

7:30 AM - 9:30 AM**BREAKFAST SEMINARS****201 Surgical Strategies and Approaches to the Anterior Skull Base****Moderator:** Donald C. Wright**Panelists:** Axel Pernecky, Jon H. Robertson, Hae-Dong Jho, William T. Couldwell, Gail L. Rosseau

This seminar will review the pathologic conditions affecting the anterior cranial base and surgical strategies employed for extradural, intradural and combined compartment lesions. Panelists will discuss steps in avoidance and management of complications, demonstrate specialized (expert) surgical approaches and indicate the appropriate application of emerging technology to anterior cranial base problems.

Learning Objectives: After completing this seminar participants should be able to recognize indications and limitations of various surgical approaches, minimize morbidity and effectively manage complications, and select complex, expert, or team-based approaches for unusual lesions with high potential morbidity.

202 Current Options in Cerebral Neuromonitoring**Moderator:** Jeffrey R. Kirsch**Panelists:** Gary K. Steinberg, Donald W. Marion, Jamie S. Ullman, Pirjo Manninen

The seminar will serve to educate the audience in the use of Neuromonitoring in neurovascular surgery, head trauma and spine injury. The seminar will be used to discuss advantages and disadvantages for using electrophysiologic monitoring as well as monitoring of intercranial hemodynamics and invasive and noninvasive assessment of parenchymal viability.

Learning Objectives: After completing this seminar participants should be able to discuss strengths and weaknesses of neuromonitoring in neurovascular surgery, head trauma and spine surgery. Participants should be able to interpret common alterations in each monitoring modality.

203 Cerebral Venous System: Surgical Considerations**Moderator:** Jacques Brotchi**Panelists:** Toshio Matsushima, Albert L. Rhoton, Jr., Thomas C. Oricitano

This seminar will emphasize the importance of cerebral venous system in different pathologies and intracranial surgical approaches.

Learning Objectives: After completing this seminar participants should be able to identify the venous drainage patterns of the brain and cerebellum, and be aware of the dangers and consequences of impairing this circulation.

204 Consultants Corner: Difficult and Controversial CV Cases**Moderator:** Arthur L. Day**Panelists:** Roberto C. Heros, Robert A. Solomon, Ralph G. Dacey, Jr., B. Gregory Thompson, Jr.

This seminar will involve the presentation of different clinical or controversial problems that face neurosurgeons, followed by a panel and audience discussion of the treatment alternatives and pitfalls.

Learning Objectives: After completing this seminar participants should be able to interpret complex neurovascular diagnostic studies, contrast various treatment options, and evaluate methods of surgical interactions vs. natural history.

205 The Anatomy and Treatment of Dural AVMs**Moderator:** Edward H. Oldfield**Panelists:** Robert H. Rosenwasser, Daniel L. Barrow, Michael T. Lawton, L. N. Hopkins, III

This seminar will examine the origin and pathophysiology of dural AVMs and will summarize the current treatment options for dural AVMs. The relationship between the pathophysiology and treatment will be emphasized.

Learning Objectives: After completing this seminar participants should be able to understand the pathophysiology of dural AVMs and the relationship between treatment approaches and pathophysiology, and summarize current treatment choices for dural AVMs.

206 Epilepsy Surgery: The Impact of New Advances and Surgical Approaches**Moderator:** Dennis D. Spencer**Panelists:** Edie E. Zusman, Andre Olivier, Jeffrey G. Ojemann

New techniques in epilepsy surgery will be explored in regard to localization and outcome both in seizure control and neurological functions.

Learning Objectives: After completing this seminar participants should be able to predict seizure control from preoperative variables, select patients for appropriate epilepsy surgery procedures and compare intracranial study methods.

207 Neurosurgical Management of Intractable Pain: Techniques and Outcomes**Moderator:** Jeffrey A. Brown**Panelists:** Kim J. Burchiel, Donlin M. Long, Kenneth A. Follett

This seminar will evaluate the indications and outcomes of chronic pain treatment using medical therapy, neurostimulation and pharmacologic subarachnoid infusion techniques. Result of treatment for failed back surgery and central pain syndromes will be discussed.

Learning Objectives: After completing this seminar participants should be able to describe the indications and results of treatment of chronic pain syndromes using neurostimulation techniques. They will also be able to discuss the use of intrathecal therapies and possible complications and should be able identify and treat various types of chronic pain including central and nociceptive.

208 Intraoperative MRI: Defining its Role in Image Guided Surgery**Moderator:** Rudolph Fahlbusch**Panelists:** Ronald E. Warnick, Peter McL. Black, Walter A. Hall, Michael Schulder

Six years ago intraoperative MRI was introduced into brain surgery as a new imaging tool, offering different equipment based on low and high field Tesla machines.

Learning Objectives: After completing this seminar participants should be able to evaluate the use of new imaging modalities in neurosurgery. The role of neuronavigation to accomplish safe and radical tumor resection will be described. The importance of neuronavigation in the treatment of gliomas, pituitary tumors and epilepsy surgery will be emphasized.

209 State-of-the-Art Treatments for Low Grade Gliomas

Moderator: Joseph M. Piepmeier
Panelists: Mark Bernstein, Douglas S. Kondziolka, Jeffrey H. Wisoff, Edward H. Mkrdichian

This seminar will provide an update on current evaluation and management of low-grade gliomas. The panel will address the variety of tumors and compare outcomes from different treatment strategies.

Learning Objectives: After completing this seminar participants should be able to describe the range of pathologies included in low-grade gliomas, distinguish between different management strategies and construct treatment plans based on state-of-the-art neurosurgery.

210 Current Treatments for Lumbar Stenosis

Moderator: Stephen L. Ondra
Panelists: Richard G. Fessler, Jeff Jacobson, Najia Elabbadi Bendahane

This seminar will debate current concepts and controversies regarding one of the most common conditions seen by neurosurgeons, lumbar stenosis. Topics covered will include treatment alternatives, extent of decompression, and the decisions of to fuse or not to fuse. Sagittal plane contour and the loss of lumbar lordosis in the etiology of back pain will be discussed.

Learning Objectives: After completing this seminar participants should be able to recognize the indications for fusion and the importance of sagittal contour, assess how much decompression is needed and identify what alternatives to standard surgery exist.

211 Pediatric Head Injury: Avoid Common Pitfalls

Moderator: Thomas G. Luerssen
Panelists: Ann-Christine Duhaime, Lorenzo F. Munoz, P. David Adelson

This session will review specific age related aspects of traumatic brain injury. Special attention will be placed on early diagnosis and management of injuries that might be missed or easily misdiagnosed.

Learning Objectives: After completing this seminar participants should be able to identify head injured children at risk for deterioration and design a care plan for specific injury types.

212 Evaluation and Management of Peripheral Nerve Entrapment Syndromes

Moderator: Eric L. Zager
Panelists: David G. Kline, John E. McGillicuddy, Kevin O. Lillehei, Daniel H. Kim

This seminar will discuss the evaluation and management of peripheral nerve entrapment syndromes.

Learning Objectives: After completing this seminar participants should be able to describe the clinical presentation and diagnostic evaluation of the various entrapment syndromes and discuss the conservative and surgical management options.

213 How I Do It: Skull Base Tumors

Speaker: Vinko Dolenc

This seminar will discuss the different available treatment modalities for tumors and vascular pathologies in the central skull base. Reasoning for microsurgical total and/or subtotal tumor resection will be presented in detail.

Learning Objectives: After completing this seminar participants should be able to estimate the cost-benefit of surgical treatment and plan the best combination of treatment modalities.

214 Complications in Complex Spinal Surgery: Lessons Learned

Moderator: Paul C. McCormick
Panelists: Regis William Haid, Jr., Christopher I. Shaffrey, Volker K.H. Sonntag

This seminar will utilize distinctive presentation and panel discussion of cases to analyze complications associated with complex spine surgery. An emphasis will be placed on complication avoidance and management.

Learning Objectives: After completing this seminar participants should be able to analyze the causes of surgical complications, formulate strategies to avoid and manage complications, and apply these principles to their practice.

215 Degenerative Spondylolisthesis: Controversies in Management

Moderator: Frederick A. Simeone
Panelists: Fred H. Geisler, Noel I. Perin, Charles B. Stillerman

A complete discussion of degenerative spondylolisthesis including treatment and treatment failures.

Learning Objectives: After completing this seminar participants should be able to review indications for fusion, see results with and without fusion, and identify fusion technique preferences.

216 Contemporary Treatments of Cervical Spondylotic Myelopathy

Moderator: Thomas B. Ducker
Panelists: Iain H. Kalfas, Richard L. Saunders, Carl Laurysse

A series of cases, with increasing complexity will be presented where both the panel and the participants will give therapeutic opinions. All options of treatment will be considered. This seminar is a working case review.

Learning Objectives: After completing this seminar participants should be able to describe the wide variations of pathology and summarize the panel's and other participant's treatment options as well of discuss your own practice patterns.

217 Perioperative Management of Subarachnoid Hemorrhage: Improve Post Operative Outcomes

Moderator: Neil A. Martin
Panelists: Christopher S. Ogilvy, Eric S. Nussbaum, H. Hunt Batjer

The pathophysiology of aneurismal rupture will be explained as will the usual medical complications that occur both pre- and post-operatively. Diagnostic and therapeutic approaches will be evaluated.

Learning Objectives: After completing this seminar participants should be able to better treat and manage patients with ruptured aneurysms, avoiding serious and devastating complications.

218 New and Controversial Techniques in the Management of Synostosis

Moderator: David F. Jimenez

Panelists: Robin M. Bowman, James T. Goodrich, Holly S. Gilmer-Hill

This seminar will review the current concepts in the management of craniosynostosis. New endoscopic techniques will be discussed. Complex cases will be presented.

Learning Objectives: After completing this seminar participants should be able to critically appraise current surgical options, interpret the use of endoscopes in management of craniosynostosis, and distinguish risk/benefit ratio of extensive vs. minimally invasive techniques.

New!

219 Update on Psycho Surgery

Moderator: G. Rees Cosgrove

Panelists: Oren Sagher

This seminar will review the neurobiologic basis of psychiatric disorders and current neurosurgical procedures employed to treat patients with severe psychiatric illness.

Learning Objectives: After completing this seminar participants should be able to describe the neuroanatomical basis of psychiatric illness, compare neurosurgical interventions for psychiatric illness, and evaluate outcomes of surgery.

220 How I Do It: Vascular Microsurgery

Speaker: Robert F. Spetzler

This seminar will review a variety of cerebrovascular disorders that require microvascular neurosurgery, including cerebral aneurysms, AVMs and cavernous malformations. Specific techniques and relevant case examples will be highlighted.

Learning Objectives: After completing this seminar participants should be able to provide indications for application of microvascular techniques. Specific microvascular techniques will be shown. Application of these techniques should improve treatment of cerebral aneurysms, AVMs and cavernous malformations while avoiding major complications.

221 Evaluation and Management of Primary and Metastatic Vertebral Column Neoplasms

Moderator: Narayan Sundaresan

Panelists: Ian E. McCutcheon, Donald D. Dietze, Jr., Richard G. Perrin, Ziya L. Gokaslan

The speakers at this seminar will discuss the clinical presentation, diagnosis evaluation, operative and non-operative management of primary and metastatic neoplasms of the spine. There will be special emphasis placed on techniques for decompressing and reconstructing the spinal column.

Learning Objectives: After completing this seminar participants should be able to formulate a rational plan for the diagnosis and treatment of surgical and non-surgical management of metastatic vertebral column neoplasms.

9:45 AM - 10:20 AM

SPECIAL LECTURE II: HUNT-WILSON LECTURE

The Outcome From Surgical Management of Gliomas of the Brain – The Role of Radical Resection



Edward R. Laws, Jr.,
introduced by
Julian T. Hoff

The Hunt-Wilson Lecture is funded by an endowment established by Timir Banerjee in recognition of his mentors, Drs. William Hunt

and Charles Wilson.

Edward R. Laws was born in New York City on April 29, 1938. He received his bachelor's degree from Princeton University with honors in Economics and Sociology in the Special Program in American Civilization, and then attended the Johns Hopkins University School of Medicine in Baltimore, Maryland, receiving the MD in 1963.

He did his surgical internship and neurosurgical residency at Johns Hopkins under A. Earl Walker. After completing his residency in 1971, Laws joined the faculty at the Johns Hopkins University School of Medicine with a primary appointment in pediatric neurosurgery. In 1972, he joined the staff of the Mayo Clinic in Rochester, Minnesota, where ultimately he became Professor of Neurosurgery and developed major interests in pituitary surgery and epilepsy surgery along with a continuing interest in the metabolism and pathophysiology of primary brain tumors. In 1987 he became Professor and Chairman of the Department of Neurosurgery at the George Washington University in Washington, D.C., and in 1992 joined the faculty of the University of Virginia as Professor of Neurosurgery and Professor of Medicine, establishing a Neuro-Endocrine Center there. During his surgical career he has operated upon more than 5,000 brain tumors, of which 3,600 have been pituitary lesions.

Dr. Laws has served as President of the American Association of Neurological Surgeons, President of the Congress of Neurological Surgeons, Editor of Neurosurgery, Chairman of the Board of Trustees of the Foundation for International Education in Neurosurgery, President of the World Federation of Neurological Societies, Director of the American Board of Neurological Surgery, and President of the Pituitary Society. He has authored over 400 scientific papers and book chapters, and with Andrew Kaye is co-editor of the encyclopedic volume, "Brain Tumors."

Currently he is a member of the Executive Committee of the Board of Regents of the American College of Surgeons and is Chair of the Residency Review Committee for Neurosurgery. He remains actively involved in brain tumor and neuroendocrine research.

Dr. Laws and his wife Margaret (Peggy) have four daughters and three grandchildren.

10:20 AM - 12:15 PM

PLENARY SESSION II

Moderators: Volker K. H. Sonntag,
Ralph G. Dacey

748 Aberrant Neuronal Migration in Hydrocephalus

Richard A. Clinton, David W. Leifer,
David Lust, Alan R. Cohen

Discussant: Harold Louis ReKate

749 Low Grade Gliomas of Childhood: Impact of Surgical Resection. A Report from the Children's Oncology Group

Jeffrey H. Wisoff, Alex Sanford,
Richard Sposto, Emi Holmes, Linda Heier, Patsy McGuire-Cullen, Larry Kun

Discussant: Ian F. Pollack

10:50 AM - 10:55 AM

VAN WAGENEN FELLOW PRESENTATION

10:55 AM - 11:15 AM

SNLF PRESIDENTIAL ADDRESS

Yves Kervel, President of Société de Neurochirurgie de Langue Française, introduced by Gail L. Rosseau

750 Improved Measured Functional Recovery After Surgery for Cervical Spondylotic Myelopathy (CSM); Does it Matter Which Operation?

Alan Crockard, Anoushka Singh

Discussant: Mark N. Hadley

11:30 AM - 11:35 AM

HUMANITARIAN AWARD PRESENTATION



Edgar M. Housepian, presented by Volker K. H. Sonntag

In recognition of his many years of dedication to neurosurgical science and the medical

community, Edgar Housepian, MD, has been named the recipient of the 2002 Humanitarian Award of the American Association of Neurological Surgeons (AANS). Dr. Housepian is being commended

for his extensive volunteer work with the Armenian Academy of Science and more globally with humanitarian efforts to aid the country of Armenia.

In the aftermath of a tragic earthquake that devastated Armenia in 1988, Dr. Housepian spearheaded efforts to provide relief to the citizens and worked to gather medical supplies and recruit American physicians willing to travel to Armenia to provide medical care, food and disaster relief. Following these efforts, Dr. Housepian served as Medical Programs Director of the Fund for Armenian Relief. This effort, in cooperation with the Armenian Ministry of Health, has provided Medical Fellowships to over 80 young Armenian physicians in various university hospitals in the United States and Canada. In addition, Dr. Housepian has provided support to the Armenian National Medical Library by supplying American medical journals, computer facilities and English classes for physicians, and has sent teaching teams of visiting professors to Armenia.

Dr. Housepian earned his undergraduate degree from Columbia College and his medical degree from the College of Physicians and Surgeons at Columbia University. He completed his neurosurgical training at the Neurological Institute of New York. Dr. Housepian was board certified by the American Board of Neurological Surgery in 1961. He is currently at the Neurological Institute in New York.

In addition to his contributions to his neurosurgical practice, Dr. Housepian has also been an active member of several professional organizations including the American Association of Neurological Surgeons, American College of Surgeons, American Medical Association, Congress of Neurological Surgeons, American Trauma Society, AANS/CNS Section on Cerebrovascular Surgery, AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, American Academy of Neurological Surgeons and the American Epilepsy Society. He has also received numerous awards for his work over the years, including the Ellis Island Medal of Honor and Citation by the President of Armenia in 1994.

In recognition of his professional accomplishments and his outstanding service to the development of neurosurgery and extensive humanitarian effort in Armenia, the AANS is proud to honor Dr. Edgar Housepian with the 2002 Humanitarian Award.

751 The Effect of Wearing a Restrictive Neck Brace on Driver Performance

Christopher J. Barry, Matthew Rizzo, Warren Darling, Julie Jermeland, Vincent Traynelis

Discussant: Regis William Haid, Jr.

752 Minimally-Invasive Thoracoscopic-Assisted Anterior Repair of Thoracic and Thoracolumbar Fractures: A Single Institution Experience With 300 Procedures

Larry T. Khoo, Rudolf Beisse, Michael Potulski, Srinath Samudrala

Discussant: Richard G. Fessler

12:05 PM - 12:10 PM

THINK FIRST PRESENTATION

Michael J. Caron

THINK FIRST Foundation Chair

12:10 PM - 12:15 PM

CUSHING MEDAL PRESENTATION



Edward R. Laws, Jr., presented by Stan Pelofsky

12:15 PM - 1:00 PM

CUSHING ORATION



Benazir Bhutto, Former Prime Minister of Pakistan, introduced by Stan Pelofsky

Benazir Bhutto, elected twice as Prime Minister of Pakistan (first in

1988 and again in 1993), holds the dual distinctions of being at age 35 the youngest Chief Executive in the world, as well as the first female Prime Minister in the Muslim world. But she is perhaps best known as a champion of democracy and human rights for Pakistan.

Her story of struggle and sacrifice to achieve freedom in Pakistan is dramatic, while her insights as a former world leader of a country that is much in the news today are enlightening.

The decade before her first election as Prime Minister was tumultuous. After completion of her education at Radcliffe and Oxford, Ms. Bhutto returned to Pakistan in 1977. Shortly thereafter, General Muhammad Zia-ul-Haq led a coup that unseated her father, Zulfikar Ali Bhutto, Pakistan's Prime Minister from 1971 to 1977. Ms. Bhutto assumed the leadership of the Movement for the Restoration of Democracy, a people's alliance that put pressure on the government to hold elections in the country and hand over power to the representatives of the people. She was arrested nine times, held in detention or in prison for nearly six years, and exiled to Britain.

From exile Ms. Bhutto continued to guide the resistance to the military regime in Pakistan, reorganizing the internal structure of the Pakistan People's Party and strengthening communication between the party's leadership and rank-and-file membership. When martial law ended and political parties were legalized in Pakistan, Ms. Bhutto returned to her country. Large crowds welcomed her back and supported her call for new elections, but she was again imprisoned.

A turning point in Ms. Bhutto's and her country's political history occurred in 1988 when General Zia died in a plane crash. General elections were held in November and the Pakistan People's Party, led by Ms. Bhutto, won a majority of seats. Sworn in for a five-year term as Prime Minister in December 1988, she acted to restore constitutional freedoms, including freedom of the press, and pursued an aggressive foreign policy. She lifted the ban on students and trade unions and agreed to the separation of the judiciary from the executive branch of government. In her first 20 months as Prime Minister, the government built 8,000 public and secondary schools and brought electricity to 4,600 villages.

In August 1990 Pakistan's President, Ghulam Ishaq Khan, dismissed her government in what the international press called an "extra-constitutional coup." The President and the caretaker Prime Minister filed a series of accusations against Ms. Bhutto and her husband, resulting in his imprisonment.

To gain back the freedoms for which she had worked, Ms. Bhutto led the opposition in questioning the fairness of the October 1990 general elections. When the President of Pakistan dismissed the government in July 1993 and called for fresh elections, Ms. Bhutto and the People's Party were elected with a broad mandate and continued their progress toward economic liberalization in Pakistan. In 1996 her government was dismissed once again.

Benazir Bhutto was born in Karachi, Pakistan, on June 21, 1953. She earned a B.A. degree from Harvard University (Radcliffe College) in 1977, as well as a B.A. in philosophy, political science and economics at the University of Oxford. She also completed a course in international law and diplomacy at Oxford. Ms. Bhutto was awarded the Bruno Kreisky Award for Human Rights in 1988 and the Honorary Phi Beta Kappa Award from Radcliffe College in 1989. She is the author of two books, *Foreign Policy in Perspective* (1978) and *Daughter of Destiny* (1988).

Funded in part by an unrestricted educational grant provided by Medtronic® (Sofamor Danek, Surgical Navigational Technologies, Neurological, Midas Rex and Neurosurgery).

1:00 PM - 2:00 PM

LUNCH IN THE EXHIBIT HALL

2:15 PM - 2:45 PM

POSTER VIEWING SESSION

Spine and Peripheral Nerve Posters
Pediatric Posters

2:45 PM - 5:30 PM

SECTION SESSION: AANS/CNS SECTION ON CEREBROVASCULAR SURGERY

This session will serve as a forum for the presentation of topics related to cerebrovascular neurosurgery.

Learning Objectives: After completing this session participants should be able to discuss concepts and advances in the care of patients with cerebrovascular neurosurgical illness.

2:45 pm - 4:00 pm

SCIENTIFIC SESSION

Moderator: H. Hunt Batjer,
Robert E. Harbaugh



Fountains at the Art Institute of Chicago

PHOTO BY TONY ARMOUR

801 Carotid Endarterectomy: Short and Long Term Re-Stenosis in Patched Versus Non-Patched Patients

Steven C. Zielinski, Steven D. Chang,
Gary K. Steinberg

802 Genome Wide Linkage and Haplotype Association Studies Map Intracranial Aneurysm to Chromosome 7q11

Hideaki Onda, Hidetoshi Kasuya,
Taku Yoneyama, Kintomo Takakura,
Tomokatsu Hori

803 Serum MCP-1 is Elevated in Association with Poor Outcome Following Aneurysmal Subarachnoid Hemorrhage

Alan Lozier, Grace H. Kim, Josh Yorgason, Ilya Laufer, Alexander L. Coon, J. Mocco, Chris J. Winfree, Kurt Kreiter, Stephan A. Mayer, E. S. Connolly

804 Extra-Cranial Carotid Artery Angioplasty and Stenting: The Cleveland Clinic Endovascular Neurosurgery Experience

Peter A. Rasmussen, John Perl, II, Sue Buehner, Lori Mertz, Marc R. Mayberg, Thomas J. Masaryk

805 Risk Factors for Carotid Re-Stenosis Following Carotid Endarterectomy: The Role of Advancing Age and Hypercholesterolemia.

Vallabh Janardhan, Robert Friedlander, Philip E. Stieg

806 Trends in Morbidity and Mortality Associated with Hospitalization for Ruptured and Unruptured Intracranial Aneurysms in the United States

Adnan I. Qureshi, M. Fareed K. Suri, L. Nelson Hopkins, North American Trial of Unruptured and Ruptured Aneurysms Planning Committee

807 Natural History of Basal Ganglia and Thalamus Arteriovenous Malformations

Ian G. Fleetwood, Michael P. Marks, Richard P. Levy, Mary L. Marcellus, Huy M. Do, Steven D. Chang, John R. Adler, Gary K. Steinberg

4:00 pm - 4:30 pm

DONAGHY LECTURE AND AWARD PRESENTATION

Cerebrovascular Surgical Skills: Learning Them, Teaching Them
Steven L. Giannotta

4:30 pm- 5:30 pm

SPECIAL SYMPOSIUM

5:30 pm - 6:00 pm

AANS/CNS SECTION ON CEREBROVASCULAR SURGERY BUSINESS MEETING

2:45 PM - 5:30 PM

SECTION SESSION: AANS/CNS SECTION ON NEUROTRAUMA AND CRITICAL CARE

This session will serve as a forum for the presentation of topics on neurotrauma and critical care.

Learning Objective: After completing this session participants should be able to discuss the latest advances in neurotrauma and critical care.

2:45 pm - 3:00 pm

Opening Remarks – M. Ross Bullock

AWARDS

Synthes Award for Resident Research on Brain and Craniofacial Trauma Limited Head Trauma: A New Criteria for Management of Patients with Minor Head Injury

Joseph S. Neimat, Sepideh Amin-Hanjani
Presented by Alex B. Valadka

Synthes Award for Resident Research on Spinal Cord and Spinal Column Increased Frequency of Cells Expressing a Neuronal Phenotype in the Injured Spinal Cord after Intravascular Transplantation with Bone Marrow Cells

Edward R. Smith, Tao Cheng, David Scadden, E. Antonio Chiocca
Presented by Michael G. Fehlings

Codman Neurotrauma Fellowship Award 2002-2003

Presented by Donald W. Marion

Douglas Miller Training Fellowship

Ivan Ng
Presented by M. Ross Bullock

3:00 pm - 4:15 pm

NEUROTRAUMA SYMPOSIUM

Speakers: Shelly D. Timmons, Domenic P. Esposito, Raj K. Narayan, Alex B. Valadka, Ivan Ng

Timing Issues in Decompressive Craniectomy for Trauma – Domenic P. Esposito

Trauma Practice Guidelines: Their Impact in the Real World – Raj K. Narayan

Socioeconomic Aspects of Neurotrauma: Position Statements, Contracts, EMTALA and On Call Obligations – Alex B. Valadka

Discussion

Ivan Ng

4:15 pm - 5:30 pm

SCIENTIFIC SESSION

Moderators: Shelly D. Timmons, Julian E. Bailes, Jr.

Synthes Award for Resident Research on Brain and Craniofacial Trauma

808 Limited Head Trauma: A New Criteria for Management of Patients with Minor Head Injury

Joseph S. Neimat, Sepideh Amin-Hanjani

Synthes Award for Resident Research on Spinal Cord and Spinal Column Injury

809 Increased Frequency of Cells Expressing a Neuronal Phenotype in the Injured Spinal Cord after Intravascular Transplantation with Bone Marrow Cells

Edward R. Smith, Tao Cheng, David Scadden, E. Antonio Chiocca

810 Intravenous Administration of Marrow Stromal Cells (MSCs) Increases the Expression of Growth Factors in Rat Brain after Traumatic Brain Injury (TBI)

Asim Mahmood, Dunyue Lu, Yi Li, Michael Chopp

811 Relationship between Local Cerebral Blood Flow and Metabolism after Severe Human TBI

Oscar L. Alves, Egon R.M. Doppenberg, Tobias Clausen, Michael Reinert, Alois Zauner, Harold F. Young, Ross Bullock

812 Metabolic Blood Flow Effects of High Dose Propofol in Head Injured Patients

Matthias F. Oertel, Daniel F. Kelly, Thomas C. Glenn, Neil A. Martin

813 The Protective Role of Cerebrospinal Fluid in Traumatic Brain Injury

Yung-Hua Chu, Michael Bottlang

2:45 PM - 5:30 PM

SECTION SESSION: AANS/CNS SECTION ON PEDIATRIC NEUROLOGICAL SURGERY

This session will serve as a forum for the presentation of topics on pediatric neurological surgery.

Learning Objectives: After completing this session participants should be able to discuss the recent advances in the care of pediatric patients with neurosurgical illness.

2:45 pm - 3:00 pm

KENNETH SHULMAN AWARD

3:00 pm - 3:45 pm

DONALD D. MATSON MEMORIAL LECTURE

The Road to Certification – David Gordon McLone, introduced by Thomas G. Luerssen

3:45 pm - 4:00 pm

BREAK

4:00 pm - 5:30 pm

SCIENTIFIC SESSIONS

Moderator: Ann Marie Flannery

814 Non-invasive Assessment of Shunt Function in Hydrocephalic Patients Using an Ultrasonic Time-of-Flight Method and Pulse Waveform Analysis.

Saulius Rocka, Arturas Sitkauskas, Carlos H. Feltes, Kostas N. Fountas, Vassilios Dimopoulos, Rostislav Davydov, Arminas Ragauskas, Gediminas Daubaris, Joe S. Robinson

815 Lumbar Dermal Sinus Tracts

Laurie L. Ackerman, Arnold H. Menezes

816 Ventriculoperitoneal Shunting in Patients with Disseminated Brain Tumors

Karl F. Kothbauer, Dennis Buis, George I. Jallo, Jeffrey C. Allen, Fred J. Epstein

817 Does Decompressive Hemorrhage Following Shunting of Neonatal Hydrocephalus Correlate with Valve Opening Pressure?

Patrick J. McDonald, Carl Bruce, Stephen Santoreneos, Maria Lamberti-Pasculi, Peter B. Dirks, James M. Drake, Robin P. Humphreys, James T. Rutka

818 Postural Stability Measurement in Normal Pressure Hydrocephalus (NPH) by Dual Axial Cranial Accelerometry

Zhicheng Li, Lindsay A. Keller, Mark G. Luciano, Brain L Davis

819 Neuropsychometric Effects of Radiation, Pre-irradiation Psychometric Testing in Pediatric Patients with Localized Primary Brain Tumors

John H. Honeycutt, Robert A. Sanford, Larry E. Kun, Thomas E. Merchant

5:30 pm - 6:00 pm**AANS/CNS SECTION ON PEDIATRIC NEUROLOGICAL SURGERY BUSINESS MEETING****2:45 PM - 5:30 PM****SECTION SESSION: AANS/CNS SECTION ON STEREOTACTIC & FUNCTIONAL NEUROSURGERY**

This session will serve as a forum for the presentation of topics on functional and stereotactic neurosurgery.

Learning Objectives: After completing this session participants should be able to discuss the role of stereotactic surgery in brain surgery in brain tumor management and apply these principles to their practice.

2:45 PM - 3:45 pm**SYMPOSIUM: IMAGING BEFORE THE OR AND IN THE OR: WHAT PROVIDES VALUE**

Moderators: Douglas S. Kondziolka, Ali R. Rezaei

Speakers: L. Dade Lunsford, Richard D. Bucholz, Garnette Roy Sutherland

3:45 pm - 5:30 pm**SCIENTIFIC SESSION**

Moderators: Andres M. Lozano, G. Rees Cosgrove

Resident Award**820 Developing Hybrid Brain-Machine Interfaces: Chronic, Multisite, Microwire Electrode Recordings in Primates**

Dragan F. Dimitrov, Jerald D. Kralik, Miguel A. L. Nicolelis

821 Subthalamic Nucleus Intraoperative Mapping Suggests Somatotopic Organization

Pantaleo Romanelli, Gary Heit, Bruce Hill, Helen Bronte-Stewart

822 Long Term Results of Microvascular Decompression of The Cochlear Nerve for Intractable Tinnitus

Yong Ko, Hyung-Jung Yi, Young-Soo Kim, Sung-Hoon Oh, Suk-Jun Oh, Kwang-Myung Kim

823 Chronic Stimulation of STN and/or SNr in Intractable Epilepsy: A Three Year Experience

Alim L. Benabid, Adnan Koudsie, Stephan Chabardes, Laurent Vercueil, Abdelhamid Benazzouz, Lorella Minotti, Jean F. LeBas, Philippe Kahane

824 Epileptiform Activity from the Subthalamic Nucleus in Patients With Intractable Seizures

Jorge A. Gonzalez-Martinez, Ashwini D. Sharan, Ali Rezaei, Silvia Leme, Erwin Montgomery, Hans Luders

825 Conditionally Immortalized Neuronal Progenitor Cells Restore Barrel Cortex Function After Focal Injury

Wylie H. Zhu, David A. Carter, Charles J. Hodge, Jr

826 Prevention of Alzheimer's Plaque Formation in a Transgenic Mouse Model

Terry Lichtor, Neelima B. Chauhan, George J. Siegel

5:30 PM - 6:00 PM**AANS/CNS SECTION ON STEREOTACTIC & FUNCTIONAL NEUROSURGERY BUSINESS MEETING****IT HAPPENED HERE FIRST**

Chicago produced the first...
 steel frame skyscraper / stainless steel building / electric iron and cooking range / Pullman railroad car / grain reaper / reactor to produce electricity from atomic energy / cafeteria / window envelope / co-educational public high school / railroad sleeping car / bifocal contact lens / winding watch / Butterfinger and Baby Ruth candy bars / caramel-chocolate turtles / bowling tournament / Shrimp de Jonghe / Cracker Jacks / Schwinn Bicycles

THANKS

AANS wishes to thank the following companies for their year-long support of Association activities:

Guilford Pharmaceuticals, Inc.
 Angel Circle Supporter
 \$250,000

Six Flags Theme Parks, Inc.
 \$100,000