, with this comparatively simple surgical treatment.

Discussion.

10. POSTERIOR FOSSA SURGERY IN CHILDHOOD. (Movie)

Donald D. Matson, M.D.

Technique of opening and closure of the posterior fossa in the sitting position in young children is demonstrated, and the following conditions are illustrated:

1. Congenital obstruction of the IVth ventricle. 2. Ventriculo-Cervical subarachnoid shunt for aqueduct occlusion. 3. Cerebellar astrocytoma. 4. Cerebello-pontine angle ependymoma.

20 Minutes.

Discussion.

EXECUTIVE SESSION - 4:00 P.M.

Friday, November 9th, 1956

Dr. Jess Herrmann, Vice-President, Presiding

Scientific Program

Morning Session — 9:00 A.M. — 12:30 P.M.

11. FRACTIONAL PNEUMOENCEPHALOGRAPHY.

Alfred Uihlein, M.D.

Fractional pneumoencephalography is a safe and rapid way of estimating whether or not there is an obstructive lesion of the posterior fossa in the presence of or absence of papilledema — the technique will be described and illustrated with x-ray films.

5 Minutes.

12. LAMINOGRAPHY IN CEREBRAL AIR STUDIES.

John Raaf, M.D. and Fred Shipps, M.D. (By invitation)

Because of overlying air shadows in cerebral arteriograms or ventriculograms, deep lying structures are at times obscured — laminography may more clearly visualize lesions at a depth.

5 Minutes.

Discussion.

13. TIMING CONTROL IN CEREBRAL ANGIOGRAPHY.

Fred Shipps, M.D. (By invitation) and John Raaf, M.D.

By exact timing of the injection of diodrast or hypaque less material can be injected and better pictures visualized. An instrument to help control the timing is presented.

5 Minutes.

A DEVICE FOR SIMULTANEOUS BIPLANE SINGLE INJECTION STEREO-SCOPIC ANGIOENCEPHALOGRAMS.

Earl Miller, M.D. (By invitation) and Edwin Boldrey, M.D.

This device is currently being used at the University of California Hospital and simplifies the technical aspects of angioencephalography as well as reduces the cost for personnel and increases the safety of the examination.

5 Minutes.

15. EXPERIENCES IN THE USE OF THE BIPLANE RAPID ANGIOGRAPH.

William F. Meacham, M.D.

A discussion of the use of this apparatus with the technique involved in the use of the biplane angiograph.

5 Minutes.

PREVENTION OF COMPLICATIONS FROM ANGIOGRAPHY. Arthur A. Ward, Jr., M.D.

To prevent vaso-spasm which follows injection of diodrast, a small quantity of procaine is injected into the carotid at the termination of the procedure. The rationale for this maneuver will be presented.

5 Minutes.

- 17. USE OF 2.5% PAPAVERIN LOCALLY TO PREVENT OR RELIEVE VASO-SPASM OF ARTERIES OF THE CIRCLE OF WILLIS AT OPERATION.
 - J. Lawrence Pool, M.D.

Topical application of 2.5% Papaverin solution by means of cottonoid strips relieves existing vasospasm of basal cerebral arteries and prevents mechanically induced vasospasm, as Dott and Gillingham have discovered. 5 Minutes.

Discussion.

COFFEE BREAK - - - 5 Minutes

18. OPERATIVE INSTRUMENTS FROM THE HARTFORD HOSPITAL WITH ESPECIAL REFERENCE TO TREPHINE EXPOSURE FOR SUPRATENTO-RIAL BRAIN LESIONS.

William B. Scoville, M.D.

Illustrative slides of instruments and techniques.

5 Minutes.

 NEWER NEUROSURGICAL INSTRUMENTS AND TECHNIQUES — CU-RETTES AND ANEURISM CLIP.

Frank H. Mayfield, M.D.

Application of a new curette in removal of cervical hypertrophic masses, with demonstration by motion picture. The advantages of intracranial use of a positive-action aneurysm clip with demonstration by slides and instruments.

5 Minutes.

- 20. ELECTRACOAGULATION TECHNIQUES EMPLOYED AT MASSACHU-SETTS GENERAL AND BOSTON VETERANS ADMINISTRATION HOS-PITALS.
 - H. Thomas Ballantine, Jr.

Presentation and description of an electronic switch and plastic-coated instruments which together have greatly simplified electrocoagulation during neurosurgical procedures.

5 Minutes.

- 21. DISCUSSION OF THE TYPE OF RETRACTOR USED FOR FRONTAL TUMORS.
 - C. Hunter Shelden, M.D.

Discussion of a simple type of self-retaining retractor for elevation of the frontal lobe during transfrontal craniotomy with the patient in the face-forward position.

5 Minutes.

Discussion.

22. A COMPLETELY SUBDURAL TORKILDSEN OPERATION. Wallace B. Hamby, M.D.

By putting a catheter through the tentorium and into the lateral ventricle, running it across the cerebellum, to be fastened with a stitch within the cisterna magna, and closing the dura, a completely intradural Torkildsen ventriculocisternostomy can be performed, eliminating many complications



incident to other methods of running the tube.

5 Minutes.

Discussion.

23. ORBITAL DECOMPRESSION WITHOUT OSTEOPATHIC FLAP.

Howard A. Brown, M.D.

Adequate decompression of the orbit, particularly in malignant exophthalmos may be accomplished by a lateral approach without the necessity of an osteoplastic flap.

5 Minutes.

Discussion.

INDWELLING CATHETER FOR PERIODIC DRAINAGE OF CRANIOPHA-RYNGIOMA CYST.

James Greenwood, Jr., M.D.

A small rubber catheter used in the cavity of a craniopharyngioma cyst with its superficial end in the subcutaneous tissues made it possible to evacuate at intervals the cystic contents with minimal disturbance or trauma to the patient.

5 Minutes.

Discussion.

25. SUTURES.

Aidan A. Raney, M.D.

Widely spaced sutures reduce the danger of wound infection, operative wound hematomas, and are time-saving in wound closure.

5 Minutes.

PLASTIC NEUROSURGICAL PROCEDURES ON THE SCALP AND SKULL. George Baker, M.D.

The valuable use of ivalon, acrylic plates and sliding scalp flaps will be demonstrated from slides.

5 Minutes.

27. LIQUID LUCITE.

George L. Maltby

We have found that "liquid lucite" is an efficient and apparently nonreactive substance to prevent bone regeneration in cases of cranial synostosis.

5 Minutes.

Discussion.

28. DISCUSSION OF VENTRICULO-AURICULAR SHUNTS.

Robert H. Pudenz, M.D.

Clinical experience with the latest model ventriculoauricular shunt tube, the method of implantation and advantages and results of its use will be presented.

5 Minutes

Discussion.

EXECUTIVE SESSION - 12:00 Noon

Poolside Luncheon - 1:30 P. M.

Saturday, November 10th, 1956

Morning Session - 9:00 A.M. - 12:30 P.M.

Scientific Program

 MASSIVE SUBDURAL HYDROMA COMPLICATING TORKILDSEN PROCE-DURE FOR POSTERIOR THIRD VENTRICLE OR PINEAL TUMORS.

John M. Meredith, M.D.

A forty-one-year-old white male with a high degree of choked disc bilaterally was found to have a probable pinealoma or a posterior third ventricle glioma. A Torkildsen procedure was carried out after ventriculography. Post-operative x-ray therapy was given. He did well for six weeks then, headache, vomiting and irrationality developed. Approximately seven weeks after the right-sided Torkildsen procedure an enormous right sided subdural hydroma was found and drained with immediate relief of the disabling clinical syndrome, including definite choked discs bilaterally. He has remained well to date, nine months after the last operation. This post-operative complication of the Torkildsen procedure, new in our experience, is discussed with particular reference to the mechanism of its formation and its surgical relief.

10 Minutes.

Discussion.

30. RESULTS OF SURGERY FOR PSYCHOMOTOR EPILEPSY.

John R. Green, M.D., Harry F. Steelman, M.D. (By invitation) R. E. H. Duisbery, M.D., W. B. McGrath, M.D. (By invitation) Samuel Wick, M.D. (By invitation)

Anterior temporal lobectomy has been performed on 46 patients with psychomotor states between July, 1948, and March, 1956. Thirty were done in the Arizona State Hospital and 16 in a private hospital in Phoenix by the same team. An accounting is made of the results and a movie is presented to depict neurosurgical technique.

Discussion

31. LOSS OF RECENT MEMORY AFTER BILATERAL SURGICAL LESIONS OF THE HIPPOCAMPUS.

William B. Scoville, M.D. and Brenda Milner, Ph.D., Montreal, Canada (By invitation)

In the course of some 280 fractional bilateral resections and undercutting operations on schizophrenic patients, 30 bilateral limited resections of the medial surface of the temporal lobe were also made. Surgical extension into this area was made because of the known relationship between the medial temporal and posterior orbital areas.

One striking behavioral result was observed after bilateral medial temporal lobe resections extensive enough to include portions of the hippocampal complex: this was a grave and persistent loss of recent memory, unaccompanied by other changes of intellect or personality. The severity of the mem-

ory loss was proportional to the extent of hippocampal removal and was not observed unless the resection was bilateral and extended 5 centimeters or more posterior to the tips of the temporal lobes.

20 Minutes.

Discussion.

32. HIBERNOTHERAPY IN THE MANAGEMENT OF THE ACUTELY ILL NEU-ROSURGICAL PATIENT.

Alfred Uihlein, M.D.

The value of lowered body temperature in the management of the acutely ill neurosurgical patient has not been satisfactorily determined. The patient with an acute head injury has been benefited by the administration of cold during the early critical period of convalescence. Six acutely ill patients were subjected to the lowering of body temperature as a method of combating their serious neurologic condition. It was difficult to lower body temperature below 90 degrees Fahrenheit. Thorazine occasionally produced marked hypotension. In selected cases, hypothermia seems to aid the convalescence of the acutely ill neurosurgical patient. The management of these patients is difficult, and hibernotheraphy should not be used unless the patient can have constant attention to maintenance of an adequate airway and the maintenance of electrolyte balance.

- 33. AWARD WINNER Hubert L. Rosomoff, Lt., MC USNR
 HYPOTHERMIA AND CEREBRAL VASCULAR LESIONS.
 II. EXPERIMENTAL MIDDLE CEREBRAL ARTERY INTERRUPTION FOLLOWED BY INDUCTION OF HYPOTHERMIA. 20 Minutes
- WORKABLE CLASSIFICATION FOR EVALUATION OF TREATMENT OF INTRACRANIAL ANEURYSM.
 Minutes.

A. Earl Walker, M.D.

DISCUSSION OF NEUROSURGICAL TRAINING PROGRAM. 20 Minutes.
 Edwin Boldrey, M.D.

TO BE PRESENTED BY TITLE:

A PLEA FOR EARLY OIL STUDY IN NEGATIVE EXPLORATION FOR LUMBAR DISCS WITH PERSISTENT SYMPTOMS.

John Meredith, M.D.

To recent instances of (1) intradural post-traumatic neuroma from extradural lumbar disc pressure, and (2) a lumbar disc with the lesion on the side opposite the patient's pain, both being shown by a preoperative oil study, prompted this report.

TREATMENT OF ACUTE TRAUMATIC POSTOPERATIVE ARACHNOIDITIS OF THE SPINAL CORD.

Benjamin Bradford Whitcomb, M.D.

By placing lumbar needles above and below a block, fresh adhesions have been interrupted by gentle hydrostatic pressure when introduced below the block by means of warm saline with Immediate return of neurologic function.

EXECUTIVE SESSION - 12:00 Noon

Program of The Women's Auxiliary

of

THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

PRESIDENT - MRS. JOHN R. GREEN

THURSDAY, NOVEMBER 8, 1956

11:00 A.M. Registration Lobby of Camelback Inn

12:30 P.M. Poolside Luncheon

and

1:30 P.M. Fashion Show by Holiday House of Scottsdale

2:30 P.M. Tour of Resort Area and Scottsdale

4:30 P.M. Horseback Ride ending at Chuckwagon Party

6:00 P.M. Cocktail Time and Chuckwagon Dinner Party

FRIDAY, NOVEMBER 9, 1956

12:30 P.M. Poolside Luncheon

7:00 P.M. Cocktail Party Pool Area

8:00 P.M. Formal Banquet—Dancing until 1:00 A.M. Cholla

SATURDAY, NOVEMBER 10, 1956

12:30 P.M. Poolside Luncheon

6:30 P.M. Cocktails Cholla

7:30 P.M Dinner Dining Room

9:00 P.M. Dancing Cholla

NOTE: For those who might like to go out "on the town," we suggest:

The Lulubelle Scottsdale

El Chorro Near the Inn

Backstage Club Phoenix
Green Gables Phoenix

Navarre's Phoenix

Membership Roster

of

THE AMERICAN ACADEMY OF NEUROLOGICAL SURGERY

FOUNDED OCTOBER 28, 1938

HONORARY MEMBERS — 5	ELECTED
Dr. Winchell McK. Craig Mayo Clinic, Rochester, Minnesota	1942
Sir Geoffrey Jefferson Department of Neurosurgery, The Royal Infirmary Manchester 13, England	1951
Dr. W. Jason Mixter Nobska West, Woods Hole, Massachusetts	1951
Dr. R. Eustace Semmes 899 Madison Ave., Memphis 3, Tennessee	1955
Dr. R. Glen Spurling 405 Heyburn Bldg., Louisville 2, Kentucky	1942

CORRESPONDING MEMBERS - 1

Dr. O. William Stewart* Montreal, Quebec *Deceased

SENIOR MEMBERS - 1

Dr. Olan R. Hyndman	1941
Veterans Administration Hospital	
Iowa City, Iowa	

ACTIVE MEMBERS - 61

Member's Name, Office Address, Residence Address	Year Elected	Wife's Name
Dr. Eben Alexander, Jr. Bowman Gray School of Medicine Winston-Salem 7, North Carolina 521 Westover Ave., Winston-Salem, North Caro	1950 olina	Betty
Dr. George S. Baker, Section of Neurological Surgery, Mayo Clinic, Rochester, Minnesota Salem Road, Route 1, Rochester Minnesota	1940	Enid

Member's Name, Office Address, Residence Address Dr. H. Thomas Ballantine, Jr. Massachusetts General Hospital Boston 14, Massachusetts 15 Common St., Dedham, Massachusetts	Year Elected 1951	Wife's Name Elizabeth
Dr. William F. Beswick 685 Delaware Avenue, Buffalo 9, New York	1949	Phyllis
Dr. Edwin B. Boldrey University of California Medical School San Francisco 22, California 924 Hayne Road, San Mateo, California	1941	Helen
Dr. E. Harry Botterell Medical Arts Building, 280 Bloor Street, West Toronto 5, Ontario 60 Bruscarth Road, Toronto, Canada	1938	Margaret
Dr. Spencer Braden 1304 Hanna Building, Cleveland 15, Ohio	Founder	Mary
Dr. F. Keith Bradford 410 Hermann Professional Building, 6410 Fannin S Houston 25, Texas 3826 Linklea Drive, Houston 25, Texas	1938 treet	Byra
Dr. Howard A. Brown 384 Post Street, San Francisco 8, California 127 San Pablo Avenue, San Francisco, Californi	1939 a	Dorothy
Dr. Harvey Chenault 200 West Second Street, Lexington 6, Kentucky Alleghan, Nicholasville Road, Lexington, Kentucky	1949	Margaret
Dr. Donald F. Coburn 221 Plaza Time Building, Country Club Plaza Kansas City 2, Missouri	1938	Max
Dr. Edward W. Davis 806 S. W. Broadway, Portland 5, Oregon 1714 N. W. 32nd Avenue, Portland 10, Oregon	1949	Barbara
Dr. Francis A. Echlin 164 East 74th St., New York 21, New York 164 East 74th Street, New York 21, New York	1944	Letitia
Dr. Dean H. Echols 3503 Prytania Street, New Orleans, Louisiana 1428 First Street, New Orleans 13, La.	Founder	Fran
Dr. Arthur R. Elvidge Montreal Neurological Institute, 3801 University S Montreal 2, Quebec	1939 treet	
Dr. Theodore C. Erickson 1300 University Avenue, Madison 6, Wisconsin 26	1940	Emily

Member's Namo, Office Address, Residence Address Dr. Joseph P. Evans University of Chicago Clinics, Chicago 37, Illinois 1234 East 56th Street, Chicago 37, Illinois	Year Elected Founder	Wife's Name Hermene
Dr. John D. French Veterans Administration Hospital Long Beach 4, California 10772 Chalon Road, Los Angeles 27, California	1951	Dorothy
Dr. Lyle A. French 2910 46th Avenue South, Minneapolis 6, Minnesota 2868 West River Road, Minneapolis 6, Minnesota	1954 a	Gene
Dr. James G. Galbraith 2020 15th Avenue South, Birmingham, Alabama 4227 Altamont Road, Birmingham, Alabama	1947	Peggy
Dr. Everett G. Grantham 405 Heyburn Building, Louisville 2, Kentucky 410 Mockingbird Hill Road, Louisville 7, Kentucky	1942	Mary Carmel
Dr. John R. Green 550 West Thomas Road, Patio A, Suite 202 Phoenix, Arizona 88 Country Club Drive, Phoenix, Arizona	1953	Georgia
Dr. James Greenwood, Jr. 1105 Hermann Professional Building, 6410 Fannir Houston 25, Texas 3394 Chevy Chase Blvd., Houston 19, Texas	1952 Street	Mary
Dr. Wesley A. Gustafson 700 North Michigan Avenue, Chicago 11, Illinois 2129 Central Park, Evanston, Illinois	1942	Jennie
Dr. Wallace B. Hamby 140 Linwood Avenue, Buffalo 9, New York 19 Middlesex Road, Buffalo 16, New York	1941	Hellyn
Dr. Hannibal Hamlin 270 Benefit Street, Providence 3, Rhode Island	1948	Margaret
Dr. Jess D. Herrmann 525 Northwest Eleventh Street Oklahoma City 3, Oklahoma 1519 Glenwood, Oklahoma City, Oklahoma	1938	Mary Jo
Dr. Henry L. Heyl Hitchcock Clinic, Hanover, New Hampshire Norwich, Vermont	1951	Katharine
Dr. William S. Keith Toronto Western Hospital, 399 Bathurst Street Toronto 2B, Ontario	Founder	Eleanor

Member's Name, Office Address, Residence Address	Year Elected	Wife's Name
Dr. George L. Maltby 203 State Street, Portland 3, Maine Falmouth, Foreside, Maine	1942	Sim
Dr. Donald D. Matson 300 Longwood Avenue, Boston 15, Massachusetts 44 Circuit Road, Chestnut Hill 67, Massachusetts	1950	Dorothy
Dr. Frank H. Mayfield 506 Oak Street, Cincinnati 19, Ohio 3519 Principio Ave., Cincinnati 26, Ohio	Founder	Queenee
Dr. Augustus McCravey 540 McCallie Avenue, Chattanooga 3, Tennessee 130 North Crest Road, Chattanooga, Tennessee	1944	Helen
Dr. Robert L. McLaurin Cincinnati General Hospital, Cincinnati. Ohio 2470 Grandis Road, Cincinnati 8, Ohio	1955	Kathleen
Dr. William F. Meacham 2122 West End Avenue, Nashville 5, Tennessee 3513 Woodmont Blvd., Nashville 12, Tennessee	1952	Alice
Dr. John M. Meredith 1200 East Broad Street, Richmond 19, Virginia 3 Greenway Lane, Richmond, Virginia	1946	Etta
Dr. Edmund J. Morrissey 450 Sutter Street, Suite 520 San Francisco 8, California 2700 Vallejo Street, San Francisco, California	1941	Kate
Dr. Francis Murphey Suite 525, Physicians and Surgeons Building Memphis 3, Tennessee	Founder	Roder
Dr. Guy L. Odom Duke University School of Medicine Durham, North Carolina 2812 Chelsea Circle, Durham, North Carolina	1946	Suzanne
Dr. J. Lawrence Pool 710 West 168th Street, New York 32, New York	1940	Angeline
Dr. Robert Pudenz 696 East Colorado Street, Pasadena 1, California 2036 San Pasqual, Pasadena 10, California	1943	Rúth
Dr. John Raaf 1010 Medical Dental Building, Portland 5, Oregon 390 S.W. Edgecliff Road, Portland 1, Oregon	Founder	Lorene

Member's Name, Office Address, Residence Address	Year Elected	Wife's Name
Dr. Aidan A. Raney 2010 Wilshire Boulevard, Los Angeles 57, Calif	1946 ornia	Mary
Dr. Rupert B. Raney 2010 Wilshire Boulevard, Los Angeles 57, Californ 435 S. Curson Avenue, Los Angeles 36, Californ		Alta
Dr. Theodore B. Rasmussen Montreal Neurological Institute 3801 University Street, Montreal 2, Canada 29 Surrey Drive, Montreal 16, Quebec, Canada	1947	Catherine
Dr. David L. Reeves 316 West Junipero Street, Santa Barbara, Califor 595 Picacho Lane, Montecito, Santa Barbara, Ca		Marjorie
Dr. R. C. L. Robertson 411 Hermann Professional Building 6410 Fannin Street, Houston 25, Texas	1946	Marjorie
Dr. Stuart N. Rowe 302 Iroquois Building, 3600 Forbes Street Pittsburgh 13, Pennsylvania 6847 Reynolds Street, Pittsburgh 8, Pennsylvania	1938 a	Elva
Dr. Henry G. Schwartz Department of Surgery, Washington University Saint Louis 10, Missouri 2 Briar Oak, Saint Louis 24, Missouri	1942	Reedie
Dr. William B. Scoville 85 Jefferson Street, Hartford 14, Connecticut	1944	Emily
Dr. C. Hunter Shelden 696 East Colorado Street, Pasadena 1, California 1345 Bedford Road, San Marino, California	1941	Betty
Dr. Samuel R. Snodgrass University of Texas Medical Branch, Galveston, Te	1939 exas	Margaret
Dr. Homer S. Swanson 384 Peachtree Street, N.E., Atlanta 3, Georgia 1951 Mt. Paran Road, West Atlanta, Georgia	1949	La Myra
Dr. William H. Sweet Massachusetts General Hospital, Boston 14, Massa 35 Chestnut Place, Brookline 46, Massachusetts	1950 achusetts	Mary
Dr. Alfred Uihlein Section on Neurological Surgery, Mayo Clinic Rochester, Minnesota Sunny Slopes, Route 1, Rochester, Minnesota 29	1950	lone

Member's Name, Office Address, Residence Address	Year Elected	Wife's Name
Dr. A. Earl Walker Johns Hopkins Hospital, Division of Neurological 601 N. Broadway, Baltimore 5, Maryland	1938 Surgery	Terrye
Dr. Exum Walker 133 Doctors Building, Atlanta 3, Georgia 1819 Greystone Road, N.W., Atlanta, Georgia	1938	Frances
Dr. Arthur A. Ward, Jr. University of Washington School of Medicine Division of Neurosurgery, Seattle 5, Washington	1953	Janet
Dr. Thomas A. Weaver Suite 1005, Third National Building, Dayton 2, Oh	1943 ilo	Mary
Dr. Benjamin B. Whitcomb 85 Jefferson Street, Hartford 14, Connecticut 38 High Farms Road, West Hartford, Connecticut	1947	Margaret
Dr. Barnes Woodhall Duke University School of Medicine Durham, North Carolina 4006 Dover Road, Hope Valley Durham, North Carolina	1941	Frances

Guests of The Academy

Dr. L. V. Amador	
Dr. Frank M. Anderson	Los Angeles, California
Dr. Lindsay E. Beaton	Tucson, Arizona
Dr. D. M. Bergenstal	Bethesda, Maryland
Dr. Harold F. Buchstein	Minneapolis, Minnesota
Dr. W. Kemp Clark	Dallas, Texas
Dr. Henry M. Cuneo	Los Angeles, California
Dr. Richard E. H. Duisberg	Phoenix, Arizona
Dr. Charles W. Elkins	Tucson, Arizona
Dr. Robert G. Fisher	Hanover, New Hampshire
Dr. Juan E. Fonseca	Tucson, Arizona
Dr. David G. Freeman	San Diego, California
Dr. L. W. Freeman	Indianapolis, Indiana
Dr. Carl J. Graf	Buffalo, New York
Dr. John W. Hanbery	San Francisco, California
Dr. E. B. Hendrick	Toronto, Canada
Dr. W. C. Hickey	Sacramento, California
Dr. Curwood R. Hunter	Cincinnati, Ohio
Dr. Roman Arana Iniguez	Montevideo, Uraguay
Dr. John J. Lowrey	Honolulu, Hawaii
Dr. Rolf Luft	
Dr. J. H. McCracken	•
Dr. William B. McGrath	•
Dr. Ernest W. Mack	Reno, Nevada
Dr. Charles P. Neumann	Tucson, Arizona
Dr. Alejo Marruyo Pazzi	Monterey, Mexico
Dr. E. Thornton Pfeil	Phoenix, Arizona
Dr. Kenneth G. Rew	Phoenix, Arizona
Dr. Hubert L. Rosomoff	Bethesda, Maryland
Dr. John E. Schramel	Phoenix, Arizona
Dr. Paul C. Sharkey	Houston, Texas
Dr. Fred C. Shipps	Portland, Oregon
Dr. Harry F. Steelman	-
Dr. James R. St. John	
Dr. Robert S. Tolmach	
Dr. Keasley Welch	Denver, Colorado

Past Meetings of The Academy

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Hotel Peabody, Memphis, Tennessee	April 22, 1938
Roosevelt Hotel, New Orleans, Louisiana	
Tudor Arms Hotel, Cleveland, Ohio	October 21-22, 1940
Ambassador Hotel, Los Angeles, Californ	niaNovember 11-15, 1941
The Palmer House, Chicago, Illinois	
Hart Hotel, Battle Creek, Michigan	
Ashford General Hospital White Sulphur Springs, West Virginia	·
The Homestead, Hot Springs, Virginia	
Broadmoor Hotel, Colorado Springs, Col	orado October 9-11 1947
Windsor Hotel, Montreal, Canada	September 20-28 1948
Benson Hotel, Portland, Oregon	
Mayo Clinic, Rochester, Minnesota	
Shamrock Hotel, Houston, Texas	October 4-0, 1931
Waldorf Astoria Hotel, New York City	September 29—October 1, 1932
Biltmore Hotel, Santa Barbara, California	
Broadmoor Hotel, Colorado Springs, Co	oloradoOctober 21-23, 1954
The Homestead, Hot Springs, Virginia	October 27-29, 1955
PAST PRESIDENTS	PAST VICE-PRESIDENTS
Dean Echols1938-39	
Spencer Braden1940	
Joseph P. Evans1941	Francis Murphey1941
Francis Murphey1942	William S. Keith1942
Frank H. Mayfield1943	John Raaf1943
A. Earl Walker1944	Rupert B. Raney1944
Barnes Woodhall1946	Arthur Elvidge1946
William S. Keith1947 Howard Brown1948	John Raaf1947 Arthur Elvidge1948
John Raaf1949	F. Keith Bradford1949
E. Harry Botterell1950	David L. Reeves1950
Wallace B. Hamby1951	Henry Schwartz1951
Henry Schwartz1952	J. Lawrence Pool1952
J. Lawrence Pool1953	Rupert B. Raney1953
Rupert Raney1954	David L. Reeves1954
David L. Reeves1955	Stuart N. Rowe1955
PAST SECRETARY	'-TREASURERS
Francis Murphey	
A. Earl Walker	1941-42-43
Theodore C. Erickson	1944-46-47
Wallace B. Hamby	1948-49-50
Theodore Rasmussen	1951-52-53
Eben Alexander, Jr	1954-55-56

