

Preliminary

Program

WORLD CONGRESSES OF
NEUROLOGICAL SCIENCES



4th
INTERNATIONAL
CONGRESS OF
NEUROLOGICAL
SURGERY

9th
INTERNATIONAL
CONGRESS
OF
NEUROLOGY

New York Hilton Hotel, New York, New York, U.S.A.
September 20-27, 1969

General Information

The 4th International Congress of Neurological Surgery and the 9th International Congress of Neurology will hold joint and individual sessions. Registration will entitle participants to attend all scientific sessions of both Congresses.

This preliminary program contains a listing of papers accepted for presentation at the main sessions, at free communication sessions and over a special closed-circuit television channel to hotel room sets. In addition, the program contains a listing of motion pictures and scientific exhibits to be viewed at the Congresses.

A final program and a book of abstracts will be provided to registrants at the beginning of the meeting. These publications will also include a listing of other papers which have been officially designated to be read by title.

Official languages of the World Congresses of Neurological Sciences are English, French, German and Spanish. Simultaneous translation will be provided for all papers presented in the main scientific meeting hall, the Grand Ballroom. Other presentations will be in the language of choice of the presentor — without translation.

Registration and housing information may be obtained from the World Congresses of Neurological Sciences, 420 Lexington Avenue, Suite 417, New York, New York 10017, U.S.A. General registration fee for physicians, surgeons and medical scientists is \$50.00. Associate registration (for residents, interns, students, nurses and family members) is \$15.00.

SATURDAY/SUNDAY

SATURDAY, SEPTEMBER 20, 1969

Registration

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

9 A.M. - 5 P.M. SECOND FLOOR PROMENADE

Opening Reception

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

6:30 P.M. - 8:30 P.M. METROPOLITAN MUSEUM OF ART,
82nd and Fifth Avenue

SUNDAY, SEPTEMBER 21, 1969

Registration

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

8:30 A.M. - 5 P.M. SECOND FLOOR PROMENADE

Opening of Technical and Scientific Exhibits

10 A.M. SECOND FLOOR EXHIBIT HALL

(Note: Exhibits will be open each day from 9 a.m. to 5 p.m. until Thursday, September 25, when the exhibits will close at noon.)

Scientific Sessions

SUNDAY, SEPTEMBER 21, 1969

Opening Ceremonies

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

9 A.M. GRAND BALLROOM

- A. EARL WALKER, Baltimore, Md., President
4th International Congress of Neurological Surgery
H. HOUSTON MERRITT, New York, N.Y., President
9th International Congress of Neurology

Supratentorial Tumors

(NEUROSURGICAL CONGRESS)

10 A.M. GRAND BALLROOM

- HERBERT OLIVECRONA, Stockholm, Sweden, Chairman
FRANK TURNBULL, Vancouver, Canada, Vice Chairman
FERNANDO CABIESES, Lima, Peru, Secretary
J. LAWRENCE POOL, New York, N.Y., Moderator

Newer Concepts of Neoplasia

DAVID P. RALL, Bethesda, Md.

DIAGNOSIS

The Echogram in the Diagnosis of Brain Tumors

LARS LEKSELL, Stockholm, Sweden

Electroencephalography in the Diagnosis of Brain Tumors

ROBERT P. VIGOUROUX, Marseille, France

Isotope Evaluation of Brain Tumors

MICHELINE VIGOUROUX, Marseille, France

The Role of the Anger Camera and Computers in the

Radioisotopic Diagnosis of Brain Tumors

EDWARD B. SCHLESINGER, SHEILA BAILEY, WILLIAM GROSS and
BRUCE BIAVATI, New York, N.Y.

Contrast Ventriculography for the Diagnosis of Supratentorial Tumor

NESTOR AZAMBUJA, Montevideo, Uruguay

Enlargement Angiography and the Latest Methods of Color Addition

KURT DECKER, Munich, West Germany

Sterol Metabolism Relative to the Diagnosis and Prognosis of Intracranial Tumors

PIETRO PAOLETTI, R. FUMAGALLI, F. A. VANDENHEUVEL and
R. PAOLETTI, Milan, Italy

NON-SURGICAL TREATMENT

The Role of Physical Agents in the Treatment of Brain Tumors

FRITZ MUNDINGER, Freiburg, West Germany

Immunology of Brain Tumors Related to Therapy

M. STANLEY MAHALEY, Jr., Durham, N.C.

DUDR—Antimetabolite—Continuous Intra-Arterial Infusion and Radiation

Therapy (BAR Therapy) for Intracranial Tumors

KEIJI SANO, TAKAO HOSHINO and MASAKATSU NAGAI, Tokyo, Japan

Discussion

EDGAR BERING, Bethesda, Md.

SURGICAL TREATMENT

Surgical Treatment of Meningiomas

VALENTINE LOGUE, London, England

Surgical Treatment of Gliomas

A. KUNICKI, E. SZWAGRZYK and M. LADZINSKA, Krakow, Poland

Surgical Treatment of Brain Tumors in Childhood

REGINALD S. HOOPER, East Melbourne, Australia

Increased Intracranial Pressure and Cerebral Edema

(NEUROSURGICAL CONGRESS)

2 P.M. GRAND BALLROOM

ADOLFO LEY, Barcelona, Spain, Chairman

K. LEWER ALLEN, Johannesburg, South Africa, Vice Chairman

HANS E. DIEMATH, Graz, Austria, Secretary

LYLE FRENCH, Minneapolis, Minn., Moderator

Pathological Anatomy of Cerebral Edema

DONLIN M. LONG, Minneapolis, Minn.

Distribution of Cerebral Fluids and Electrolytes

DONALD B. TOWER, Bethesda, Md.

Experimental Studies on Cerebral Edema

IGOR KLATZO, Bethesda, Md.

Etiological Factors Involved in Intracranial Hypertension

PHILLIP HARRIS, Edinburgh, Scotland

Relationship between Respiration and Intracranial Pressure in Experimental Cerebral Edema

J. W. F. BEKS, Groningen, The Netherlands

The Pathophysiologic Background of Acute Symptoms in Patients with Intracranial Hypertension

NILS LUNDBERG, Lund, Sweden

Effect of Anesthetic Agents and Hyperbaric Oxygen on Intracranial Hypertension

W. BRYAN JENNITT, Glasgow, Scotland

SUNDAY

Influence of Respiratory Function on Intracranial Pressure

ROBERT L. McLAURIN, Cincinnati, Ohio

Effect of Osmotic Agents on Cerebral Edema and/or Increased Intracranial Pressure

BURTON L. WISE, San Francisco, Calif.

Control of Increased Intracranial Pressure at Time of Surgery

GUNNAR AF BJORKESTEN, Helsinki, Finland

Surgical Aspects of the Control of Intracranial Hypertension

ROMAN ARANA-INIGUEZ, E. GARCIA-AUSTT and J. I. VILLAR,
Montevideo, Uruguay

Management of the Patient with Increased Intracranial Pressure

BENIAMINO GUIDETTI, Rome, Italy

Free Communications—Via Closed Circuit Television

(NEUROSURGICAL CONGRESS)

The following free communications papers will be presented over a special closed circuit television channel to hotel room sets at the New York Hilton and the Americana Hotel as well as to television sets located in the Nassau Suite.

7 A.M.—MISCELLANEOUS I

Uveitis and Reticulum Cell Sarcoma of the Brain

ROBERT E. VAN SCOY, THOMAS P. KEARNS, COLLIN S. MacCARTY and
RICHARD W. HILL, Rochester, Minn.

Controlled Hypotension During Intracranial Surgery Using Pacemaker-Induced Ventricular Tachycardia

R. L. ROVIT, J. GREGORY, F. CONKLIN, J. O'LEARY, H. MUELLER and
W. J. GRACE, New York, N.Y.

Localization of Regions Mediating the Cushing Reflex in Medulla and Spinal Cord of Cat

J. T. HOFF and DONALD J. REIS, New York, N.Y.

The Sequelae of Head Injury in the Rhesus Monkey

CLAIRE PARSONS and AYUB K. OMMAYA, Bethesda, Md.

Operative Staging as an Index to Survival in Cerebellar Medulloblastoma

EDGAR M. HOUSEPIAN and CHU H. CHANG, New York, N.Y.

Combined Radiocontrast and Radionuclide Cerebral Angiography

JOSEPH STRATFORD, JACK CHAN, RAJINDAR SIDHU and LEONARD
ROSENTHALL, Montreal, Canada

8 A.M.—TUMOR I

The Treatment of Glioblastoma Multiforme

PAUL C. BUCY and RICHARD K. JELSMA, Chicago, Ill.

Experience with Urea in 2000 Patients

MANUCHER JAVID, Madison, Wis.

Some Results and Prospects in the Field of Treatment of Gliomas

A. I. ARUTIUNOV, V. V. ARCHANGELSKY and N. M. VOLYNKIN, Moscow, U.S.S.R.

The Choice Between Tc-99m and Neohydrin-Hg-203 in the
Isotopic Diagnosis of Intracranial Tumors

R. VILLANI and P. PAOLETTI, Milan, Italy

Modern Clinico-Pathophysiological Criteria Determining the Character
and Scope of Surgical Intervention in Malignant Gliomas of the Brain

YU. A. ZOZULYA and A. P. ROMODANOV, Kiev, U.S.S.R.

5 P.M. — TUMOR IIMalignant and Intraventricular Epidermoidal Tumors
(Craniopharyngiomas?)

CHARLES NEBLETT and GEORGE EHNI, Houston, Tex.

Neurosurgical Problems of the Craniopharyngioma in Infancy

MIGUEL RAMOS-MURGUIA, Mexico D.F., Mexico

Supratentorial Intraventricular Tumors

MILAN IVKOV, BOGDAN BABIC and ALEKSANDAR CERAMILAC,
Belgrad, Yugoslavia

Hypophysentumor — Rezidive

ORTWIN E. WILCKE, Cologne, West Germany

Ectopic Pinealoma in the Chiasma Region

NAOKI KAGEYAMA, Osaka, Japan

6 P.M. — TUMOR III

Bioenergetics of the Glioblastoma: Chemotherapeutic Implications

WOLFF M. KIRSCH, DEMOY SCHULZ and J. WAYNE LEITNER, Denver, Colo.

Intravascular and Extravascular Distribution of Standard Drug Molecules
in Brain Tumor and Brain

JAMES I. AUSMAN and VICTOR A. LEVIN, Minneapolis, Minn.

Phospholipids in Human Brain Tumors

J. BRIHAYE, G. GRAFF and J. J. VANDERHAEGEN, Brussels, Belgium

Plasminogen Activator Content in Brain Tumors

W. KOOS, G. BLUMEL and F. BOCK, Vienna, Austria

Angiographic Appearance of Intracranial Metastases

K. THUMNOON and VICHAI BUMRUNGPHOL, Bangkok, Thailand

7 P.M. — TUMOR IV

Chemotherapy of Malignant Gliomas

JOSEPH RANSOHOFF, New York, N.Y.

SUNDAY

Chemotherapy of Malignant Gliomas

LASZLO ZOLTAN, ISTVAN GORACZ and SEBO ZETTNER, Budapest, Hungary

Comparative Enzyme-Histochemical Studies of Human and Experimental Brain Tumors

CARL H. SUTTON, H. M. ZIMMERMAN, ALLEN G. ZIPPIN and HUBERT L. ROSOMOFF, Bronx, N.Y.

Modifications of Macromolecular Structure of Ribonucleic Acids in Brain Tumors

LUIGI PERRIA and GIUSEPPE L. VIALE, Genoa, Italy

A Cell-Free Transmission of Chemical Carcinogen-Induced Hamster Glioma and Demonstration of Virus Particles in its Precancerous Tissue

YOSHIO HOSOBUCHI and JOHN F. MULLAN, Chicago, Ill.

8 P.M. — INCREASED PRESSURE AND CEREBRAL EDEMA I

Pathogenesis and Therapy of Brain Edema

W. WESEMANN and H. W. PIA, Giessen, West Germany

The Role of Anoxia in Cerebral Edema

LOUIS BAKAY, Buffalo, N.Y.

Critical Remarks Concerning the Treatment of Perifocal Edema, Based on Clinical and Experimental Data

HEINRICH BRENNER, Vienna, Austria

Effect of Increased Intracranial Pressure on Cerebral Hemodynamics

HAJIME NAGAI, HIROSHI HORI and SHIN HOSHIKAWA, Nagoya, Japan

A Comparison of Two Forms of Intracranial Hypertension

J. DONALD McQUEEN, BRUCE E. NORTHRUP and LAWRENCE F. JELSMA, Baltimore, Md.

9 P.M. — INCREASED PRESSURE AND CEREBRAL EDEMA II

Ventriculo-Atrial Shunt for Hydrocephalus Ex-Vacuo

JAMES H. SALMON, Cincinnati, Ohio

The Role of Brain Stem Dysfunction in the Development of Acute Cerebral Swelling

SHOZO ISHII, MINORU MAEDA, HIROSHI OKA, JOHN F. MULLAN and JOSEPH P. EVANS, Tokyo, Japan and Chicago, Ill.

Brain Edema as the Anatomical Substrate of Supratentorial Cerebral Pseudotumors

JAN GLOWACKI, Krakow, Poland

Study of Auditory Function in Raised Intracranial Pressure

P. N. TANDON, A. SINHA and S. K. KACKER, New Delhi, India

CSF-Pressure Course After Operation of Hemispheric Brain Tumors

P. C. POTTHOFF, W. SCHULZE and K. SCHMIDT, Freiburg, West Germany

MONDAY, SEPTEMBER 22, 1969

Symposium: Epilepsy

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

9 A.M. GRAND BALLROOM

H. HOUSTON MERRITT, New York, N.Y., Co-Chairman
A. EARL WALKER, Baltimore, Md., Co-Chairman
ANTONIO REYMOND, Paris, France, Vice-Chairman
MARY A. B. BRAZIER, Los Angeles, Calif., Vice-Chairman
JEROME K. MERLIS, Baltimore, Md., Vice-Chairman
FREDERICK G. GIBBS, Los Angeles, Calif., Vice-Chairman

Opening Remarks

H. HOUSTON MERRITT

Basic Physiological Mechanisms of Epilepsy

Moderator: HERBERT H. JASPER, Montreal, Canada
Panel: COSIMO AJMONE MARSAN, Bethesda, Md.
EDUARDO DE ROBERTIS, Buenos Aires, Argentina
Discussors: M. R. KLEE, Rochester, N.Y.
DANIEL POLLON, Boston, Mass.
DAVID A. PRINCE, Palo Alto, Calif.

Recent Developments in the Diagnosis of Convulsive Disorders

DENIS WILLIAMS, London, England

Medical Therapy of Epilepsy

Moderator: FRANCIS M. FORSTER, Madison, Wis.
Panel: ALFREDO R. A. BENGZON, Manila, Philippines
GILBERTO BELISARIO CAMPOS, Bello Horizonte, Brazil
HENRI GASTAUT, Marseille, France
GEORGE F. HENRIKSEN, Sandvika, Norway

Clinical EEG Evaluation of the Antiepileptic Action of a New Series of Benzodiazepinic Derivates

M. TURNER, B. CANTLON, J. R. CORDERO FUNES, R. ASPINWALL, N. FEJERMAN and E. SCHUGURENSKY, Buenos Aires, Argentina

Motion Pictures

(NEUROSURGICAL CONGRESS)

NOON MERCURY BALLROOM

DIAGNOSTIC PROCEDURES

Remote-Controlled, Video-Monitored, System-Integrated Neuroradiology and Neurosurgery

JOSE L. GARCIA OLLER, New Orleans, La.

The Application of Cerebral Cine-Angiography in the Study of Vascular Lesions: Its Value in Clinical Diagnosis and Research

MILOS PEROVIC and GEORGE B. UDVARHELYI, Baltimore, Md.

MONDAY

Automatic Stereoscopic Cerebral Angiography

J. M. SANCHEZ-PEREZ, Mexico D.F., Mexico

Diagnostic Application of Ultrasound in Neurosurgery

AKIRA NISHIMOTO, Okayama, Japan

Technetium-99m Myeloventriculography with the Digital Auto-Fluoroscope (Gamma Camera)

FRITZ MUNDINGER, Feiburg, West Germany

Symposium: Epilepsy

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

2 P.M. GRAND BALLROOM

H. HOUSTON MERRITT, New York, N.Y., Co-Chairman

A. EARL WALKER, Bethesda, Md., Co-Chairman

ANTONIO REYMOND, Paris, France, Vice-Chairman

MARY A. B. BRAZIER, Los Angeles, Calif., Vice-Chairman

JEROME K. MERLIS, Baltimore, Md., Vice-Chairman

FREDERICK G. GIBBS, Los Angeles, Calif., Vice-Chairman

The Pathology of Epilepsy

FRANZ SEITELBERGER, Vienna, Austria

Biological Determinants in Epilepsy

EBERHARD BAY, Dusseldorf, West Germany

Febrile Convulsions: A Follow-Up and Genetic Study

E. FRANTZEN, Copenhagen, Denmark

The Principles of Diagnosis and Surgical Treatment of Epilepsy

V. M. UGRUMOV, A. G. ZEMSKAYA, S. S. KALINER, I. V. VVEDENSKAYA,

T. S. STEPANOVA, A. A. TELEGINA, V. V. DUBIKAYTIS, K. V. GRATCHIOV

and Y. V. ZOTOV, Leningrad, U.S.S.R.

Surgical Treatment of Epilepsy

Moderator: ARTHUR A. WARD, JR., Seattle, Wash.

Panel: MURRAY FALCONER, London, England

HIROTARO NARABAYASHI, Tokyo, Japan

THEODORE RASMUSSEN, Montreal, Canada

JEAN TALAIRACH, Paris, France

J. BANCAUD, Paris, France

Stereotaxic Amygdalotomy in the Treatment of Temporal Automatism HATAI CHITANONDH, Bangkok, Thailand

Discussion

Summation

A. EARL WALKER

Special Lecture Series

(NEUROSURGICAL CONGRESS)

Speakers nominated by the societies of the World Federation
of **Neurosurgical Societies**

8 P.M. GRAND BALLROOM

A. EARL WALKER, Baltimore, Md., Chairman
 PAUL BUCY, Chicago, Ill., Honorary Chairman
 EDWARD BUSCH, Hesselbjerg pr. Vejby, Denmark, Honorary Chairman
 M. DAVID, Paris, France, Honorary Secretary
 BRONSON S. RAY, New York, N.Y., Honorary Secretary
 D. W. C. NORTHFIELD, London, England, Honorary Secretary

Surgical Treatment of Brain Basal Tumors

ALEX I. ARUTIUNOV, Moscow, U.S.S.R.

Echoencephalography in Neurosurgery

KENJI TANAKA, Tokyo, Japan

Microsurgical Approach to Cerebrospinal Lesions

HUGO KRAYENBUHL, Zurich, Switzerland

Brain Energetics

BARNES WOODHALL, Durham, N.C.

Medical, Psychological and Surgical Neurology

NORMAN DOTT, Edinburgh, Scotland

The Sub-Responsive Human Brain

SIXTO OBRADOR, Madrid, Spain

Free Communications—Via Closed Circuit Television

(NEUROSURGICAL CONGRESS)

The following free communications papers will be presented over a special closed circuit television channel to hotel room sets at the New York Hilton and the Americana Hotel as well as to television sets located in the Nassau Suite.

7 A.M. — MISCELLANEOUS II**Improvement of Survival in Head Injury Utilizing the Hyperbaric Chamber**

ROBERT A. MOODY, CARL O. MEAD, SERI RUAMSUKE and JOHN F. MULLAN,
 Chicago, Ill.

**Measurements of Electrical Impedance During Probe Insertion
 for Thalamotomy**

J. A. AGUILAR, S. TACHIBANA and L. BERZIS, Palo Alto, Calif.

**Experimental Extravascular Surface Cooling of the Brain Stem,
 4th Ventricle and High Cervical Spine**

ROBERT G. SELKER, Atlanta, Ga.

Control of Hypothermic Cardiac Irritability with Bretylium Tosylate

L. A. FRENCH, S. N. CHOU, J. J. BUCKLEY and M. B. BUCANER,
 Minneapolis, Minn.

Dorsal Column Electroanalgesia

C. NORMAN SHEALY and J. THOMAS MORTIMER, La Crosse, Wis.

Hypophysectomy Utilizing Induction Heating: An Experimental Study

CHARLES BURTON and RICHARD BLACK, Seattle, Wash.

MONDAY

8 A.M.—INCREASED PRESSURE AND CEREBRAL EDEMA III

New Scheme of Corticoid Administration in the Treatment of Head Injury

PAULO NEIVA, Rio de Janeiro, Brazil

Treatment of Pseudotumor Cerebri by Continuous Valve-Controlled Drainage of Cerebrospinal Fluid

JAVIER VERDURA and ROBERT J. WHITE, Mexico D.F., Mexico

Continuous Recording of Brain Pressure with Semiconductor Strain Gauge

KINJIRO IWATA, H. SHIBAHARA and T. HIROTA, Nagoya, Japan

Protracted Intracranial Pressure Recording

HELGE NORNES, Oslo, Norway

Experimental Study of Intracranial Pressure During the Expansion of an Additional Intracranial Volume. Part Played by the Elasticity of Vascular Space and the Seeping of Cerebrospinal Fluid

JACQUES DE ROUGEMONT, MICHEL BARGE, A. L. BENABID and LOIC BATALAN, Maylan, France

5 P.M.—INCREASED PRESSURE AND CEREBRAL EDEMA IV

Circulatory and Metabolic Factors in the Causation and Control of Cerebral Swelling Following Injury or Operation

ALEX R. TAYLOR, Belfast, North Ireland

Experimental Alteration of Cerebral Fluids and Osmoreceptor Control in Conscious Goats

DAVID G. STORRS and TRACY MILLER, Syracuse, N.Y.

Chemical Alterations in Cerebral Edema

S. R. NELSON and M. L. MANTZ, Kansas City, Kans.

Analysis of Extracellular Space, Electrolyte Distribution and Energy Metabolism in Brain Edema

M. SAMII, H. J. REULEN, R. FENSKE and K. SCHURMANN, Mainz, West Germany

Experimental Study on the Relation Between Stereotaxic Lesions in the Brain Stem and Cerebral Edema

B. GRIPONISSIOTIS and G. TAVRIDIS, Thessaloniki, Greece

6 P.M.—EPILEPSY I

Effect of Ablation of the Anterior Lobe of the Cerebellum on the Seizure Propagation in Reflex Epilepsy

F. D'ANDREA, B. CUCCINIELLO, and C. COLUCCI D'AMATO, Naples, Italy

Follow-up of Cases with Tumor-Induced Epilepsy

PETER AXEL-FISCHER, Frankfurt, West Germany

Facilitatory and Inhibitory Functions in the Brain Stem to Epileptic Excitability

JIRO MUKAWA and DENNOSUKE JINNAI, Osaka, Japan

The Combination of the Deep Local Brain Hypothermia and High Doses of Anticonvulsants in Treatment of Severe Epilepsy

KAREL SOUREK, Prague, Czechoslovakia

Experimental Changes in Epileptic Manifestations in Response to Brain Cooling

E. PASZTOR, Budapest, Hungary

TUESDAY, SEPTEMBER 23, 1969

Symposium: Parkinsonism and L-Dopa

(NEUROLOGY CONGRESS)

9 A.M. GRAND BALLROOM

ANDRE BARBEAU, Montreal, Canada, Co-Chairman

MELVIN D. YAHR, New York, N.Y., Co-Chairman

GEORGE C. COTZIAS, Upton, N.Y., Vice-Chairman

HIROTARO NARABAYASHI, Tokyo, Japan, Vice-Chairman

WALTER BIRKMAYER, Vienna, Austria, Vice-Chairman

Mono Amines and Parkinsonism

O. HORNYKIEWICZ, Toronto, Canada

Dopamine and Parkinson's Disease

U. K. RINNE and V. SONNINEN, Turku, Finland

Parkinsonism, Dopa and Chronic Manganese Poisoning

GEORGE C. COTZIAS, PAUL S. PAPAVASILIOU and ISMAEL MENA, Upton, N.Y.

The Present Status of L-Dopa in the Treatment of Parkinsonism

ROGER DUVOISIN, MELVIN D. YAHR, MYRNA SCHEAR, MARGARET HOEHN and ROBERT BARRETT, New York, N.Y.

Double-Blind Study of L-Dopa Treatment of Parkinsonism

WILLIAM H. TIMBERLAKE, IRVING ZIEPER and ROBERT B. SCHWAB, Boston, Mass.

The Treatment of Parkinson's Disease with Dihydroxyphenylalanine

FLETCHER McDOWELL, JOHN E. LEE, RICHARD SWEET, THOMAS SWIFT, JAMES OGSBURY and JEFFREY KESSLER, New York, N.Y.

Treatment of Parkinson's Disease with L-Dopa and Ro-4-4602

ANDRE BARBEAU and LISE GILLO-JOFFROY, Montreal, Canada

Treatment of Parkinson's Disease with L-Dopa Combined with a Decarboxylase Inhibitor

J. SIEGFRIED, R. KLAIBER, E. PERRET and W. H. ZIEGLER, Zurich, Switzerland

Side Effects During L-Dopa Treatment in Parkinsonism

GORAN STEG, Gothenburg, Sweden

Restoration of Speed in Parkinsonian and Experimental Bradykinesia and Akinesia

E. A. SPIEGEL, M. SPIEGEL-ADOLF, H. T. WYCIS, E. G. SZEKELY, F. R. FABIANI and H. A. SCHWARTZ, Philadelphia, Pa.

L-Dopa vs. Surgery in Parkinson's Disease

ROBERT S. SCHWAB, Boston, Mass.

Summation

Free Communications

(NEUROLOGY CONGRESS)

9 A.M. SUITE 524

The Manifestations of Cerebral Dominance in the Dynamics of the Spine

JAN JIROUT, Prague, Czechoslovakia

TUESDAY

Evidence for Dominance Within the Human Lateral Thalamus

GEORGE OJEMANN, PAUL FEDIO and J. M. VAN BUREN, Seattle, Wash.

Cerebral Dominance and Visual Symbol Discrimination

MARTHA B. DENCKLA and RICHARD L. MASLAND, New York, N.Y.

Psychological Sequelae of Right and Left Hemisphere Vascular Accidents

J. CERNACEK and M. TRAVNIKOVA, Bratislava, Czechoslovakia

The Evolution of Hand and Foot Preference in Children

J. CERNACEK and J. JAGR, Bratislava, Czechoslovakia

On the Problem of Dominant Central Mechanisms Controlling Vegetative Functions in Man

A. N. BONDARTCHUK, L. I. NIKITINA and YU. V. SHMATKOV, Leningrad, U.S.S.R.

Significance of the Dominance, Intrasystem and Intracentral Dysfunctions in Development of Anosognosia and Disturbances of "Body Scheme"

V. M. SMIRNOV and A. N. SHANDURINA, Leningrad, U.S.S.R.

Speech Perception and Cerebral Dominance

TADANOBU TSUNODA, Tokyo, Japan

A Statistical Approach to the Study of the Neuromuscular Unit Discharge in Relation to the Problem of the Cerebral Dominance

F. DENOTH, F. FERRO-MILONE, A. STARITA and C. C. PERFETTI, Pisa, Italy

Signos Precoces De Dominancia Hemisferica

M. ANTONIETA REBOLLO, SONIA IHLENFELD and RINA P. DE SEINELDIN, Montevideo, Uruguay

Spatial and Temporal Factors in Visual Perception of Patients with Unilateral Cerebral Lesions

AMIRAM CARMON, Jerusalem, Israel

Crossed Aphasia in Dextral and Sinistral Patients

J. A. M. FREDERIKS, Eindhoven, The Netherlands

9 A.M. SUITE 526

Incidence of Three Major Types of Cerebrovascular Diseases (CVD)

Based on Seven-Year Follow-Up and Autopsy Study in a

General Population in Japan

SHIBANOSUKE KATSUKI and YASUO HIROTA, Fukuoka City, Japan

Cerebrovascular Accidents in Nigerians: A Clinical Study

B. O. OSUNTOKU, E. L. ODEKU, T. O. DADA and R. B. A. ADELOYE, Ibadan, Nigeria

Cerebral Atherosclerosis: A Comparative Autopsy Study Between Nigerian Negroes and American Negroes and Caucasians

JOSEPH A. RESCH and A. OLUFEMI WILLIAMS, Minneapolis, Minn. and Ibadan, Nigeria

Cerebrovascular Disease of Young Adults in Mississippi

A. F. HAERER, R. R. SMITH and W. A. SPENCER, Jackson, Miss.

A Statistical Survey Concerning the Etiology and Treatment of the Cerebrovascular Diseases Encountered at the Haydarpasa Modell Hospital in Turkey

ZULEYHA ARAL, FETTAH DEMIRHAM and OZDEMIR ARAL, Istanbul, Turkey

Natural History of Non-Embolic Cerebral Infarction

FLETCHER McDOWELL, SYDNEY LOUIS and ELLEN McDEVITT, New York, N.Y.

Preventing the Second Stroke

STANLEY C. LOENBERG, JR. and FRANK A. ELLIOTT, Philadelphia, Pa.

Clinical Aspects of the Pathophysiology of Atherosclerotic Cerebral Vascular Disease

MEYER BROWN, Evanston, Ill.

Mass-Screening for Identification of the Stroke-Prone Patient

MONROE COLE and JAMES F. TOOLE, Winston-Salem, N.C.

Diagnostic Tests in Epidemiological Study of Cerebrovascular Diseases

V. E. SMIRNOV, Moscow, U.S.S.R.

Etude Epidemiologique des Troubles Vasculaires Aigus De L'Encephale

C. L. CAZZULLO, R. MONTANINI, M. GIOVANNUCCI and M. ANDREONI, Gallarte, Italy

9 A.M. SUITE 529**Oculomotor Responses From Visual Inputs To An Immobilized Eye**

M. FELDMAN, A. ATKIN and M. BENDER, New York, N.Y.

Positional Nystagmus After Lesions of the Cerebellum

BERNARD COHEN, ATSUSHI KOMATSUZAKI and JACK ALPERT, New York, N.Y.

Effects of Visual Conditions Upon Vestibulo-Ocular Responses

M. FELDMAN, M. HIRSCH and M. BENDER, New York, N.Y.

Eye Dominance and Body Axis

J. CERNACEK, J. B. BARON and J. JAGR, Bratislava, Czechoslovakia

Compensatory Eye Movements in a Barany Chair: Effect of Visual Cues, Eye Closure, Attention and Vestibular Disease

ALFRED D. WEISS and JOHN S. BARLOW, Boston, Mass.

Spontaneous and Induced Nystagmus, and "Lightning" Eye Movements in Monkeys with Pretectal Lesions

TAUBA PASIK, PEDRO PASIK and M. BENDER, New York, N.Y.

Nystagmus Evoked by Stationary Repetitive Light Flashes in Monkeys

PEDRO PASIK, TAUBA PASIK and JOSE A. VALCIUKAS, New York, N.Y.

A New Video-Pupillography and Its Clinical Applications

SATOSHI ISHIKAWA, Tokyo, Japan

Cervical Nystagmus

J. M. B. VIANNEY DE JONG, Amsterdam, The Netherlands

Formas Etiologicas Del Edema Papilar, Excluidas Las Inflamatorias Y Tumorales

JOSE M. ESPADALER, M. BALCELLS and J. JUBERT, Barcelona, Spain

A Neuropathological Investigation of a Case of Bilateral Ophthalmoplegia

META A. NEUMANN, Washington, D.C.

9 A.M. SUITE 534**Familial Myasthenia Gravis**

TATSUJI NAMBA, STUART B. BROWN and DAVID GROB, Brooklyn, N.Y.

TUESDAY

Electron Microscopic Studies of Muscle Biopsies in Juvenile Diabetes (A Preliminary Report)

EDITH RESKE-NIELSEN and AAGE HARMSSEN, Aarhus, Denmark

Clinical and Morphological Studies in Familial Hyperparathyroid Myopathy A. J. HUDSON, E. J. CHOLOD and M. D. HAUST, London, Canada

The Scapulo-Peroneal Syndrome: Dystrophic Type

ROBERT E. LOVELACE and MATTHEW MENKEN, New York, N.Y.

Metabolic Studies and Exchange of ^{42}K in a Case of Periodic Hypercalcemic Paralysis and a Patient with Hypotonic Dystrophy WOLFGANG SCHWARTZKOPFF and WOLFGANG ULRICH, Berlin, West Germany

Clinical and Genetic Studies of Congenital Muscular Dystrophy in Japan YUKIO FUKUYAMA and MASAYA SEGAWA, Tokyo, Japan

The Relationship Between Blood Flow, Myoglobin Concentration and Capillary Density in Red and White Skeletal Muscle in Cat During Quiet Wakefulness, Sleep and Excitement

D. J. REIS, G. F. WOOTEN and D. MOORDHEAD, New York, N.Y.

Pathological, Histochemical and Electron Microscopic Studies of Biopsied Muscle in Congenital Progressive Muscular Dystrophy MASAYA SEGAWA, KIYOSHI ITOH and MESANORI UONO, Tokyo, Japan

Etude du ^{42}K au cours de 2 Cas de Paralysie Periodique Familiale, Avec Hypokaliémie, Traites Par Spironolactones

J. BOUDOURESQUES, G. SERRATRICE and J. BILLE, Marseille, France

Clinical and Histological Features of Skeletal Muscle in Chronic Invalid States

VIMLA VIRMANI and S. SRIRAMACHARI, New Delhi, India

Mesures Isotopiques en Cas d'Atrophie Musculaire

P. J. DELWAIDE, P. A. DELWAIDE and C. A. PENDERS, Montegnee, Belgium

Familial Continuing Distal Cramps — A New Disease Due to Potassium Deficit?

A. JUSIC, S. DOGAN and I. STOJANOVIC, Zagreb, Yugoslavia

9 A.M. SUITE 548

Arthrogryposis Multiplex Congenita (AMC) — A Clinico-Pathological Study E. P. BHARUCHA, D. K. DASTUR and S. S. PANDYA, Bombay, India

Porphyria, Clinical Picture, Classification, Pathogenesis and Prognosis ELISABETH KLIMKOVA-DEUTSCHOVA, Pilsen, Czechoslovakia

Physiological and Pharmacological Factors in the Treatment of Primary Orthostatic Hypotension ROGER BANNISTER, London, England

Neurological Findings in Cystinuria ZDENEK VRANESIC and VLADIMIR KRIZEK, Marianske Lazne, Czechoslovakia

Familial Amyloidotic Polyneuropathy — Study of the Peripheral Nerve CORINO ANDRADE, Porto, Portugal

Vitamin B_{12} Deficiency in Diabetic Neuropathy G. S. WAKEFIELD, A. KHAN and D. W. PUGH, Bath, England

- Degenerescence Hepato-Lenticulaire Au Vietnam. Une Etude Statistique, Clinique, Evolutive Echelonnee sur Dix Ans, Concernant 8 Cas Personnels
 BUI QUOC HUONG, NGUYEN NHUT and NGUYEN NGOC, Saigon, South Viet Nam
- Infantile Tremor Syndrome: Review of 10-Year Study
 P. N. TANDON, P. C. BAJPAI and P. K. MISRA, New Delhi, India

9 A.M. SUITE 551

- Disturbances of Humoral Homeostatic Regulation In Cerebral Infarcts
 EMILIAN STOICA and CONSTANTIN BALACEANU, Bucharest, Romania
- Coagulation Studies in Cerebrovascular Diseases: Their Significance as Diagnostic and Prognostic Findings
 MASAO KASE, REIKO ITO and EIZO HIYAMUTA, Tokyo, Japan
- Hypoplasia of the Internal Carotid Arteries and Hyperplasia of the Vertebral Arteries
 G. PADBERG, L. N. M. COENE and A. C. J. SLOOFF, Maastricht, The Netherlands
- Topography and Architecture of the Intracerebral Arterial Demarcation Zones in Human Adult and Foetus Brains
 H. M. VANDER EECKEN and J. L. REUCK, Destelbergen, Belgium
- The Effect of Oral Glucose on Vasomotor Control in Patients with Strokes
 OTTO APPENZELLER and JERRY GOSS, Albuquerque, New Mexico
- Vascular Origin of Cranial Disturbances of Sensibility Caused by Pathology of the Lower Cervical Spine
 E. J. W. KEUTER, Utrecht, The Netherlands
- Cerebrovascular Occlusions in Young Patients with Regional Ileitis
 ALLEN SILVERSTEIN and DANIEL PRESENT, New York, N.Y.
- Hyperuricemia and Cerebral Infarction
 OLE EVALD HANSEN, Copenhagen, Denmark
- Cerebrovascular Complications in Patients with Stenosis of the Aortic Isthmus
 W. ULBRICHT, V. ALSN, H. DIETZ and K. SCHURMANN, Mainz, West Germany
- Experimental Hypertensive Cerebrovascular Disease
 HENRY B. DINSDALE and DAVID M. ROBERTSON, Kingston, Canada
- The Neurological Sequela of Systemic Circulatory Arrest
 JAMES R. MILLER and RONALD E. MYERS, New York, N.Y.

Motion Pictures

(NEUROSURGICAL CONGRESS)

9 A.M. MERCURY BALLROOM**DIAGNOSTIC PROCEDURES****Spinal Cord Angiography**

GIOVANNI DiCHIRO, Bethesda, Md.

NEUROSURGICAL TECHNIQUES

Craniotomy by 5 cm Skull Trephine

YUJI MIYAZAKI, Sapporo, Japan

The Surgical Removal of the Varix of the Superior Ophthalmic Vein

HAJIME HANNA, Kyoto, Japan

Transcallosal Removal of Brain Tumors

GEORGE EHNI, Houston, Tex.

The Total Removal of Pinealoma

JIRO SUZUKI, AKIRA TAKAKU, SHIGEHARU SUZUKI and NAMIO KODAMA, Sendai, Japan

Total Removal of Craniopharyngioma

JIRO SUZUKI, AKIRA TAKAKU and SHIGEHARU SUZUKI, Sendai, Japan

Transtentorial Microsurgical Selective Retrogasserian Rhizotomy in Trigeminal Neuralgia

PETER J. JANETTA and ROBERT W. RAND, New Orleans, La.

Microvascular Surgery of Ruptured Intracranial Aneurysms — Technique of the Section and Clipping

W. M. LOUGHEED, Toronto, Canada

Extracranial-To-Intracranial Non-Suture Arterial By-Pass Grafting: Laboratory and Clinical Studies

C. A. CARTON, J. KENNADY, E. E. BLINDERMAN, T. KOBAYASHI, JR., J. CAGUNGUN and T. PINEDA, Los Angeles, Calif.

Artificial Embolization of Cerebral Arteriovenous Malformations

ALFRED L. LUSSENHOP, Washington, D.C.

PROCEDURES INVOLVING SPINAL CORD

Anterior Cervical Percutaneous Cordotomy

PAUL M. LIN, PHILIP L. GILDENBERG and PEDRO P. POLAKOFF, Jenkintown, Pa.

Percutaneous Radiofrequency Cervical Cordotomy

HUBERT L. ROSOMOFF, New York, N.Y.

Spinal Cord Hypothermia in Neurological Surgery

JUAN NEGRIN, JR., New York, N.Y.

1 P.M. MERCURY BALLROOM

PROCEDURES INVOLVING SPINAL CORD (Continued)

Intramedullary Spinal Schistosoma Granuloma

AHMED EL-BANHAWY, Cario, U.A.R.

Technique of Total Removal of Intramedullary Spinal Cord Tumors

JAMES GREENWOOD, JR., Houston, Tex.

Removal of Spinal Angioma

M. G. YASARGIL, Zurich, Switzerland

MOVEMENT DISORDERS

Carotid Amobarbital Test for Involuntary Movement Disorders

DENNOSUKE JINNAI, Osaka, Japan

Stereotaxic Surgery in Dyskinesia and Parkinsonism
BASHIR AHMAD, LAHORE, PAKISTAN

**500 Cryothalamectomies for Parkinson's Disease and Other
Extrapyramidal Disorders**

ANGELOS CARACALOS, Athens, Greece

Long Range Evaluation of the Surgical Treatment of Spasmodic Torticollis
H. T. WYCIS and P. L. GILDENBERG, Philadelphia, Pa.

Myoclonies Arythmiques Pharyngo-Laryngees
J. NEHLIL, Argenteuil, France

HYPOPHYSEAL TUMORS

Microsurgical Approach to Hypophyseal Tumors
K. BURIAN and G. F. GESTRING, New York, N. Y.

Nutritional and Metabolic Disorders

(NEUROLOGY CONGRESS)

2 P.M. GRAND BALLROOM

JOHN D. SPILLANE, Cardiff, Wales, Chairman
MORRIS B. BENDER, New York, N.Y., Vice-Chairman
SIGVALD REFSUM, Oslo, Norway, Vice-Chairman
J. O. TRELLES, Lima, Peru, Vice-Chairman

TROPICAL

Africa:	HENRI H. COLLOMB, Dakar, Senegal
	B. O. OSUNTOKUN, Ibadan, Nigeria
	G. L. MONEKOSSO, Lagos, Nigeria
India:	N. H. WADIA, Bombay, India
	K. S. MANI, Bangalore, India

NON-TROPICAL

Cyanide Metabolism and Neurological Disorders
JOHN WILSON, London, England

Vitamin B12 and Folic Acid in Neurological Disorders
D. L. MOLLIN, London, England

Thiamine Deficiency
PIERRE M. DREYFUS, Davis, Calif.

The Effects of Alcoholism and Liver Disease on the Nervous System
MAURICE VICTOR, Cleveland, Ohio

Free Communications

(NEUROLOGY CONGRESS)

2 P.M. SUTTON BALLROOM

**Intracranial Arteriovenous Malformations (Clinical Radiographic
Correlation with Long-term Follow-up)**

WILLIAM S. FIELDS, BASSETT B. KILGORE and VALENTINA MASLENIKOV,
Dallas, Tex.

TUESDAY

First Results on 1-(2" pyrimidyl)-4 piperonyl piperazine (ET 495) in Vascular Diseases in Neurology and Ophthalmology

FRANCOIS DENIKER, Paris, France

The Fate of Patients with Clinically Proven Spontaneous Intracerebral Hematoma Treated Without Intracranial Surgery

MICHAEL SCOTT and MERYLEE WERTHAM, Philadelphia, Pa.

Relearning Following Cerebral Deconnection: A Case Report

RONALD E. SAUL, Los Angeles, Calif.

Disorders of the Static Apparatus in Wallenberg's Syndrome

B. P. SILFVERSKIOLD, Stockholm, Sweden

Evaluation of the Effect of a Drug by a Double Blind Method in the Treatment of Cerebral Arteriosclerosis

YOSHIO KUDO, Nishinomiya, Japan

Results of Long Term Medical Treatment (Hypotension) of Ruptured Intracranial Aneurysm

PAUL S. SLOSBERG, New York, N.Y.

Paquimeningitis Cervical por Hemorragias Minimas Repetidas de un Hemangioma del Ventriculo Lateral

CARLOS OLIVERAS DE LA RIVA, Barcelona, Spain

Tratamiento de los Accidentes Vasculares Cerebrales Oclusivos con Etilendiaminotetracetato Calcico Disodico (EDTA)

ANTONIO FERNANDEZ-BOUZAS, THALIA HARMONY, SUSANA SZAVA and EZRA NAPOLES, Havana, Cuba

Rehabilitation of Patients with Cerebrovascular Diseases

RICHARD P. BOGGS and HOWARD S. BARROWS, Downey, Calif.

Comparative Study of 100 Cases of Cerebrovascular Diseases With Use of Vasodilating Drugs

CHR. GIANNAKIS, A. GRIGORIADIS, Z. KAPSALAKIS and K. MATHEOU, Athens, Greece

Uber die Behandlung Cerebraler Durchblutungsstorungen im Hoheren Alter mit Hydrierten Mutterkornalkaloiden. Eine Studie an 54 Patienten im Doppelblindversuch

HEINZ BROICHER, Bonn, West Germany

2 P.M. SUITE 524

Pattern of Drawing Disability in Right and Left Hemispheric Patients

G. GAINOTTI, R. IBBA and C. TIACCI, Perugia, Italy

Dysnomia and Short-Term Memory Impairment from Intracarotid Sodium Amytal

PAUL FEDIO and MAITLAND BALDWIN, Bethesda, Md.

Hemispheric Dominance for Visuospatial Perception and Orientation

A. M. SOLOMONOVICI and C. BALACEANU, Bucharest, Romania

Cerebral Dominance and Interhemispheric Transfer of Learning in Brain-Damaged Patients

ION N. PETROVICI, Bucharest, Roumania

Test De Wada y Dominancia Cerebral

L. TAMAROFF, I. STOLARZA, J. C. ORTIZ, D. ZARATE, I. WEINSTEIN, A. SALAMA
and P. SALAMA, Buenos Aires, Argentina

Cerebral Dominance in Children with Speech Disorders

F. CLIFFORD ROSE, London, England

Psychomotor and Electrographic Data with Regard to Hemispheric Dominance in Childhood

A. GUARESCHI-CAZZULLO and M. BERTOLIN, Milan, Italy

Is There A Cerebral Dominance for Muscle Trophicity?

M. I. BOTEZ, Bucharest, Roumania

Interhemispheric Sharing and Shift of Cerebral Speech Function

JOHN A. WADA, Vancouver, Canada

Disturbances of Metaphorical Speech with Lesions of the Non-Dominant Hemisphere

EDWIN A. WEINSTEIN, New York, N.Y.

Temporal Processing and Its Relation to Cerebral Dominance

RUTH RUTSCHMANN, New York, N.Y.

A Possible Pathophysiological Explanation to the Clinical Phenomenon of Motor Impersistence

AMIRAM CARMON, Jerusalem, Israel

2 P.M. SUITE 526**Angiographical Study on Aphasia in Cerebral Infarction**

SHIBANOSUKE KATSUKI and KAZUHISA NAGAUE, Kukuka, Japan

Ultrasonic Diagnosis of Acute Cerebrovascular Disease

IWAO SAIKI, Morioka, Japan

Plausible Improvement of Differential Diagnosis of Brain Strokes by Using the Computer Technique

N. I. MOISEEVA, S. A. MOVSISIANTS, L. I. NIKITINA, V. V. USOV and
R. I. YAKOVLEV, Leningrad, U.S.S.R.

Hazards of Angiography in Stenosing Arterial Disease: Implications of Experimental Observations

GEORGE MARGOLIS, Hanover, N.H.

Reaction Time in Relation to Size of Cerebral Lesion as Indicated by Brain Scan

FRANCOIS BOLLER, DAVIS HOWES and DAVID PATTEN, Cambridge, Mass.

Experiences in Total and Regional Cerebral Blood Flow Measurements by Means of a Scintillation Camera-1600 Channel-Store-Unit

W. D. HEISS, P. PROSENZ and H. TSCHABITSCHER, Vienna, Austria

Vasopressor Drug Therapy for Complications of Cerebral Arteriography

GARY WISE, Seattle, Wash.

Detection of Carotid Artery Obstruction by Intravenous Radioisotope Arteriography

GARY WISE, ROBERT J. GRIEP and RAYMOND MARTY, Seattle, Wash.

Ultrasonic Carotid Echography

F. VON WOWERN, J. KVIST KRISTENSEN and M. EIKEN, Copenhagen, Denmark

TUESDAY

Volumetric Pulse Recordings from Cutaneous Carotid Territories
in Carotid Ligatures for Surgical Treatment in Some Cerebrovascular
Disorders

B. FUSTER, J. A. FOLLIE and R. ARANA-INIGUEZ, Montevideo, Uruguay

An Ultrasonic Method for Recording Echo Pulse Curves from the
Internal Carotid and Vertebral Arteries

K. KENDEL and H. J. FREUND, Freiburg, West Germany

2 P.M. SUITE 529

Clinical and Pathologic Studies of Human Rabies

ATHASIT VEJJAJIVA and PRASAN TANGCHAI, Bangkok, Thailand

Nervous System Complications in Typhoid Fever

L. P. SANCHEZ LONGO, ROSA E. FIOL, CHARLES A. PAYNE and
VICTOR MOJICA, Rio Piedras, Puerto Rico

Ascaris Lumbricoides Invasion—An Allergic Factor in the Etiopathogenesis
of Meniere's Disease "Hypertensio Auris Internae Intermittens"

BORIS YOSSIFOV MILOSHEV, Sofia, Bulgaria

Necrotizing Encephalitis Associated with Cerebral Cytomegalic Inclusion
Disease in an Adult

Y. TOYOKURA, N. YANAGISAWA and H. SHIRAKI, Tokyo, Japan

Human Cytomegalovirus Encephalitis: Clinical-Pathological-Ultrastructural
Correlations

WILLIAM G. ELLIS, NATHAN MALAMUD and JOHN R. McCULLOCH,
San Francisco, Calif.

Epidemiologic Aspects of Non-Identified Viral Neuro-Infections

E. HERMAN, A. PRUSINSKI and M. ORZECHOWSKA, Lodz, Poland

SPE: Etiological and Epidemiological Studies in the Memphis Area

J. T. JABBOUR, DANILO DUENAS, JULIO GARCIA and J. L. SEVER,
Memphis, Tenn.

Viral Encephalitis and Learning Disorders

KNOX H. FINLEY, San Francisco, Calif.

Enterovirus Infections of the Nervous System and Circulation
of Enteroviruses in Estonian SSR (1959-1968)

E. RAUDAM and T. KUSLAP, Tartu, U.S.S.R.

Post-Encephalitic Psychosis with Late Amyotrophy: Clinico-Pathologic
Observation

J. M. BRUCHER and G. DE JAFFE, Louvain, Belgium and Montreal, Canada

2 P.M. SUITE 534

Explication Du Reflexe Plantaire en Extension (Signe de Babinski)

E. CHEHRAZI, Tehran, Iran

Histo-geometry of the Spinal Cord

J. DROOGLEEVER FORTUYN, Groningen, The Netherlands

Studies of Motoneuron Excitability in Hemiplegics

R. GARCIA-MULLIN and R. F. MAYER, Baltimore, Md.

Anal Sphincter Electromyography: Description of Urethro-Anal Reflex

ASA P. RUSKIN and JOSEPH E. DAVIS, New York, N.Y.

Magnetically Induced Function of Bladder

DAVID GROB and PHILIP STEIN, New York, N.Y.

Vestibulospinal and Reticulospinal Actions on Neck, Forelimb and Hindlimb Motoneurons

M. YOSHIDA and VICTOR J. WILSON, New York, N.Y.

Models of Perinatal Damage in Monkey

RONALD E. MYERS, San Juan, Puerto Rico

Prognosis of Acute Acquired Hemiplegia in Childhood

GAIL E. SOLOMON, SADEK K. HILAL, ARNOLD P. GOLD and SIDNEY CARTER, New York, N.Y.

An Experimental Study of Nerve Grafting

DARAB K. DASTUR, V. I. BUCH, S. S. PANDYA and N. H. ANITA, Bombay, India

Electrical Analysis of an Agranular Cerebellum

W. PRECHT and R. LLINAS, Chicago, Ill.

2 P.M. SUITE 548**A Long-Term Follow-Up Study on Minamata Disease****(An Alkylmercury Poisoning)**

TORU OKAJIMA, HARUHICO TOKUOMI and HIROSHI MISUMI, Kumamoto City, Japan

Phenytoin Neurotoxicity and Metabolic Polymorphism

R. S. KOSEN, P. T. LASCELLES and E. H. REYNOLDS, London, England

Peripheral Neuropathy in Tropical Ataxia Syndrome**(Light and Electron Microscopic Study)**

A. OLUFEMI WILLIAMS and B. O. OSUNTOKUN, Ibadan, Nigeria

Persistent Dyskinesia: A Serious Neurologic Complication of Major Tranquilizers

FRANK J. AYD, JR., Baltimore, Md.

Alcoholic Neuropathy

J. C. WALSH and J. G. McLEOD, Sydney, Australia

Neurological Complications of Heroin Addiction

RALPH W. RICHTER and MICHAEL BADEN, New York, N.Y.

Diphenylhydantoin Blood Levels, Clinical Effects and Metabolism

HENN KUTT, SYDNEY LOUIS, ROBERT BRENNAN, KARL VEREBELY and FLETCHER McDOWELL, New York, N.Y.

Ethambutol Neuropathy

EIJIRO SATOYOSHI and HISAYUKI KOWA, Tokyo, Japan

Hyperkinetic Syndrome Associated with High Values of Dopamine in the Urine and Thyroid Dysfunction

M. BECHAR, E. KOTT and B. BORNSTEIN, Petah Tikva, Israel

Vincristine Neuropathy

J. G. McLEOD and R. PENNY, Sydney, Australia

n-Hexane Polyneuropathy

ITSURO SOBUE, KAZUYA ANDO, MITSUO IIDA, TETSUYA TAKAYANAGI, YUSHIRO YAMAMURA and YUKHIKO MATSUOKA, Nagoya, Japan

Outbreak of Organic Mercury Intoxication in Niigata: An Epidemiological and Clinical Study

TADAO TSUGAKI, KENICHI SHIRAKAWA, KOICHI HIROTA and KEIICHIRO KANBAYASHI, Niigata City, Japan

The Clinical Importance of Folic Acid in Patients Treated with Anticonvulsive Drugs

O. NYGAARD JENSEN and O. VENDELIN OLESEN, Glostrup, Denmark

2 P.M. SUITE 551

Disturbances in Nervous Self-Regulation of Cerebral Circulation in Cerebral Arteriosclerosis

ARTHUR KREINDLER, Bucharest, Roumania

A Study of the Normal Morphological Patterns and Pathological Alterations of Microcirculation in Human Brain

HARRY C. H. FANG, Los Angeles, Calif.

Immunological Aspects of the Brain Pathology Produced by Cerebral Vascular Disorders and Brain Trauma

I. V. GANNOUSHKINA, T. M. TZAREGORODTZEVA, V. G. ALEXANDROV, T. V. RYASSINA and I. H. ZAREZKAJA, Moscow, U.S.S.R.

Histochemical Studies of Retinal Blood Vessels

MASATOSHI FUKUDA, Tokyo, Japan

Massive Cerebral Hemorrhage in Hypertension

S. MARKAM, A. S. SETIAWAN, G. TJAHHADI and S. GUNAWAN, Djakarta, Indonesia

Possible Relationship Between Primary Vascular Disorder and Occurrence of Intracranial Hygroma in Infants

R. DOM, G. DOYEN, N. BOURGEOIS, G. STROOBANDT, H. S. TAPER, J. LAUWERIJNS and J. M. BRUCHNER, Louvain, Belgium

Manifestations Vasculaires Cerebrales Apoplectiformes Pendant le Syndrome Reno-Pulmonaire Goodpasture

TRAIAN MIRCEA, TRAIAN BICLE, AUREL CODREA and PAULA MIRCEA, Oradea, Romania

Comparative Semiologic Study of Internal Carotid Artery Occlusion and Medial Cerebral Artery Occlusion

ROBERTO MELARAGNO FILHO, WILSON LUIZ SANVITO, MARIO CINELLI, JR. and ANOI CASTRO CORDEIRO, Sao Paulo, Brazil

The Effect of Peripheral Nerve Implanted Electrical Stimulation on Motor Control in Stroke Patients

DONALD McNEAL, WILLIAM WILEMON, VERT MOONEY and RICHARD BOOGS, Downey, Calif.

Cerebral Autoregulation in Patients with Transient Focal Cerebral Ischaemic Attacks

ERIK SKINHOJ, Copenhagen, Denmark

The Ventral Pontine Syndrome: A Clinical, Pathological and 24-Hour EEG Study

MARIA DELIA BOTTINELLI, VALENTINA MASLENIKOV, J. MEDOC and J. PURRIEL, Montevideo, Uruguay

Free Communications—Via Closed Circuit Television

(NEUROSURGICAL CONGRESS)

The following free communications papers will be presented over a special closed circuit television channel to hotel room sets at the New York Hilton and the Americana Hotel as well as to television sets located in the Nassau Suite.

7 A.M.—MISCELLANEOUS III

The Effects of Intrathecal Frozen Saline Perfusion for Relief of Intractable Pain on the Thalamic Responses and Dorsal Rootlet Potentials

H. DALE RICHARDSON and TAKASHI TSUBOKAWA, Atlanta, Ga.

Radiologic and Magnetic Guidance of Intra-Arterial Catheters

JAMES A. TAREN, TRYGVE O. GABRIELSEN and CHIHIRO KIKUCHI, Ann Arbor, Mich.

Cortical Stimulation in Patients with Right-Sided or Bilateral Speech Representation

WILLIAM FEINDEL, Montreal, Canada

Cystosiderosis and Abnormal Movements

A. ASENJO, L. ARANDA, G. ROJAS, R. CHIORINO, P. DONOSO, V. WEINSTEIN and E. OBERHAUSER, Santiago, Chile

The Effect of Cerebral Hypertension on the Angiographic Demonstration of Inconstantly Visible Vessels

H. HACKER, Frankfurt, West Germany

Surgical Repair of Transected Spinal Ventral Roots (An Experimental Study on Cats with Clinical Application)

C. A. THULIN, C. A. CARLSSON, J. SJOSTRAND and T. SUNDIN, Umea, Sweden

8 A.M.—EPILEPSY II

Neuropathological Findings in Temporal Lobe Epilepsy

B. W. KONIGSMARK, DIETRICH BLUMER and A. EARL WALKER, Baltimore, Md.

Some Problems of Diagnosis and Surgical Treatment of Temporal Lobe Epilepsy

L. STEPIEN, T. BACIA, J. BIZINSKI and J. WISLAWSKI, Warsaw, Poland

Temporal Lobectomy for Temporal Lobe Epilepsy

K. V. MATHAI and J. CHANDY, Vellore, India

Selective Stereotaxic Thalamotomy in "Grand Mal" Epilepsy

B. PERTUISET, J. F. HIRSCH, M. SACHS and J. LANDAU-FEREY, Paris, France

Epileptic Seizures with Infantile Hemiplegia: Indication for Operative Treatment

R. LORENZ, Giessen, West Germany

9 A.M. — PAIN I

Treatment of Pain by Chronic Electrical Stimulation of Large Axons

WILLIAM H. SWEET and JAMES G. WEPSIC, Boston, Mass.

Control of Electrode Placement and Lesion Size in Stereotaxic Cervical Cordotomy

F. E. NULSEN, D. P. BECKER and H. F. YOUNG, Cleveland, Ohio

Cingulotomy: A New Treatment for Causalgia

F. G. LARA, F. HERMIDA, G. GARNICA and S. HAKIM, Bogota, Colombia

Thalamic Mapping — Lesion Localization in Thalamotomy for Pain

RONALD R. TASKER, Toronto, Canada

Stereotactic Thalamic Tractotomy for the Alleviation of Intractable Pain in Malignant Tumors

DAVID FAIRMAN, Buenos Aires, Argentina

10 A.M. — PAIN II

Treatment of Pain by Cautery in Old and Present Times

OSMAN SOROUR, Cairo, U.A.R.

Dilantin, Tolserol and Tegretol: A Comparative Study on Primary Afferent Excitability in the Trigeminal System

DAVID G. STORRS and ROBERT B. KING, Syracuse, N.Y.

Clinical Observations on Sensory Effects of Trigeminal Dorsal Root Section

ADOLFO LEY and J. M. GUITART, Barcelona, Spain

Functional Subdivision of the Trigeminal Sensory Root

WILLIAM F. EMMONS and ALBERT RHOTON, JR., Rochester, Minn.

Selective Ganglion-Root Section of the Trigeminal Nerve

PETER C. KARVOUNIS and HARRY A. KAPLAN, Newark, N.J.

Decompression for Trigeminal Neuralgia: 15 Years Follow-up

PALLE TAARNHOJ, Glostrup, Denmark

11 A.M. — SPINE I

Intermittent Claudication-Like Syndrome Due to Lesions of the Lumbar Spine

H. J. SVIEN, G. J. KAVANAUGH and R. M. JOHNSON, Rochester, Minn.

Transabdominal Fixation of the Spondylolisthesis L5/S1 Associated with Pain

ZDENEK KUNC, KARL SOUREK and JIRI BRET, Prague, Czechoslovakia

Cervical Myelopathy: A Post-Mortem Biomechanical and Histological Study

I. M. TURNBULL, W. SCHAMBERGER and C. L. DOLMAN, Vancouver, Canada

Treatment of the Intramedullary Gliomas

CARLO ALVISI and ALESSANDRO BORROMEI, Bologna, Italy

Trans-Thoracic Removal of Midline Thoracic Disc Protrusions Causing Spinal Cord Compression

PHANOR L. PEROT, JR., and DARRELL MUNRO, Charleston, S.C.

NOON — SPINE II

Spinal Vascular Malformations: Their Classification, Pathogenesis and Rationale of Treatment by Excision of the Draining Veins

R. N. CHATTERJEE, Calcutta, India

Surgical Treatment of Spinal Cord Angiomas Based on Arteriography

R. HOUDART, R. DJINDJIAN and M. HURTH, Paris, France

The Bleeding Angioma in the Spinal Canal

KONRAD NITTNER, Cologne, West Germany

The Importance of Early Surgery in Spinal Cord Compression Caused by Metastatic Vertebral Tumors

ARNOLD DE VET, The Hague, The Netherlands

A Comparison of the Evolution of the Medial Lemniscus and Anterolateral System in the Primate Lineage

JOHN A. JANE and DOLORES SCHROEDER, Cleveland, Ohio

5 P.M. — CEREBROVASCULAR DISEASE I

The Salutary Effect of Lower Arterial PCO₂ in Experimental Cerebral Infarction

ROBERT J. WHITE, MARK SOLOWAY, W. NADEL, DAVIS YASHON and MAURICE S. ALBIN, Cleveland, Ohio

The Effect of Sympathetic Stimulation on Cerebrovascular Hemodynamics and Cerebral Oxygen Tension

B. M. BLOOR, H. S. MAJZOUB, C. A. CARRION, A. F. FIGUEROA and C. R. LOAR, Morgantown, W. Va.

Recurrent Cerebral Ischemia Following Successful Surgery on the Extracranial Arteries

JAMES W. CORRELL, FRANK K. BOSCHENSTEIN and E. H. WOOD, New York, N.Y.

Experimental Vasospasm: Induction, Pharmacology and Catecholamine Morphology in the Laboratory Animal

B. M. STEIN, R. A. R. FRASER, R. E. BARRETT and J. L. POOL, New York, N.Y.

Cerebrovascular Dilatation and Compression with Intracranial Hypertension

T. W. LANGFITT, J. D. WEINSTEIN, N. F. KASSELL and H. M. SHAPIRO, Philadelphia, Pa.

6 P.M. — CEREBROVASCULAR DISEASE II

Intracranial Arterial Spasm in the Dog

ROBERT H. WILKINS, Durham, N.C.

Clinical and Experimental Cerebral Vasospasm

ERIK KAGSTROM, PER ERIK NILSSON and NIELS-AAGE SVENNGAARD, Lund, Sweden

Vasospasm, Acute and Recurrent, Due to Experimental Subarachoid Hemorrhage

FRANCIS A. ECHLIN, New York, N.Y.

Intracranial Arterial Spasm in Acute Head Injuries

CHARAS SUWANWELA and NITAYA SUWANWELA, Bangkok, Thailand

TUESDAY/WEDNESDAY

The Relief of Cerebral Vasospasm by Topically Applied Ethylene Diamine Tetracetic Acid (EDTA)

E. W. PETERSON, J. METUZALS and D. H. JOHNSON, Ottawa, Canada

7 P.M. — CEREBROVASCULAR DISEASE III

Transcutaneous Doppler and Extracranial Carotid Disease

RONALD BRISMAN, B. L. GROSSMAN and J. W. CORRELL, New York, N.Y.

Ophthalmosonometry in Cerebrovascular Diseases

J. C. MAROON, R. L. CAMPBELL and M. L. DYKEN, Indianapolis, Ind.

Brain Scanning in the Diagnosis of Cerebrovascular Insufficiency

R. DA PIAN and G. DALLE ORE, Verona, Italy

Internal Carotid Artery Hemodynamics (The Role of External Carotid Artery Ligation)

JACOB ABRAHAM, Vellore, India

Evidence for a Transcallosal Contribution to Motor Recovery Stroke Implications

PERRY BLACK, S. N. CIANCI and RONALD MARKOWITZ, Baltimore, Md.

Special Opera Performance

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

8:30 P.M. NEW YORK STATE THEATER, LINCOLN CENTER

Performance of "La Boheme" by Puccini by the New York City Opera Company. (Tickets required)

WEDNESDAY, SEPTEMBER 24, 1969

Free Communications

(NEUROSURGICAL CONGRESS)

9 A.M. GRAND BALLROOM

K. A. BUSCHE, Gottingen, West Germany, Chairman

JAIME GOMEZ-GONZALEZ, Bogota, Colombia, Vice Chairman

DWIGHT PARKINSON, Winnipeg, Canada, Secretary

Surgical Experience with Chromophobe Adenoma of the Pituitary

BRONSON S. RAY and R. H. PATTERSON, JR., New York, N.Y.

Radical Surgery and Radioactive Chromic Phosphate for the Treatment of Craniopharyngiomas

RAUL CARREA, HECTOR MORA and EDUARDO LANARI, Buenos Aires, Argentina

Experience with Large Acoustic Neurinomas

B. RAMAMURTHI, Madras, India

Turbulence in Human Intracranial Saccular Aneurysms

GARY G. FERGUSON and MARGOT R. ROACH, London, Canada

Prognostic Correlation with Cerebral Vasospasm and the Direct Operation for Intracranial Aneurysms

JIRO SUZUKI, AKIRA TAKAKU, SHIGEHARU SUZUKI and NAMIO KODAMA, Sendai, Japan

Les Arteres du Thalamus: Etude Anatomique et Radiologique

G. LAZORTHES and G. SALAMON, Toulouse, France

Stereotactic Proton Hypophysectomy for Hyperpituitarism

RAYMOND N. KJELLBERG and BERNARD KLIMAN, Boston, Mass.

The Use of Antifibrinolytic Substances in Ruptured Intracranial Aneurysms

G. NORLEN and C. A. THULIN, Gothenburg, Sweden

Computer Prognosis of the Spontaneous Intracerebral Hemorrhage for the Purpose of its Surgical Treatment

N. M. CHEBOTAREVA, I. M. GELFAND, SH. A. GUBERMAN, M. L. ISVEKOVA, ED. I. KANDEL, N.V. LEBEDEVA, D. K. LUNEV and I. F. NICOLAEVA, Moscow, U.S.S.R.

Major Observations in Surgery of Cerebral Gliomas

S. KOSTIC, M. IVKOV and N. SEKULOVIC, Belgrade, Yugoslavia

Ultrastructure of Arterial Aneurysms

G. ROJAS, A. ASENJO and R. POBLETE, Santiago, Chile

Chemotherapy of Malignant Glioma: A Collaborative Study

CARL M. LEVENTHAL and MICHAEL D. WALKER, Bethesda, Md.

Motion Pictures

(NEUROSURGICAL CONGRESS)

NOON MERCURY BALLROOM**HYPOPHYSEAL TUMORS (Continued)****The Microsurgical Combined Open-Stereotactic Operation of the Hypophysis with Transsphenoidal Approach**

T. RIECHERT, J. U. KARINICK and A. U. MUHTAROGLU, Freiburg, West Germany

MISCELLANEOUS**Subdural Hemorrhage**

R. S. HOOPER, East Melbourne, Australia

A Precis of Clinical Neurophysiological Investigations in Limbic Structures of Psychomotor Epilepsy

PAUL H. CRANDALL, RICHARD D. WALTER and MARY A. B. BRAZIER, Los Angeles, Calif.

Vergleichende Untersuchungen über die Verteilung Arteriosklerotischer Veränderungen im Halsabschnitt der Grossen Zerebralen Gefäse bei Leichen Mit und Ohne Zerebrale Insulte

HERBERT REISNER, Vienna, Austria

WEDNESDAY

Fluorescein Angiography of the Cerebral Microcirculation

WILLIAM FEINDEL, LUCAS YAMAMOTO and CHARLES HODGE, Montreal, Canada

Myelocintigraphy

ESTEBAN D. ROCCA, JULIO BEDOYA and BLANCA NEIRA, Lima, Peru

Pain

(NEUROSURGICAL CONGRESS)

2 P.M. GRAND BALLROOM

JAMES C. WHITE, Boston, Mass., Chairman

ANTONIO DE VASCONCELLOS MARQUES, Lisbon, Portugal, Vice Chairman

RICHARD GYE, Camperdown, Australia, Secretary

ROBERT B. KING, Syracuse, N.Y., Moderator

Chairman's Remarks

JAMES C. WHITE

Newer Concepts of Pain

RONALD MELZACK, Boston, Mass.

Concepts Relative to Recurrent Pain

W. NOORDENBOS, Amsterdam, The Netherlands

Concepts of Trigeminal Neuralgia

FREDERICK W. L. KERR, Rochester, Minn.

Discussion

PETER J. JANETTA, New Orleans, La.

Stereotaxis of Relief of Pain

E. SIDNEY WATKINS, Syracuse, N.Y.

Thalamic Mechanisms of Pain in the Light of Experiences of Stereotaxic Thalamotomy

MASUMI YOSHIOKA, BUICHI ISHIJIMA and KEIJI SANO, Tokyo, Japan

Discussion

CLAUDE BERTRAND, Montreal, Canada

Percutaneous Cordotomy

JOHN F. MULLAN, Chicago, Ill.

The Pathologist Looks at Cordotomy

JOHN MOOSSY, Winston-Salem, N.C.

Summation

JOHN GILLINGHAM, Edinburgh, Scotland

Free Communications—Via Closed Circuit Television

(NEUROSURGICAL CONGRESS)

The following free communications papers will be presented over a special closed circuit television channel to hotel room sets at the New York Hilton and the Americana Hotel as well as to television sets located in the Nassau Suite.

7 A.M. — MISCELLANEOUS IV

Non-Tumoral Hydrocephalus in Young and Adults

G. DIERSSEN, S. OBRADOR and E. RODA, Madrid, Spain

Blood Serum and Spinal Fluid Enzyme Changes in Brain Injuries

BORIS KLUN, Ljubljana, Yugoslavia

Visible Tumors of Head and Neck

ABRAHAM KRIVOV, Caracas, Venezuela

Permeability Disturbances in the Brain

G. BLUMEL, Vienna, Austria

Collaborative Angiographic and Clinical Study of the Aneurysms of the Anterior Communicating Complex

GEORGE B. UDVARHELYI and MILOS PEROVIC, Baltimore, Md.

Peripheral Facial Paralysis: A New Syndrome

ANIBAL ALBERTO GONZALEZ, Mendoza, Argentina

8 A.M. — CEREBROVASCULAR DISEASE IV

Thrombosis of the Internal Carotid Artery in Africans in Senegal

B. COURSON, M. DUMAS, G. LEMERCIER and H. COLLOMB, Dakar, Senegal

Acute Cerebral Circulatory Disorders and Their Surgical Treatment

A. P. ROMODANOV and G. A. PEDACHENKO, Kiev, U.S.S.R.

Surgical Indication and Treatment of Primary Intracerebral Hemorrhage

HARUYUKI KANAYA, KENICHI OHSAWA, EIJI ONODERA, YUTAKA HORIE and IWAO SAIKI, Morioka, Japan

The Possibility of Surgical Treatment of Spontaneous Intracerebral Hemorrhage

V. BENES, Prague, Czechoslovakia

Surgical Treatment of Cerebral Hemorrhage: Late Results

JEAN E. PAILLAS, Marseille, France

5 P.M. — CEREBROVASCULAR DISEASE V

A Controlled Trial of Delayed Surgical vs. Conservative Treatment of Intracranial Arterial Aneurysms: Further Results

G. AF BJORKESTEN and H. TROUPE, Helsinki, Finland

Factors Responsible for Improved Mortality and Morbidity in Anterior Communicating Aneurysms

JAMES L. POPPEN and CHARLES A. FAGER, Boston, Mass.

Analysis of Surgery of Anterior Communicating Aneurysms

GERMAN HUGO DICKMANN, ROGELIO D. LASPIUR and CARLOS A. PARDAL, Buenos Aires, Argentina

Ischemia of the Hypothalamus in Aneurysms of the Anterior Communicating Artery

J. RODRIGUEZ JUANOTENA, JUAN A. PURRIEL, LIVIA DAVILA, ALFREDO NAVARRO and PEDRO BENEDEK, Montevideo, Uruguay

Elements in the Successful Management of Intracranial Aneurysms

C. D. HAWKES and W. S. OGLE, Memphis, Tenn.

WEDNESDAY/THURSDAY

7 P.M. — CEREBROVASCULAR DISEASE VI

The Identification of the Ruptured Aneurysm in Patients with Multiple Intracranial Arterial Aneurysms

O. HEISKANEN and IRJA MARTTILA, Helsinki, Finland

Intracranial Abnormalities of the External Carotid System

AHMED EL-BANHAWY and FOUAD EL-NADI, Cairo, U.A.R.

Control of the Cerebral Circulation in the Surgery of Ruptured

Intracranial Aneurysms

RICHARD GYE, JOHN SEGELOV, TIMOTHY CARTMILL and MICHAEL BOOKALLIL,
Sydney, Australia

Excision of Bleeding Paraventricular Arteriovenous Malformations

ALBERT BARTAL (BEHMOARAM), Tel Aviv, Israel

Hemodynamics of Cerebral Arteriovenous Fistulas

HAJIME HANADA, JYOJI HANADA, KOUZO YOSHIDA and YUTAKA ISHIJIMA,
Kyoto, Japan

Reception and Banquet

4th INTERNATIONAL CONGRESS OF NEUROLOGICAL SURGERY

7 P.M. GRAND BALLROOM FOYER

Reception

8 P.M. GRAND BALLROOM

Banquet

(Dancing — Dress optional)

THURSDAY, SEPTEMBER 25, 1969

Free Communications

(NEUROSURGICAL CONGRESS)

9 A.M. GRAND BALLROOM

ALFONSO ASENJO, Santiago, Chile, Chairman

FUAD S. HADDAD, Beirut, Lebanon, Vice Chairman

W. EUGENE STERN, Los Angeles, Calif., Secretary

Blood Vessels of the Dura

HARRY A. KAPLAN and STANLEY M. ARONSON, New York, N.Y.

A Comparison of Neurologic EEG Findings in Acute Moderate Head Injuries

H. E. DIEMATH, G. F. FUEGER, H. LECHNER and W. KOLLAR, Salzburg, Austria

Cervical Spine and Cord Injuries: Mechanisms and Surgical Implications
BORYS ROMULD SELECKI, Sydney, Australia

Is There a Real Indication for Operative Treatment in Temporal Lobe Epilepsy?

HANS WERNER PIA, Giessen, West Germany

Epilepsia Partialis Continua

KRISTIAN KRISTIANSEN, BIRGER R. KAADAL and GEORG F. HENRIKSEN, Oslo, Norway

Total and Partial Hemispherectomy in the Treatment of Epilepsy

Associated with Infantile Unilateral Cerebral Atrophy: Longterm Follow-up of 31 Cases

S. MINGRINO, A. BENEDETTI and P. FRUGONI, Padova, Italy

Amygdaloidectomy and Temporal Lobe's Partial Desafferentation in Epilepsy

MANUEL M. VELASCO-SUAREZ and A. FERNANDEZ GUARDIOLA, Mexico D.F., Mexico

Results of Surgical Pituitary Ablation for Diabetic Retinopathy

CHARLES A. FAGER, Boston, Mass.

Operative Results on Major Trigeminal Neuralgia

ADOLFO LEY, JR. and J. M. GUITART, Barcelona, Spain

Sensory Input to Motor Cortex in Man

SIDNEY GOLDRING, ERTURAN ARAS and PETER C. WEBER, St. Louis, Mo.

Pathogenesis of Neurocysticercosis

JUAN FRANCO PONCE, B. SOTO and L. PALOMINO, Lima, Peru

The Effects of Induction of General Anaesthesia on Intracranial Pressure

A. HULME and RAY COOPER, Bristol, England

Free Communications

(NEUROLOGY CONGRESS)

9 A.M. MERCURY BALLROOM

Consideration on Seizures Beginning After the Sixth Decennium

L. R. CARNEY, R. L. HUDGINS, R. E. ESPINOSA and D. W. KLASS, Temple, Tex.

Vincent Van Gogh (su Vida, su Obra, su Enfermedad)

A. MONTI ANGEL, Cordoba, Argentina

Progressive Myoclonic Epilepsy Without Lafora Bodies

W. B. MATTHEWS, D. A. HOWELL and D. L. STEVENS, Manchester, England

Epilepsy, Neurosis and Isolation

L. IVAN, Budapest, Hungary

Rhythmic Myoclonus, Influenced by Voluntary Innervation and Sensory Stimuli

K. MEIER-EWERT, E. SCHENK and W. KUHLO, Munich, West Germany

Un Nuevo Caso Anatomoclinico de Enfermedad de Marchiafava-Bignami

E. PONS-TORTELLA, A. POU-SERRADELL and R. OBACH-CIRERA, Barcelona, Spain

Prakursiv-Epilepsie als Erstmanifestation bei Zerebrovascularer Erkrankung

G. S. BAROLIN, E. SCHERZER and G. SCHNABERT, Graz, Austria

THURSDAY

The Diagnostic Significance of Focal Seizures

ROBERT JAFFE, SEYMOUR GENDELMAN and GARY KORENMAN, New York, N.Y.

Clinical Studies on Myoclonus Epilepsy

KAZUTOYO INANAGA, Kurume, Japan

9 A.M. SUITE 524

Electromyographic Findings in Atrophies of Central Origin

M. I. BOTEZ and GH. CALCAIANU, Bucharest, Roumania

Socio-Agnostic Behavior in Temporal Lobectomized Macaque

KINJIRO IWATA, Y. ANDO and A. TSUMORI, Nagoya, Japan

Modification of Visually Directed Prehension by Temporal Ablation

SIMON HORENSTEIN and JOHN P. CONOMY, Cleveland, Ohio

Cortical Representation of the Auditory System in Man

GASTONE G. CELESIA and FLAVIO PULETTI, Madison, Wis.

A Technique for Predicting Memory Deficits Subsequent to Temporal Lobectomy

HALLGRIM KLOVE and RONALD L. TRITES, Madison, Wis.

Significance of Symmetrical and Asymmetrical Motor Performance

MORTON NATHANSON, New York, N.Y.

The Origin and Fate of an Engram

RALPH FREDMAN, Wingdale, N.Y.

Blockade of Descending Hippocampal Influences by Fornix and Septal Lesions

FOSTER K. REDDING, Detroit, Mich.

Neuropsychological Studies in 9 Patients with Agenesis of the Corpus Callosum

HANS JOACHIM LEHMANN, Kiel, West Germany

Interhemispheric Relations in Visual Guidance of Hand Movements

PERRY BLACK and RONALD E. MYERS, Baltimore, Md.

Medical Management of the Minimally Neurologically Handicapped Child

J. A. WHIELDON, Columbus, Ohio

Etude De La Recommaissance De Messages Sonores Complexes Lors De Lesions Cerebrales Unilaterales

J. BARBIZET, PH. DUIZABO and G. ENOS, Paris, France

Etude De La Nature Des Deficits Visuels Lors Des Lesions Centrales Unilaterales

J. BARBIZET, G. BERNARD and E. CANY, Paris, France

Perceptual Rivalry in Symbolic Operations

ROBERT COHN, Bethesda, Md.

9 A.M. SUITE 526

Four Vessel Angiography: Correlation with Clinical Localization of Stroke

STEPHEN A. KIEFFER, MILTON ALTER and JOSEPH A. RESH, Minneapolis, Minn.

Anatomie Vasculaire et Angiographie Medullaire

R. DJINDJIAN, M. HURTH, H. JULIAN and R. HOUDART, Paris, France

Validation de la Rheoencephalographie en Pathologie Intra-Cranienne
 GUY NOEL and JEAN JACQUY, Charleroi, Belgium

Radioisotope Arteriography: Clinical Use of the Gamma Camera in the Diagnosis and Treatment of Patients with Cerebrovascular Disorders
 RICHARD JANEWAY, C. D. MAYNARD, R. L. WITCOFSKI, RICHARD KEMP and JAMES F. TOOLE, Winston-Salem, N. C.

La Valeur du V.S.E. Fractionné dans le Diagnostique et le Prognostique des Accidents Vasculaires Cérébraux
 TRAIAN MIRCEA, Oradea, Roumania

Die neurophysiologischen Möglichkeiten zur Objektivierung einer Cerebrovaskulären Insuffizienz

A. LECHNER, H. GEYER, E. OTT and G. LADURNER, Graz, Austria

Mesure Continue, Focale et Absolue du Débit Sanguin du Cortex de L'Homme

J. SEYLAZ, H. MAMO, P. MCLEOD, J. P. CARON and R. HOUDART, Paris, France

EEG Studies of the Brain Reactivity in Vascular Brain Diseases
 JERZY MAJKOWSKI and JACEK KOWALSKI, Warsaw, Poland

The EEG Findings in Experimental Lower Brain Stem Vascular Lesions
 MASAO KASE, KEITARO SUGIURA and JUNICHI ONO, Tokyo, Japan

Autonomic, EEG and Nystagmic Reactivity to Labyrinthine Stimulation in Patients with Cerebral Vascular Disorders

I. POLICI and E. CRIGHEL, Bucharest, Roumania

Changes in Flash-Evoked Potentials Induced by Vestibular Afferents in Patients with Cerebrovascular Disturbances

E. CRIGHEL and I. POILICI, Bucharest, Roumania

The Clinical and Electroencephalographical Picture of the Chronic Subdural Hematoma

J. STEIN and H. KREJCOVA, New York, N. Y.

Statistical EEG Frequency Analysis Related to Prognosis of Cerebrovascular Occlusions

GUENTER PRUELL, Giessen, West Germany

9 A.M. SUITE 534

The Regeneration of Synapses in Vitro

C. DOMINIQUE ALLERAND, M.D., New York, N. Y.

An Experimental Analysis of Cerebellar Hypotonia

SID GILMAN, M.D., New York, N. Y.

Comparison of Retrograde Degeneration in Central and Peripheral Nervous System

DAVID MEYER and MONROE COLE, Winston-Salem, N. Carolina

An Analog Model for Automatic Analysis of the Autonomic Nervous System

F. DENOTH, S. GANDINI, A. STARITA and E. GANDINI-COLLODEL, Pisa, Italy

Microelectrode Recording of Spontaneous and Evoked Thalamic Activity

W. STEWART, E. WATKINS, T. BERNSTEIN, D. STORRS and R. KING, Syracuse, N. Y.

THURSDAY

Presynaptic Inhibition of the Monosynaptic Reflex by Vibration

J. W. LANCE and J. D. GILLIES, Little Bay, Australia

Reversible Movement Disorders During Cooling of N. Dentatus

I. KOZLOVSKAYA-AVDEYEVA, A. ATKIN, F. HORVATH, M. UNO and V. B. BROOKS, New York, N. Y.

Quantitative Cytometric Studies in the N. Lateralis Dorsalis Thalami of Man: Its Importance in Limbic System Pathology

R. DOM and A. DEWULF, Louvain, Belgium

Un Nouveau Critere du Niveau d'Attention et de Vigilence

JACQUES FAIDHERBE, Liege, Belgium

9 A.M. SUITE 529

Experimental Hydrocephalus Induced by Reovirus Type 1

GEORGE MARGOLIS and LAWRENCE KILHAM, Hanover, N. H.

Protection Against Herpes Simplex Encephalitis by an Interferon Inducer

LOUIS W. CATALANO and SAMUEL BARON, JR., Bethesda, Md.

Bacillus Subtilis Treatment in the Central Nervous System Infections: Experimental Research

M. AGUINIS and C. L. PUEBLA, Cordoba, Argentina

Role of Immune Response in Outcome of Experimental Arbovirus Encephalitis

L. P. WEINER, G. A. COLE and N. NATHANSON, Baltimore, Md.

Influence of the Polysaccharide of the Pseudomonas Aeruginosa in the Encephalic Circulatory Disturbances

M. AGUINIS, F. AMUCHASTEGUI, C. L. PUEBLA, N. CORDOBA and R. CAGNOLATTI, Cordoba, Argentina

Schistosomal Myopathy in Man and in Mice

SALAH EL-DIN MANSOUR and HANS H. REESE, Alexandria, U.A.R.

The Ultrastructure of Modoc Virus in Experimental Encephalitis

HAROLD N. JOHNSON and FORBES H. NORRIS, JR., San Francisco, Calif.

Klinische Symptomatologic bei Zunehmender Hirndrucksteigerung Metabolisch-Nutritiv Bedingte Schaden Peripherer Nerven Beim Appallischen Syndrom

F. GERSTENBRAND and C. H. LUCKING, Vienna, Austria

A Pedigree Study of Metachromatic Leukodystrophy: Biochemical Investigation of the Carrier State

F. E. DREIFUSS, E. J. WITMER and N. H. BASS, Charlottesville, Va.

9 A.M. SUITE 548

Acute Retrobulbar Neuritis in Japan

SHOZO KITO, TAKAO MURO, MASANORI TOMONAGA, TADASHI INAGAKI, TOSHIJI MOZAI and KIKU NAKAO, Tokyo, Japan

ACTH-Induced Adrenocortical Response Patterns in Multiple Sclerosis and Their Relation to Clinical Effectiveness of ACTH Therapy

LEO ALEXANDER and LEO J. CASS, Boston, Mass.

**The Effect of ACTH Therapy Upon the Evolution and Resolution
of Experimental Primary Demyelination in Peripheral Nerves**

ROSS MELLICK, Double Bay, Australia

Intrathecal Depo-Medrol in Multiple Sclerosis

IRVING M. LEVINE and PAUL B. JOSSMANN, Boston, Mass.

**Association of the Geographic Distribution of Multiple Sclerosis with
Some Infections in Finland**

M. PANELIUS, U. K. RINNE and E. KIVALO, Turku, Finland

Discussion Bases of MS Epidemiological Research Program in Europe

R. CH. BEHREND, Hamburg, West Germany

Studies in the Course of Multiple Sclerosis

TORBEN FOG, Copenhagen, Denmark

Occurrence of Dementia with the "Benign" Form of Multiple Sclerosis

HAROLD KOENIG, Chicago, Ill.

Epidemiology Considerations about Multiple Sclerosis in Italy

GIORGIO MACCHI, Perugia, Italy

Submicroscopical Aspect of Subacute Sclerosing Panencephalitis

E. OVARY, R. GOMBI, S. GODENY, P. SORSZEGI and CH. BENKO,
Debrecen, Hungary

**Pelizaeus-Merzbacher Disease: Diagnosis Only on Clinical and Genetic
Grounds**

C. FORSTER and F. DASCHNER, Munich, West Germany

9 A.M. SUITE 551

The Effect of Harmaline in Monkeys with Central Nervous System Lesions

ARTHUR F. BATTISTA, SUSUMU NAKATANI and MENEK GOLDSTEIN,
New York, N. Y.

**Cytoplasmic Vacuole Formation in Cultured Neurons Treated with a
Na-K-Activated-ATPase Inhibitor or with Li Ions**

W. O. WHETSELL, JR., New York, N. Y.

**Catecholamine Depletion and Cholinergic Activity Enhancement in the
Olfactory Bulb and Central Olfactory Connection Under Chronic
Amphetamine Treatment**

OVIDIO DUARTE ESCALANTE and E. ELLINGWOOD, Durham, N. C.

**Adrenergic and Cholinergic Nerve Endings in Ureteral Smooth
Muscle and Epithelial Layers, Neurological Implications**

OVIDIO DUARTE ESCALANTE and SAUL BOYARSKY, Durham, N. C.

**Adrenergic and Cholinergic Structures of Cerebellar Purkinje Cell
and a Concomitant Study of MAO-Enzyme Activity**

OVIDIO DUARTE ESCALANTE, Durham, N. C.

Histochemistry of Lewy Bodies in Parkinson's Disease

W. A. DEN HARTOG JAGER, Amsterdam, The Netherlands

Regional Circadian Rhythms of Norepinephrine and Serotonin in Cat Brain

D. J. REIS, A. CORVELLI and E. I. GUTNICK, New York, N. Y.

Regional Aspects of Amino Acid Transport in Cat Brain Slices

LEONTINO BATTISTIN and ABEL LAJTHA, New York, N. Y.

THURSDAY

Typical Distribution Patterns of Molecular Weights of Mucopolysaccharides in Three Variants of Hurler Syndrome. Aid in Appraisal of Therapeutic Trials.

A. S. DEKABAN and G. CONSTANTOPoulos, Bethesda, Md.

Copper Binding and Wilson's Disease: A Biochemical Study

SAUL B. NEEDLEMAN, VINOD SAHGAL and BENJAMIN BOSCH, Chicago, Ill.

Experimental Production of Neuronal Degeneration with Inhibitors of RNA Synthesis

HAROLD KOENIG, Chicago, Ill.

Neurostenin, an Actomyosin-Like Contractile Protein from Brain

S. BERL, S. PUSZKIN and D. D. CLARKE, New York, N. Y.

Metabolism of Polyamines in Normal Human and in Tumors of the C.N.S.

L. T. KREMZNER, P. E. DUFFY, R. F. DEFENDINI and M. J. TERRANO, New York, N. Y.

The Activity of Acid and Alkaline Nucleases in the Human Central Nervous System and Possible Relation with the Tumor Incidence: Histochemical Study

H. S. TAPER, L. FORT and J. M. BRUCHER, Louvain, Belgium

ACTH Release Effected by Brain Implantation of Synaptically Active Chemicals

H. P. KRIEGER and D. T. KRIEGER, New York, N. Y.

Cerebrovascular Diseases

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

2 P.M. GRAND BALLROOM

GOSTA NORLEN, Gothenburg, Sweden, Co-Chairman

FRANCOIS LHERMITTE, Paris, France, Co-Chairman

HANS HOFF, Vienna, Austria, Vice-Chairman

A. B. BAKER, Minneapolis, Minn., Vice-Chairman

A. H. SAHS, Iowa City, Iowa, Vice-Chairman

M. MCKISSACK, Huntsville, Ala., Vice-Chairman

Cerebral Circulation in Cerebrovascular Diseases

I. Measurement of Cerebral Blood Flow and Outline of the Normal Regulation

DAVID H. INGVAR, Lund, Sweden

II. Abolition of Normal Regulation of Cerebral Blood Flow After Anoxia and Trauma (The Luxury Perfusion Syndrome)

NIELS A. LASSEN, Copenhagen, Denmark

Natural History of Cerebral Accidents Due to Arteriosclerosis

JEAN CLAUDE GAUTIER, Paris, France

Stenosis of Internal Carotid Artery

WILLIAM S. FIELDS, Dallas, Tex.

Surgical Treatment of Stenosis and Occlusions in Ischemic Attacks

ALAIN GOUTELLE, Lyon, France

Cerebral Accidents in Arterial Hypertension

C. MILLER FISHER, Boston, Mass.

Pathological Aspects of Cerebral Accidents in Arterial Hypertension

K. J. ZULCH, Cologne, West Germany

Surgical Treatment of Intracerebral Hemorrhages

ALAN RICHARDSON, London, England

Natural History of Ruptured Intracranial Aneurysms

S. PAKARINEN, Helsinki, Finland

Surgical Treatment of Intracranial Aneurysms

E. LAINE, Lille, France

Reception and Banquet

9th INTERNATIONAL CONGRESS OF NEUROLOGY

7 P.M. GRAND BALLROOM FOYER

Reception

(Dancing — Dress optional)

8 P.M. GRAND BALLROOM

Banquet

Free Communications—Via Closed Circuit Television

(NEUROSURGICAL CONGRESS)

The following free communications papers will be presented over a special closed circuit television channel to hotel room sets at the New York Hilton and the Americana Hotel as well as to television sets located in the Nassau Suite.

7 A.M. — MISCELLANEOUS V

Steel Mesh Tunnel Spinoplasty for Arrest of Paraplegia and Hydrocephalus in Birth Meningomyeloceles and Lipomata

WILLIAM BEECHER SCOVILLE, Hartford, Conn.

Observations on the Functional Differences Between the Right and the Left Thalamus

GUNVOR KULLBERG, PER-ERIK ALMGREN and ALF L. ANDERSSON,
Lund, Sweden

Electrical Activity in the Lateral Geniculate Nucleus of Monkeys
Sensitized with Homologous Antigens of Neuronal and Glial Origin

LJ. MIHAILOVIZ, D. CUTIC and B. BELESLIN, Belgrade, Yugoslavia

THURSDAY/FRIDAY

Transdural A-Sonotomography as an Aid to Stereotactic Cyst Puncture and Tumor Biopsy

H. R. MULLER and A. LEVY, Basel, Switzerland

A New Antibiotic "Mastic" in Neurosurgery

G. P. CANTORE, B. GUIDETTI and G. MOSCATELLI, Rome, Italy

A Revised Boron-Neutron Capture Therapy for Malignant Brain Tumors

HIROSHI HATANAKA, TOSHIO MASUZAWA and KEIJI SANO, Tokyo, Japan

8 A.M. — INFECTIOUS DISEASE I

Cryptococcosis of the CNS in Thailand

SOMBUT SUKONDHABHANT, SOMSONG PENPARGKUL, PRAYAD TASNAKORN, VICHAI BAMRUNGPOL and SUMITR RENGPEAN, Bangkok, Thailand

Ventriculo Atrial Shunt in Tubercular Meningitis with Hydrocephalus

SANAT N. BHAGWATI, Bombay, India

Late Evolution of Operated Hydatid Cyst of the Brain

J. M. ORTIZ-GONZALEZ, S. OBRADOR and E. RODA, Madrid, Spain

Cisticercosis del IV Ventriculo. (Diagnostico, Tratamiento Quirurgico)

GENARO H. ZENTENO-ALANIS, Mexico D.F., Mexico

Vertebral Echinococcosis

HUSAMEDDIN GOKAY, Istanbul, Turkey

FRIDAY, SEPTEMBER 26, 1969

Cerebral Dominance

(NEUROLOGY CONGRESS)

9 A.M. GRAND BALLROOM

DEREK E. DENNY-BROWN, Southborough, Mass., Chairman

W. R. RITCHIE RUSSELL, Oxford, England, Vice-Chairman

SHIBANOSUKE KATSUKI, Fukuoka, Japan, Vice-Chairman

R. GARCIN, Paris, France, Vice-Chairman

EBERHARD BAY, Dusseldorf, West Germany, Vice-Chairman

Introduction: Elementary Hemispheric Rivalry in Relation to Cerebral Dominance

DEREK E. DENNY-BROWN

Hemispheric Specialization as Reflected in the Syndrome of the Neocortical Commissures

R. W. SPERRY and J. LEVY, Pasadena, Calif.

Lateralized Right and Left Dyspraxias and Complementary Hemispheric Dominance in Patients with Surgical Section of the Cerebral Commissures

J. E. BOGEN, Los Angeles, Calif.

Differences in Behavioral Effects of Right and Left Temporal Lesions

BRENDA MILNER, Montreal, Canada

Dominance Hemispherique chez les Sujets Gauchers

HENRY HECAEN, Paris, France

Handedness and Hemisphere

R. CAROLUS OLDFIELD, Edinburgh, Scotland

Handedness, Praxis and Cerebral Dominance

OLIVER L. ZANGWILL, Cambridge, England

Studies on Inner Speech

HIROMU GOTO, Tokyo, Japan

The Anatomical Basis of Dominance for Speech

NORMAN GESCHWIND, Boston, Mass.

The Mind's Brain Mechanism

WILDER PENFIELD, Montreal, Canada

Discussion of Papers

ANTONIO SUBIRANA, Barcelona, Spain

H-L. TEUBER, Boston, Mass.

MACDONALD CRITCHLEY, London, England

General Discussion

WALTHER RIESE, Glenallen, Va.

Closing Session

(NEUROSURGICAL CONGRESS AND NEUROLOGY CONGRESS)

1 P.M. GRAND BALLROOMA. EARL WALKER, Baltimore, Md., President
4th International Congress of Neurological SurgeryH. HOUSTON MERRITT, New York, N. Y., President
9th International Congress of Neurology

Free Communications

(NEUROLOGY CONGRESS)

9 A.M. MERCURY BALLROOMNistagmo Congenito y Epilepsia: Estudio Clinico
HECTOR A. FIGIN and ENRIQUE FERNANDEZ, Buenos Aires, Argentina

Epidemiology of Epilepsy in Nigeria

T. O. DADA, B. O. OSUNTOKUN and E. O. ODEKU, Lagos, Nigeria

Parasites and Epilepsy

T. O. DADA, Lagos, Nigeria

Petit Mal-Status of Lennox: A Twilight State of Childhood?

GUENTER PRUELL, Giessen, West Germany

Epilepsy As a Cause of Transient Automatism in Drivers

JOHN H. EVANS, Manchester, England

Results of Surgical Excision of Epileptogenic Lesions Influencing Negatively First and Second Order Conditioned Responses in Man

ROBERTO ZAPPOLI and SERGIO BBIANI, Florence, Italy

FRIDAY

Migraine As a Paroxysmal Disorder in Children

DEWEY K. ZIEGLER, Kansas City, Kan.

Psychological and Behavioural Disturbances in Cerebral Seizures

VIMLA VIRMANI and S. B. SINGH, New Delhi, India

Myoclonic Encephalopathy of Infants

NICHOLAS CHRISTOFF, New York, N. Y.

The Mortality of Epileptics

MOGENS LUND, P. BRINK HENRIKSEN and P. JUUL-JENSEN, Glostrup, Denmark

Epileptic Drop Attacks in Adults

MOGENS LUND, Copenhagen, Denmark

9 A.M. SUITE 524

Polyneuritis Cranialis

A. VASUVAT and J. C. STEELE, Bangkok, Thailand

Electromyographic Studies of the Abnormal Associated Movement and Contracture in Bell's Palsy

ICHIRO DOHI, Tokyo, Japan

The Role of Muscle Activity in Reflex Excitability

KENNETH H. OTT and MICHAEL GASSEL, San Francisco, Calif.

Histopathological Changes of the Intramuscular Nervous System and Subneural Apparatus in Juvenile Diabetes

EDITH RESKE-NIELSEN, AAGE HARMSEN and GUNNAR GREGERSEN, Aarhus, Denmark

Pathologic Anatomical Findings in Diabetic Neuropathy: An Electron Microscopic Study

A. BISCHOFF, Zurich, Switzerland

Hereditary Neurological Disease with Acanthocytosis

IRVING M. LEVINE, J. WORTH ESTES and JOSEPH M. LOONEY, Boston, Mass.

Serum and CSF Protein Changes in Polyneuropathies

H. E. KAESER, L. NUSSELT, H. P. RIEDER and U. DUBACH, Basel, Switzerland

Reflex Sympathetic Dystrophy: A Clinical, Histochemical and Experimental Study

J. F. FOLKERTS, E. L. M. J. WIERTS-HOESSELS, P. KRIEDIET and A. J. SNEEP, Amsterdam, The Netherlands

Hemorrhage-Induced Neuropathy

BERNARD M. PATTER, New York, N. Y.

Polyneuropathy, Guillain-Barre Syndrome in Iraq

T. HAMDI, Baghdad, Iraq

9 A.M. SUITE 526

Synchronization of Neighboring Cortical Neurons During Development of Seizures

LOUIS BERLIN, Bronx, N. Y.

Experimental Epileptogenic Foci in the Mesial Cortex of the Cat

V. VOICULESCU, I. VOINESCU and G. POPESCU-TISMANA, Bucharest, Romania

Enzymatic Alterations in "Epileptic" Cat Cerebral Cortex (Produced by Undercutting)

JOHN R. GREEN, LAWRENCE M. HALPERN and SALLY VAN NIEL, Seattle, Wash.

Cerebral Metabolism during Generalized Seizures

JEROME B. POSNER and FRED PLUM, New York, N. Y.

Activation of Experimental Chronic Epileptogenic Foci by Minute Changes in CSF Ions, Amino Acids and Enzymes

EMIL C. ZUCKERMANN and GILBERT H. GLASER, New Haven, Conn.

Metabolism of Guanidino Compounds in the Seizure Mechanism

DENNOSUKE JINNAI, AKITANE MORI, JIRO MUKAWA, HARUMI OHKUSU and AKIRA MIZUNO, Osaka, Japan

Sensitivity of Partially Deafferented and Neuronally Isolated Cortex to Electrical and Acetylcholine Stimulation

R. SPEHLMANN and C. M. CHANG, Chicago, Ill.

Experimental Epilepsy: A Histochemical and Ultrastructural Study

C. L. CAZZULLO, M. L. ANDREOLA and G. INVERNIZZI, Milan, Italy

The Relationship of High Frequency Electrical Activity to Clinical Seizure Manifestations

E. RODIN, T. ONUMA, S. WASSON, J. POZAK and M. RODIN, Detroit, Mich.

Use of Epileptic Monkeys for Anticonvulsant Drug Testing

JOSEPH G. SHUSID and LENORE M. KOPELOFF, New York, N. Y.

9 A.M. SUITE 529

Clinical and Anatomopathological Studies of the Spinal Cord in Metabolic Diseases

EDNA KOTT, MARCO BECHAR, BERNARD BORNSTEIN and URI SANDBANK, Tel Aviv, Israel

The Hereditary Torsion Dystonias (Dystonia Musculorum Deformans): Geographical Distribution and I.Q. in Dominant and Recessive Forms

ROSWELL ELDRIDGE, ANNE HARLAN, IRVING S. COOPER and MANUEL RIKLAN, Bethesda, Md.

An Unusual Type of Sphingolipidosis with Sphingomyelin and Neutral Glycolipids Storage

P. BORRI, G. SEGNI and A. D'ANGELO, Rome, Italy

Primary Familial Systemic Amyloidosis with Neuropathy

AGNES PAVLOU and ROBERT D. TERRY, Athens, Greece and New York, N. Y.

Kinky Hair Disease: Neuropathological Findings of Two Cases

N. R. GHATAK, A. HIRANO, H.M. ZIMMERMAN and J. FRENCH, New York, N. Y.

Structural Abnormalities in the CNS of Gunn Rats with Acute Bilirubin Encephalopathy Precipitated by Sulfadimethoxine

H. S. SCHUTTA and L. JOHNSON, Philadelphia, Pa.

Ammonia and Phenol Detoxication in the Brain of Patients with Hepatic Encephalopathy and Alcoholic Delirium

D. MUETING, O. E. KRIDDLE and E. W. FUENFGELD, Homburg, West Germany

**Drug Influences on Cerebral Detoxication Mechanism in Chronic
Alcoholics**

E. W. FUENGFELD, O. E. KRIDDLE and D. MUETING, Homburg, West Germany

9 A.M. SUITE 534

Surgical Treatment of Intractable Unilateral Headache

AVERILL STOWELL, Tulsa, Okla.

**Painful Tonic Seizure in Multiple Sclerosis: Its Pathogenesis and
Effect of Carbamazepine**

HIROSHI SHIBASAKI and YOSHIGORO KUROIWA, Fukuoka City, Japan

Percutaneous Trigeminal Tractotomy

BENJAMIN L. CRUE, JR., EDWIN M. TODD and ENRIQUE J. A. CARREGAL,
San Marino, Calif.

**The Mechanism of 5-Hydroxytryptamine Depletion During the Migraine
Attack**

M. ANTHONY, H. HINTERBERGER and J. W. LANCE, Sydney, Australia

**Use of Triamcinolone Hexacetonide for Treatment of Some Types
of Severe Pain**

J. A. FOLLE and J. A. FIGUEROA, Montevideo, Uruguay

Les Douleurs des Paraplegiques Post-Traumatiques

ANDRE HEILPORN, Brussels, Belgium

**Capacitance Plethysmography of Vascular Disorders in Vascular
Headache Syndromes**

O. STARY, S. FIGAR and M. JANSKY, Prague, Czechoslovakia

The Relationship of Nocturnal Migraine Headaches to Stages of Sleep

JAMES D. DEXTER, ELLIOT D. WEITZMAN and ARNOLD P. FRIEDMAN,
Bronx, N. Y.

9 A.M. SUITE 548

Enzymic Changes in the Cerebrospinal Fluid of Multiple Sclerosis Patients

P. J. RIEKKINEN and U. K. RINNE, Turku, Finland

Proteolytic Activity of Purified Myelin Fractions in CNS

P. J. RIEKKINEN and J. KLAUSEN, Turku, Finland

Immunoglobulins in Multiple Sclerosis

HANS LINK and RAGNAR MULLER, Lund, Sweden

**Free Amino Acid Gas Chromatographic Patterns in Cerebrospinal Fluid
of Patients with Amyotrophic Lateral Sclerosis and Multiple Sclerosis**

ANTONIO CULEBRAS, CHARLES E. WILLIS and GUY H. WILLIAMS, JR.,
Cleveland, Ohio

**Refractory Period and Succession of Impulses in Demyelinated
Nerve Fibres**

HANS JOACHIM LEHMANN, Kiel, West Germany

**Fatty Acid and Aldehyde Changes in Choline and Ethanolamine
Containing Phospholipids of White Matter and Erythrocytes in
Multiple Sclerosis**

L. A. AMADUCCI, G. ARNETOLI and A. PAZZAGLI, Florence, Italy

Peripheral Nerve Involvement in Multiple Sclerosis: Motor Latency Study
 MEJER GINSBURG, MATHEW LEE and JEHUDIT GINZBURG, New York, N. Y.

The Possible Role of Human Brain-Specific Protein in Demyelinating Processes

KRYSTYNA WARECKA, Lubeck, West Germany

Electrophoretic Morphology of Gammaglobulins in Cerebrospinal Fluid of Multiple Sclerosis and Other Diseases of the Nervous System
 E. C. LATERRE, Louvain, Belgium

9 A.M. SUITE 551

The Response of the Parkinson Tremor to Peripheral Nerve Stimulation
 R. J. MONES and A. H. WEISS, New York, N. Y.

The Physiological Basis of Involuntary Movements
 J. PURDON MARTIN, London, England

Perceptual-Motor Alterations in Parkinsonian Patients

FLORRY PROCTOR-BOWEN, MARGARET M. HOEHN and MELVIN D. YAHR,
 New York, N. Y.

Prefrontal Sonic Treatment: Fifteen Years of Experience
 PETTER A. LINDSTROM, San Francisco, Calif.

A Scan Echoencephalography
 D. N. WHITE, Kingston, Canada

Mutual Stabilization of Upper Limbs in Relation to Tremor Synchrony in Parkinson's and Familial Tremor

JOHN S. BARLOW and ROBERT S. SCHWAB, Boston, Mass.

The Echoencephalogram: Applications in Neuropsychiatric Research
 J. M. C. HOLDEN, G. FORNO and R. A. BRINKER, St. Louis, Mo.

The Values, Limitations and Future of Echoencephalography
 H. W. KIENAST and LOUIS D. BOSHES, Chicago, Ill.

Principles for Classification and Systematization of the Data of Neurological Examination
 N. I. MOISEEVA, Leningrad, U.S.S.R.

Les Rapports Entre la Neurologie et la Psychiatrie
 HENRI BARUK, Paris, France

The Chiari Malformation in Middle Life and the Identity of Syringomyelia
 J. B. FOSTER, Newcastle Upon Tyne, England

Free Communications

(NEUROLOGY CONGRESS)

2 P.M. SUITE 524

Serum and Cerebrospinal Fluid Enzymes in Cerebrovascular Disease: Creatine Phosphokinase, Aldolase and Lactic Dehydrogenase

ARTHUR H. WOLINTZ, LAWRENCE D. JACOBS, NICOLAS CHRISTOFF,
 MISU SOLOMON and NORMAN CHERNIK, Brooklyn, N. Y.

CSP pH and Cerebral Blood Flow

FRED PLUM, JEROME B. POSNER and MARCUS E. RAICHLE, New York, N. Y.

FRIDAY

Immunoglobulin Light Chain Types in CSF

OLLE ZETTERVALL and HANS LINK, Lund, Sweden

Cerebrospinal Fluid B-glucuronidase Activity in the Diagnosis of Krabbe's Leucodystrophy

N. ALLEN, E. C. SHUTTLEWORTH, N. R. CLENDON and W. A. GORDON, Columbus, Ohio

Fine Structural Studies of the Blood-Brain Barrier

ASAO HIRANO, NORWIN H. BECKER and H. M. ZIMMERMAN, New York, N. Y.

Spinal Fluid Absorption in Hydrocephalic Cats

G. M. HOCHWALD, A. SAHAR and J. RANSOHOFF, New York, N. Y.

The CSF Cytology in Cerebrovascular Disease

RAGNAR MULLER, Lund, Sweden

The Low Molecular Weight Proteins in Cerebrospinal Fluid

E. C. LATERRE, P. SHENA and J. F. HEREMANS, Louvain, Belgium

The Undistorted Physiological CSF Pressure

OLOF GILLAND, Gothenburg, Sweden

Disc Electrophoresis Pattern of Serum and CSF in Degenerative, Allergic and Inflammatory Diseases of the Nervous System

S. GANDINI and R. ROSSI, Pisa, Italy

Changes in CSF After Death

GEORGE W. PAULSON, Columbus, Ohio

Intrathecal Administration of Neurobiological Agents: A Study of Barbiturate Anesthetics

ROBERT B. AIRD, San Francisco, Calif.

2 P.M. SUITE 526

Combined Effect of Carbon Dioxide and Acetazolamide on Cerebral Blood Flow in Occlusive Cerebral Vascular Disease

ATHASIT VEJJAJIVA, M. R. UDOMPORN, MARTIN CHIPMAN and WILLIAM H. BIGGERS, Bangkok, Thailand

Muscle Blood Flow in Stroke

TOYOZO AIZAWA and FUMIO GOTOH, Tokyo, Japan

Cerebral Circulation Studied in 4 Patients with a Cardiac Pacemaker

KRISTER LAGERGREN, Stockholm, Sweden

Etude de l'Action au Niveau Cerebral des Drogues Vasodilatrices

R. MONTANINI and G. GASPARI, Gallarate, Italy

Hyperemia and Ischemia of Cerebral Tissue After Arterial Occlusion

ARTHUR G. WALTZ, Rochester, Minn.

A New Method for Measuring Hemispheric Blood Flow and Metabolism in Man

JOHN S. MELER, Y. SHINOHARA, T. KANDA, Y. WUKUUCHI, P. RODPRASERT and A. ERICSSON, Detroit, Mich.

Regional Cerebral Blood Flow in Comatose States of Different Depths and in Cerebral Death

A. A. HADJIDIMOS, M. BROCK and K. SCHURMAN, Mainz, West Germany

Dominance of Cerebral Arteries and Collateral Circulation

JOHANNES IIZUKA, Bonn, West Germany

Possibilities of Collateral Circulation in Cases of Occlusion of the Carotid and Vertebral Arteries

E. V. SCHMIDT, L. K. BRAGINA and H. H. YARULLIN, Moscow, U.S.S.R.

Lung Ventilation, Pulmonary and Cerebral Gas Exchange in Patients with Cerebral Hemorrhage

E. RAUDAM, A. E. KAASIK and R. ZUPPING, Tartu, U.S.S.R.

Interregional Differences in Cerebral Blood Flow in Stroke

MARVIN E. JAFFE, LAWRENCE C. McHENRY, JR., HERBERT I. GOLDBERG and JUNICHIRO KAWAMURA, Philadelphia, Pa.

Effects of Forelimb Exercise on Cephalic Blood Flow

RICHARD JANEWAY, JAMES F. TOOLE, KOJI SHIGENO and WAKOU ANAZAWA, Winston-Salem, N. C.

2 P.M. SUITE 529**Electroencephalographic Findings in Patients with Jackson's Epileptic Paroxysms**

H. KREJCOVA and J. STEIN, New York, N. Y.

Stereoelectroencephalography in an Epileptic Patient with Focal and Generalized Seizures: An Automatic Analysis

G. GOMIRATO, F. FERRO-MILONE, F. DENOTH and A. LORIZIO, Pisa, Italy

Donnees Stereoencephalographiques Concernant l'Organization Prescriptive de la Crise Epileptique Chez l'Homme

G. VELOK, G. GOMBI, J. HULLAY, G. ENGART and G. BOCZAN, Debrecen, Hungary

Depth Recording in Subacute Sclerosing Leukoencephalitis

R. GOMBI, E. OVARY, S. GODENY, P. SORSZEI and G. ENGART, Debrecen, Hungary

Neurophysiological Observations on the Mechanisms of the Stimulus Sensitive Myoclonus: A Stereotactic Study

C. A. PAGNI, F. MAROSSERO, G. P. CABRINI, G. ETORRE and L. INFUSO, Milan, Italy

Bispectral Analysis of the Electroencephalogram

JULIUS KOREN and LEO J. TICK, New York, N. Y.

The Diagnostic Significance of Scalp and Depth EEG Findings in Patients with Temporal and Frontal Lobe Epilepsy

E. NIEDERMEYER, E. LAWS and A. EARL WALKER, Baltimore, Md.

Electroclinical Analysis of Different Elementary Psychomotor Seizures

F. SERRA ROTONDI and C. SERRA, Naples, Italy

Subclinical Electroencephalographic Disorders in Practically Normal Subjects

P. M. SARAJISHVILI and T. SH. GELADZE, Tbilisi, U.S.S.R.

Clinical and Electroencephalographic Correlates of Minor Seizures

VIMLA VIRMANI and K. C. KATHPALIA, New Delhi, India

The Relation of Petit Mal with Partial and Generalized Epileptic Mechanisms

P. JUHASZ and P. HALASZ, Budapest, Hungary

FRIDAY

2 P.M. SUITE 534

Hereditary Acoustic Neuroma: Clinical and Genetic Aspects

DEAN F. YOUNG, JANE McNEW and ROSWELL ELDRIDGE, Bethesda, Md.

Ventricular Size and Chronic Increased Intracranial Venous Pressure

THOMAS C. GUTHRIE, HOWARD S. DUNBAR and BARBARA KARPELL,
New York, N. Y.

The Distortion of the Island (Triangle) of Reil

GERTRAUD WOLLSCHLAEGER, PAUL B. WOLLSCHLAEGER and TARSICIO M.
MORALES, Columbia, Mo.

Our Experience in the Treatment of Brain Edema

D. M. ALEXIANU, FL. IANCOVICI and CR. MUSETEANU, Bucharest, Romania

Brain Edema: A Study of Biochemical and Structural Alterations

SHOZO ISHII, KIYOSHI SATO, MICHIO YAMAGUCHI, JOHN F. MULLAN and
JOSEPH P. EVANS, Tokyo, Japan and Chicago, Ill.

Tumores Temporales: Su Localizacion Angiografica

I. T. STOLARZA and H. ZIMMAN, Buenos Aires, Argentina

**The Use of 21 Disodium Phosphate Triamcinolene Acetonide in the
Neurosurgical Approach to the Sellar and Parasellar Regions**

J. A. FELLE and R. ARANA-INIGUEZ, Montevideo, Uruguay

False Localizing Signs in Raised Intracranial Tension

VIMLA VIRMANI, New Delhi, India

**Spatergebnisse Nach Stereotaktischer Implantation von Yttrium 90 in
die Hypophyse bei Cushing Syndrom**

M. NADJMI, Wurzburg, West Germany

Consideraciones Sobre la Hypertension Intracraneal

ALEX I. CONSTANTINESCU, Bucharest, Roumania

A Case Resembling Cerebral Tumor Due to Hydatoinism

PERIS NICOLOPOULOS and ELIAS G. FRANGOS, Athens, Greece

Stereotaxic Third Ventriculocisternostomy for Obstructive Hydrocephalus

JAMES A. TAREN and GERARD GUIOT, Ann Arbor, Mich.

**Valoracion de la Simtomatologia Extrapiramidal Aparecida en los
Procesos Expansivos Localizados en el Lobulo Frontal**

J. VIIATO, Barcelona, Spain

2 P.M. SUITE 548

Scapulo-Peroneal Muscular Atrophy

P. K. THOMAS, London, England

Is Amyotrophic Lateral Sclerosis a Vascular Disorder?

PATRICK STORTEBECKER, Gothenburg, Sweden

**An Obscure Neuromyelopathy Occurring in Japan: A Clinical and
Neuropathological Study**

Y. TOYOKURA, H. TSUKAGOSHI and A. IGATA, Tokyo, Japan

Acute Spinal Compression Paralysis: Rational Basis for Treatment

I. M. TARLOV, New York, N.Y.

Myelopathy in Cervical Spondylosis

K. JAGANNATHAN, B. RAMAMURTHI, C. U. VELMURUGENDRAN and
E. MEENAKSHISUNDARAM, Madras, India

Neuromyelopathy with Gastrointestinal Disorders: Clinico-Pathology and Epidemiology

ITSURO SOBUE, KAZUYA ANDO, MITSUO IIDA, TETSUYA TAKAYANAGI,
YASUHIRO YAMAMURA and YUKIHIKO MATSUOKA, Nagoya, Japan

Aetiological Study of 386 Cases of Paraplegia

N. N. GUPTA, M. K. GOEL, V. S. DAVE and G. NEWTON, Lucknow, India

Contribution a la Rehabilitation du Syndrome Postoperatif Chez Discopathies Cervicales et Thoracales

ALENA VRBOVA, Marianske Lazne, Czechoslovakia

2 P.M. SUITE 551

Separation, Identification and Quantitative Estimation of Commonly Used Anti-Epileptic Drugs in Body Fluids

J. W. A. MEIJER and H. MEINARDI, Heemstede, The Netherlands

**Moderne Methoden der Prufung von Anti-Epileptika
(Beispiel: Carbamazepin)**

H. DOOSE, H. HELMCHEN, E. KETZ, H. KUNKEL, A. MATTHES, G. OBERHOFFER,
H. PENIN, F. RABE and D. SCHEFFNER, Berlin, West Germany

A Therapeutic Trial of Epileptic and Cerebrovascular Patients by Mononucleotide Solutions

C. SERRA and S. RONTONDI, Naples, Italy

Cerebrospinal Fluid Folate Levels in Epileptic Patients

E. H. REYNOLDS, London, England

Benzodiazepines in the Treatment of Childhood Epilepsy and their Effect on the EEG

E. VOLZKE and H. DOOSE, Kiel, West Germany

About the Standard Methods for Testing Anti-Epileptic Drugs

P. HALASZ and P. JUHASZ, Budapest, Hungary

Community Aspects of Epilepsy: A Modern Approach

LOUIS D. BOSHES and HANS W. KIENAST, Chicago, Ill.

The Catamnesis of 130 Patients Discharged from the Epilepsy Center "Meer en Bosch," The Netherlands

HENK SMITS and HARRY MEINARDI, Heemstede, The Netherlands

Socio-Medical Problems of Epileptic School Children

M. ELIAN, Y. YASSUR and B. BORNSTEIN, Tel Aviv, Israel

Motion Pictures

(NEUROLOGY CONGRESS)

2 P.M. MERCURY BALLROOM

Massive Myoclonic Jerks of Difficult Nosologic Classification

M. GOZZANO, R. VIZIOLI and P. SEVERINI, Rome, Italy

FRIDAY

A Special Type of Epileptic Seizures: The Tonico-Automatic Crises

L. OLLER-DAURELLA, Barcelona, Spain

Familial Congenital Ocular Motor Ataxia

FOSTER K. REDDING, Detroit, Mich.

Early Onset Hereditary Non-Progressive Chorea with Intention Tremor and No Dementia. A Disease Entity?

SIGVALD REFSUM and OTTAR SJAASTAD, Oslo, Norway

Cervical Syndromes

R. RICHTER, Basel, Switzerland

Myasthenic Syndrome in a Dog

ALBRECHT STRUPPLER, W. REISCHLE and H. M. JACOBI, Munich, West Germany

The Treatment of Parkinsonism with L-Dopa

MELVIN D. YAHR and ROGER C. DUVOISIN, New York, N.Y.

Scientific Exhibits

The following scientific exhibits will be on display in the exhibit hall on the Second Floor of the New York Hilton. Exhibit locations will be listed in the final program. (Opening hours are 10 a.m., Sunday, to Noon, Thursday)

(NEUROSURGICAL CONGRESS)

A Magnetic Probe for Stereotactic Thrombosis of Intracranial Aneurysms

JOHN F. ALKSNE, Richmond, Va.

Value of Microtomography in Clinical Neurosurgery

ARNOLD BERRETT and ALAN B. ROTHBALLER, New York, N.Y.

Regional Cerebral Blood Flow and Local Energy Metabolism in Brain Tumor Patients

M. BROCK, H. J. REULEN and K. SCHURMANN, Mainz, West Germany

Extracranial to Intracranial Non-Suture Arterial By-Pass Grafting: Laboratory and Clinical Studies

C. A. CARTON, J. KENNADY, E. E. BLINDERMAN, T. KOBAYASHKI, JR., J. CAGUNGUN and T. PINEDA, Los Angeles, Calif.

Isotope Cisterno and Ventriculography

GIOVANNI DI CHIRO, Bethesda, Md.

A Needle Designed for Myelography

W. CUATICO, R. SPARACIO, W. GANNON and A. W. COOK, Brooklyn, N.Y.

Ciliary Vastonometry — A Method of Objective Assessment of Medical Treatment in Cerebrovascular Disorders

T. O. DADA and I. RETHY, Lagos, Nigeria

Anatomie Vasculaire de la Moelle Epiniere et Angiographie Medullaire

R. DJINDJIAN, M. HURTH, H. JULIAN and R. HOUDART, Paris, France

Circumferential Decompression of the Cervical Spinal Cord for Myeloradiculopathy, Excision of Spurs and Osteophytes Combined with Laminectomy and Foraminotomy

JOSEPH A. EPSTEIN, New Hyde Park, N.Y.

Acute Hypervasculär Patterns in Cerebral Infarction

HERBERT I. GOLDBERG and NORMAN E. LEEDS, Bronx, N.Y.

Development of Hematomyelia: An Experimental Study

ROBERT GOODKIN and JAMES B. CAMPBELL, New York, N.Y.

Head Injury — Mechanisms and Prevention

E. S. GURDJIAN, L. M. THOMAS, L. M. PATRICK and V. R. HODGSON, Detroit, Mich.

Positive Pressure-Halothane Hypotensive Anesthesia Animal Studies and Clinical Experience

HENRY GUY, ROBERT HSU, VALENTINO MAZZIA, EDWARD H. BERGOFSKY, ARTHUR BATTISTA and JOSEPH RANSOHOFF, New York, N.Y.

Normal Pressure Hydrocephalus: Basic Concepts

SALOMON HAKIN, Bogota, Colombia

Tableaux Cristallographiques du LCR (Demonstration sur 200 Documents Photographiques)

ST. IACOB and B. KABAY, Cluj, Roumania

Aneurysms of the Anterior Communicating Artery

LUDWIG G. KEMPE and GARY D. VANDERARK, Washington, D.C.

Brain Assessment by Scintillation Camera

JOHN C. KENNADY, FREDERICK CHIN and MICHAEL HAYES, Los Angeles, Calif.

Anterior Cervical Percutaneous Cordotomy

PAUL M. LIN, PHILIP L. GILDENBERG and PEDRO P. POLAKOFF, Jenkintown, Pa.

Selective Needle-Catheter Angiography

JOSEPH T. McFADDEN, Norfolk, Va.

The Cushing Reflex

GLENN A. MEYER, THOMAS B. DUCKER and LUDWIG G. KEMPE, Washington, D.C.

Selective Angiography of the Extra and Intracranial Branches of the External Carotid Artery by Catheterization of the Superficial Temporal Artery

S. MINGRINO, G. F. PISTOLESI, F. FRASSON and G. A. MERLI, Padova, Italy

Newer Neurosurgical Instruments and Equipment

JUAN NEGRIN, JR., New York, N.Y.

A New Technique for Correct Placement of Cardiac Tube in Ventriculo-Atrial Shunt by Ultrasound

AKIRA NISHIMOTO, HIKOZO SHIMADA, SHIN UEDA and YASUNORI YAGYU, Okayama City, Japan

Intracranial Pressure Monitoring

MITSUO NUMOTO, L. J. WALLMAN, M. E. FLANAGAN, PETER D. UPTON, V. T. KERANEN, A. INOA, A. KUMAR and R. M. PEARDON DONAGHY, Burlington, Vt.

Computer Calculation of Two Targets Trajectory and Position of Electrode Point During Penetration in Human Brain

F. PELUSO and J. GYBELS, Louvain, Belgium

Electrically Induced Thrombosis of the Cavernous Sinus in the Treatment of Carotid Cavernous Fistula

E. W. PETERSON, J. VALBERG and D. S. WHITTINGHAM, Ottawa, Canada

Avoidance of Certain Pitfalls During Cervical Interbody Fusion

ANSELMO PINEDA, JOHN R. CLARK and EDWARD O. GAMMEL,
Long Beach, Calif.

Ultrastructure of Human Peripheral Nerve Tumors

ANSELMO PINEDA, Long Beach, Calif.

Cryohypophysectomy for Diabetic Retinopathy

ROBERT W. RAND, NATHAN ROTH, DONALD ADAMS, GUNNAR HEUSER and
ALFRED DASHE, Los Angeles, Calif.

Chronic Subdural Hematoma in the Elderly

ROBERT RASKIND, J. S. METCALF, SANFORD R. WEISS and ALBERTO DORIA,
Oakland, Calif.

**Vergleichende Untersuchungen über die Verteilung Arteriosklerotischer
Veränderungen im Halsabschnitt der Crossen Zerebralen Gefäße bei
Leichen Mit und Ohne Zerebrale Insulte**

HERBERT REISNER, Graz, Austria

Acoustic Neuroma: Microsurgical Anatomy and Early Diagnosis

ALBERT L. RHOTON, JR., COLLIN S. MacCARTY, HILLIER L. BAKER, JR.,
KENDALL B. CORBIN, JACK L. PULEC and VINCENT P. DESTRO, Rochester, Minn.

Use of the Thermal Argon Plasma as a Tissue-Cutting Device

THEODORE S. ROBERTS, Salt Lake City, Utah

Stereoecephaloscopy

PETER ROTTGEN and JOHANNES ILZUKA, Bonn, West Germany

Ventriculo-Atrial Shunt: New Equipment, Techniques and Indications

JAMES H. SALMON, Cincinnati, Ohio

Surgical Treatment of Sincipital Encephalomeningocele

CHARAS SUWANWELA, NITAYA SUWANWELA and CHATRAPORN
HONGSAPRBHAS, Bangkok, Thailand

**33 Cases of Hydrocephalus Treated with a Silastic Ventriculoperitoneal
Shunt**

SANFORD R. WEISS and ROBERT RASKIND, Oakland, Calif.

Treatment of Malignant Brain Tumors by Local Methotrexate

SANFORD R. WEISS and ROBERT RASKIND, Oakland, Calif.

**Studies of the Epicerebral Circulation using Flourescein Angiography
and Radioactive Tracers**

LUCAS YAMAMOTO, CHARLES HODGE and WILLIAM FEINDEL, Montreal,
Canada

Microangioidal Surgery — Extra-Intracranial Blood Flow Diversion

GAZI YASARGIL and R. M. PEARDON DONAGHY, Zurich, Switzerland and
Burlington, Vt.

**The Functional Brain Stem Operations from the Open Infratentorial Way
of Access**

B. ZAPLETAL, Oran, Algeria

**Middle Meningeal Artery Connections with Circle of Willis and Diploic
Space Connections with Dural Sinuses**

JOHN G. ZOLL and EUGENE LESLIE, Buffalo, N.Y.

Hypothermia in Treatment of Status Epilepticus

JOHN G. ZOLL, Buffalo, N.Y.

(NEUROLOGY CONGRESS)

Current Brain Research in China

JOHN S. BARLOW, Boston, Mass.

The Geography of Multiple Sclerosis: Some Contributions from the Recent Non-English Literature

JOHN S. BARLOW, Boston, Mass.

Neurological Information Network

EDGAR A. BERING, JR., Bethesda, Md.

Help Him Out

CLIFFORD H. COLE, Arlington, Va.

Multiple Sclerosis

ELDON L. EAGLES, Bethesda, Md.

National Institute of Neurological Diseases and Stroke Publications Exhibit

ELDON L. EAGLES, Bethesda, Md.

Epilepsy Foundation of America

THOMAS M. ENNIS, Washington, D.C.

International Bureau for Epilepsy

INTERNATIONAL BUREAU FOR EPILEPSY, London, England

Parenteral Diazepam in the Treatment of Status Epilepticus

CHARLES F. NICOL, JOSEPH C. TUTTON and BERNARD H. SMITH, Buffalo, N.Y.

Neurological Information Network of the National Institute of Neurological Diseases and Stroke

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND STROKE,
Bethesda, Md.

Trauma to the Nervous System: Mechanisms and the Preventive Approach to Management

A. K. OMMAYA ET AL., Bethesda, Md.

The Comprehensive Stroke Program in North Carolina, U.S.A.: A Community Action, Patient-Centered, Stroke Program

B. LIONEL TRUSCOTT, MARC J. MUSSER, JAMES F. TOOLE, WILLIAM M. MCKINNEY and RICHARD JANEWAY, Winston-Salem, N.C.

The Neglected Cause of Stroke: Intracranial Occlusion Diagnosed by Cerebral Angiography

MARGARET WADDINGTON and B. A. RING, Rutland, Vt.

Transient Cerebral Ischemia Due to Arrhythmia (Diagnosis by Continuous 10-Hour Electrocardiogram)

P. F. WALTER, S. D. REID, JR. and N. K. WENGER, Atlanta, Ga.

Some Favorable Lesions of the CNS

WILLIAM Q. WU, Kansas City, Mo.

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Related Meetings

The following is a listing of meetings of other organizations to be held at the New York Hilton Hotel at the time of the World Congresses of Neurological Sciences.

SATURDAY, SEPTEMBER 20

The Fulton Society

8 A.M. - 5 P.M. MERCURY BALLROOM
4th Symposium on the "Cerebellum"

TUESDAY, SEPTEMBER 23

American Association of Neurosurgical Nurses

9 A.M. - NOON GIBSON SUITE
Meeting

WEDNESDAY, SEPTEMBER 24

International Federation of Multiple Sclerosis Societies
and the National Multiple Sclerosis Society

8 A.M. - 12:30 P.M. MERCURY BALLROOM
Conference on the Epidemiology of Multiple Sclerosis

FRIDAY, SEPTEMBER 26

International Society for Research in Stereoencephalotomy

9 A.M. - 6 P.M. SUTTON BALLROOM
Symposium on Stereotaxic Surgery
6:30 P.M. TRIANON BALLROOM
Reception and Dinner

SATURDAY, SEPTEMBER 27

International League Against Epilepsy

9 A.M. - 12:30 P.M. MERCURY BALLROOM
XIth International Congress
12:30 P.M. SUTTON BALLROOM
Luncheon
2 P.M. - 5 P.M. MERCURY BALLROOM
Joint Meeting with International Bureau for Epilepsy
5 P.M. MERCURY BALLROOM
Meeting of General Assembly

International Society for Research in Stereoencephalotomy

9 A.M. - 5 P.M. TRIANON BALLROOM
Symposium on Stereotaxic Surgery