

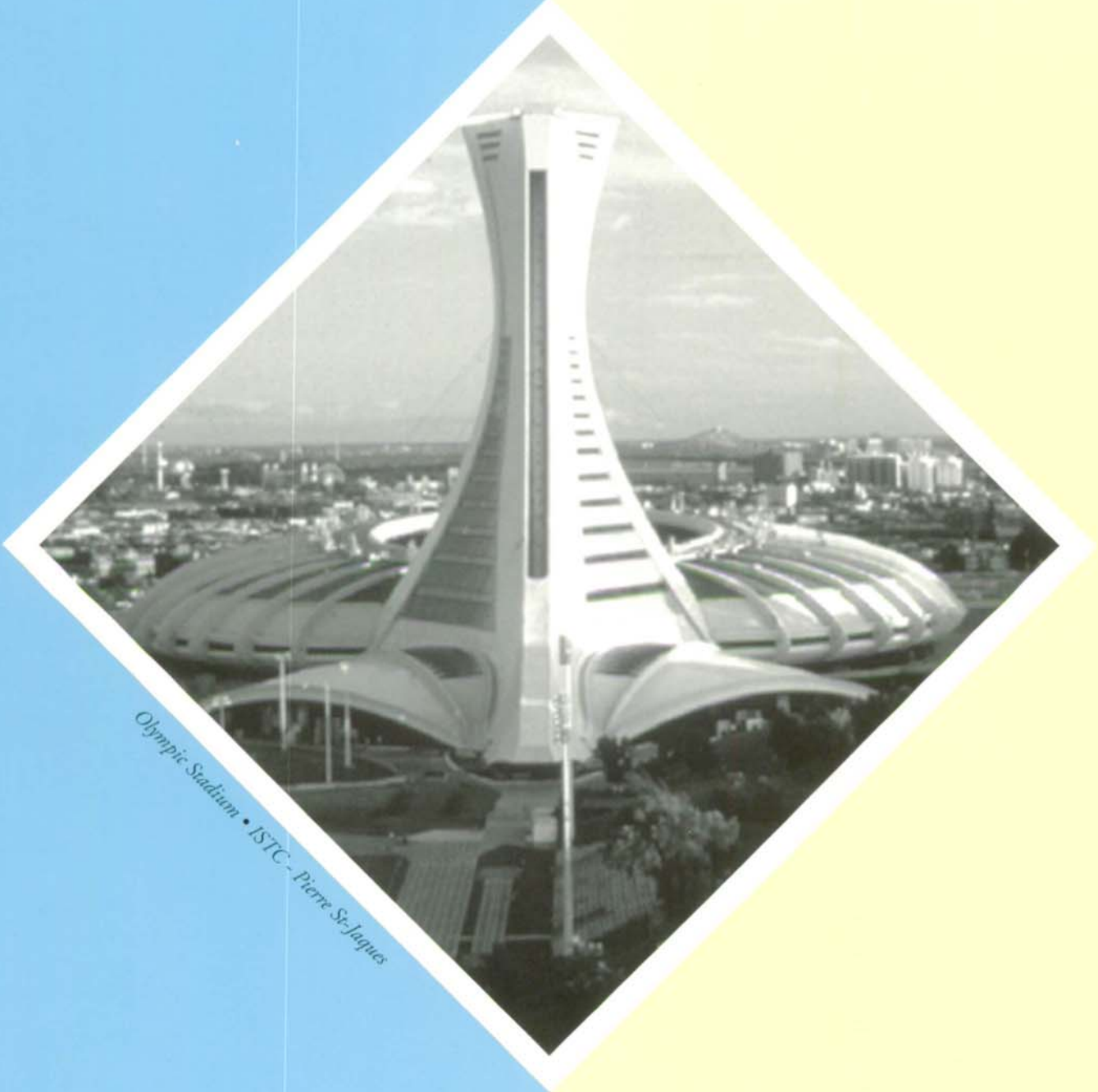
the 46th
annual meeting

montréal, québec



september 28-october 3, 1996

of the
**CONGRESS of
NEUROLOGICAL
SURGEONS**



Olympic Stadium • ISTC - Pierre St-Jaques

montreal québec

september 28-october 3, 1996

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president's LETTER

The 46th Annual Meeting of the Congress of Neurological Surgeons will be held in Montréal, Québec from September 28 through October 3, 1996. Exhibits, posters and scientific sessions will be held at the Montréal Convention Centre while Le Centre Sheraton will serve as the headquarters hotel.

Peter Jannetta is the 1996 CNS Honored Guest. Dr. Jannetta is world renowned for his seminal contributions in the understanding and treatment of vascular compression syndromes of the brainstem and cranial nerves. His vast experience in surgery of the posterior fossa and cranial nerves will be highlighted in the Scientific Program. In addition, Dr. Jannetta has developed one of the most creative and fertile departments of neurological surgery in the world. From this environment arose not only the concept of cranial nerve vascular compression, but the introduction of radiosurgery to the United States, many of the basic developments in skull base surgery, and the development of xenon CT blood flow examinations. Dr. Jannetta has trained many academic neurosurgeons including several department chairmen. His perspective is enhanced by a brief political career as Secretary of Health for the Commonwealth of Pennsylvania.

The Scientific Program Committee has labored to create a program of contemporary interest and importance. In this age, when we are bombarded with requests for the evidence to support our recommendations and interventions, we will ask the question "how do you know?" How do you know what operations to recommend for which patients? How do you know how to do complex neurosurgical procedures? How do you know the results of your operations? The answers to these questions will help every neurosurgeon to more effectively participate in today's changing health care system.

Led by Stephen Papadopoulos, the Annual Meeting Committee has worked hard to provide an outstanding meeting environment. Montréal is a unique North American city with European continental flavor and distinctive culture. Many fine restaurants, artistic activities, sporting venues, and shopping opportunities await visitors. Montréal welcomes its English-speaking neighbors, and language presents no barrier to full enjoyment of its many attractions. At this time of year, autumn colors should be starting to paint the countryside with their spectacular annual show. Attendees at this year's Annual Meeting will be rewarded with an outstanding Scientific Program, a unique venue, and a spectacular natural setting. We look forward to seeing you in Montréal!

Sincerely,



Stephen J. Haines

President, Congress of Neurological Surgeons

CNS Annual Meeting Committee

Annual Meeting Chairman
Stephen M. Papadopoulos

Scientific Program Chairman
Mitchel S. Berger

Exhibits
Mark N. Hadley

Host
Paul L. Penar

Local Arrangements
Dr. and Mrs. Gerard Mohr

Public Relations
Bruce A. Kaufman

Registration
Jeffrey W. Cozzens

Sergeant-At-Arms
Paul J. Camarata

Clinical Neurosurgery
Christopher M. Loftus



montréal

Montréal Convention Centre • Courtesy of Greater Montréal Convention and Tourism Bureau

Bonjour and Welcome to Montréal!

CNS attendees and their families will discover one of the world's most fascinating cities while attending the CNS Annual Meeting in Montréal.

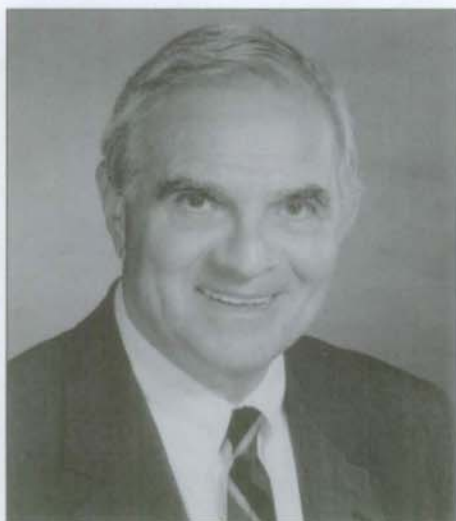
Founded in 1642, Montréal initially became the fur-trading capital of North America and then Canada's major industrial center. Eventually, it grew into the modern cosmopolitan city we know today. All of this is reflected in its dynamic cultural life and rich heritage...many fine restaurants, artistic activities, sporting venues, and shopping opportunities await you. A stroll through Old Montréal provides an opportunity to relive great moments in the city's history, while the Olympic Park, downtown skyscrapers and the underground city all attest to the vitality of Montréal today. At this time of year, Montréal is sure to be truly spectacular with the rich, beautiful colors of autumn.

A large metropolis and one of the largest French-speaking cities in the world, this fine city welcomes its English-speaking neighbors. Discover Montréal at the 1996 Congress of Neurological Surgeons Annual Meeting!

honored guest

BIOGRAPHY

Peter Joseph Jannetta, MD, DSc(hon), FACS, was born in Philadelphia, Pennsylvania, and grew up in Haddonfield, New Jersey and York, Pennsylvania. He attended the University of Pennsylvania where he received both the AB and MD degrees. Achievement came early—he was a high school All American swimmer and president of his class at University of Pennsylvania.



Dr. Jannetta trained first in general surgery at the University of Pennsylvania, but saw the light, and after three years as an NIH Fellow in neurophysiology, he undertook training in neurological surgery at UCLA, which he completed in 1966. His first academic appointment in neurological surgery was as associate professor and chief of the division of neurological surgery at Louisiana State University. In 1971, he became professor and chief of the division of neurological surgery at the University of Pittsburgh. The division became a department in 1973. He held the Francis Sargent Cheever distinguished professorship at the University of Pittsburgh from 1976 to 1978. In 1989, Washington and Jefferson College granted him the degree of Doctor of Science, honoris causa. In 1992, he was honored by becoming the first Walter Dandy Professor of Neurological Surgery at the University of Pittsburgh.

Dr. Jannetta is a prolific contributor to scientific literature; he has given invited lectures and has been visiting professor at institutions throughout the world. His seminal contributions in the understanding and treatment of vascular compression syndromes of the brainstem and cranial nerves are internationally known. At the University of Pittsburgh he has created one of the most outstanding schools of neurological surgery in the world. He has fostered an environment of creativity that has produced several of the major advances in neurosurgery in the past two decades. Five of the 17 Van Wagenen Fellows named since 1980 have trained with Dr. Jannetta.

Dr. Jannetta is a musician at heart, schooled on the piano but mastering the tenor banjo, skills honed in the jazz clubs of New Orleans. He has an eclectic interest in the arts and is currently applying some of his surgical skills to sculpting in plaster. He is the proud father of six children: two physicians, two international business executives, a historian, and an actor. His wife, Diana, is an art collector and critic.

Dr. Jannetta's charismatic personality and wide ranging skills have brought him recognition outside of neurosurgery. In 1995 and 1996, he was Secretary of Health for the Commonwealth of Pennsylvania. He was selected as Man of the Year in the Sciences by Vectors/Pittsburgh in 1990 and elected to membership in the Horatio Alger Association in that year as well.

Peter Jannetta is a unique, innovative and charismatic neurosurgeon and educator. The Congress of Neurological Surgeons is privileged to have him as the 1996 Honored Guest.

mission

STATEMENT

The Congress of Neurological Surgeons exists for the purpose of promoting the public welfare through the advancement of neurosurgery, by a commitment to excellence in education and by dedication to research and scientific knowledge. The Congress of Neurological Surgeons maintains the vitality of our learned profession through the altruistic volunteer efforts of our members and the development of leadership in service to the public, to our colleagues in other disciplines and to the special needs of our fellow neurosurgeons throughout the world and at every stage of their professional lives.

MEETING

purpose

The purpose of the 1996 Annual Meeting of the Congress of Neurological Surgeons is to provide continuing medical education for practicing neurosurgeons, neurosurgical residents in training, post-graduate neurosurgical fellows as well as allied health professionals such as nurses, physician assistants and clinical specialists.

This education is provided in many forms:

- ◆ didactic lectures
- ◆ practical (hands-on) courses demonstrating neurosurgical techniques
- ◆ small group sessions to provide in-depth coverage of selected topics
- ◆ exhibits demonstrating the newest instruments and information known to the neurosurgical community
- ◆ posters to provide the latest information regarding clinical and laboratory advances in neurological surgery

Montréal Museum of History • Courtesy of Montréal Museum of History



GENERAL information

Continuing Medical Education

The Congress of Neurological Surgeons (CNS) is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

The CNS designates this continuing medical education activity for 26.5 credit hours in Category 1 toward the Continuing Education Award in Neurosurgery and the Physician's Recognition Award of the American Medical Association. Participation in ticketed courses provides additional Category 1 credit.

An additional 29.5 hours of credit may be earned by attending optional educational programs such as Practical Courses, Luncheon Seminars, and Joint Section on Tumors satellite symposium.

*The following Luncheon Seminars will not be awarded Category 1 credits: 123/124, 221/222, 239/240, 335/336.

Registration Information

Enclosed with this preliminary program are the following materials:

- ◆ Advance Registration form
- ◆ Housing form

Advance Registration forms are preprinted with identification numbers, names and addresses. Use only your form when registering. DO NOT use another person's registration form, as our computers register by preprinted information listed on the form.

If you would like to request additional forms, please call (847) 692-9500 and our office will mail you a personalized registration form.

Complete the Advance Registration form in ink.

- ◆ If paying by check or money order, make payable in U.S. dollars to CNS and mail all pages of the form with your payment in the envelope provided. DO NOT FAX your registration form if paying by check or money order.

- ◆ If paying by credit card, fax the complete form without a cover sheet to (847) 692-7729 and keep the originals for your files. DO NOT MAIL your faxed registration form.
- ◆ A late fee is added to registrations received in our office on or after August 29. The postmark date on the envelope is NOT the date used in determining a late fee.

All registrants will receive a registration confirmation letter, confirming meeting registration and assignment to courses. Please allow three weeks for processing.

Please Note: The deadline for advance registration is August 28, 1996. Because course capacities are limited, early registration is recommended. All attendees wishing to register after this date should register at the on-site registration desk at the meeting.

CNS Registration will take place at the Montréal Convention Centre. Registration hours will be:

Saturday, September 28	2:00 PM-7:00 PM
Sunday, September 29	7:00 AM-5:30 PM
Monday, September 30	7:00 AM-5:30 PM
Tuesday, October 1	7:00 AM-5:30 PM
Wednesday, October 2	7:00 AM-5:30 PM

All meeting registrants will receive one ticket to the Opening Reception.

Refund Policy

Registration Fees:

A letter requesting cancellation of pre-registration must be received by the CNS Annual Meeting Office, Attention: Pam Miczuga, 22 South Washington Street, Park Ridge, Illinois 60068-4287, by August 28 in order to receive a full refund. Cancellation requests for the full meeting registration received on or after August 29 but on or before September 23 will be refunded less a \$75 processing fee. NO REFUNDS will be made if received in the CNS Annual Meeting Office on or after September 24. Cancellations may be faxed to (847) 692-4225.

Course and Event Tickets:

Course and event tickets will be refunded in full until September 23. Changes to course and event tickets may be faxed to (847) 692-4225. Because of facility guarantees, there can be no refund for tickets canceled on or after September 24. There will be NO RETURN OR EXCHANGE of tickets for courses on-site.

Scientific Meeting

All scientific meetings and exhibits will take place at the Montréal Convention Centre.

CNS Member Services Center

To increase the availability of the CNS Secretary's Office, the CNS Membership Office, as well as the Resident's and Placement Offices, a CNS booth will be accessible in the Exhibit Hall of the Montréal Convention Centre. The CNS Member Service Center will be open during Exhibit Hall hours. Staff members will be available to answer any questions you may have regarding the CNS and its member services.

CNS Exhibition

Over 350 exhibit booths will be located in Hall A/B of the Montréal Convention Centre. Hours are:

Monday, September 30
8:30 AM-4:00 PM

Tuesday, October 1
8:30 AM-4:00 PM

Wednesday, October 2
8:30 AM-4:00 PM

Support CNS exhibiting companies. Their financial contribution to the Annual Meeting is essential to its success.

Admittance to the Exhibit Hall is by CNS name badge only. Please note that children under the age of 18 are not allowed in the Exhibit Hall.

GENERAL information

Social and Auxiliary Activities

Complete details of all planned Social and Auxiliary activities can be found on pages 37-45. It is recommended that this information be shared with your spouse or guest in order to register for all of the week's extensive programming. Tours and activities have been selected to provide an opportunity to explore the Montréal area.

All Auxiliary Program registrants are invited to use the Hospitality Suite, including daily continental breakfasts from 8:00 AM-10:00 AM (admittance to the Hospitality Suite is by Spouse/Guest or Nurse/Spouse badge only). The Hospitality Suite is located in Salon 4/5 of Le Centre Sheraton Hotel and is open from 8:00 AM until 5:00 PM, Sunday through Wednesday.

Children over the age of 12 may register as a guest at the Guest Registration Fee. This will allow full participation in the Auxiliary Program activities. However, please note that children under the age of 18 years are not allowed into the Exhibit Hall.

Individual childcare agencies and official references are available through the Concierge desk of the official CNS hotels listed below:

- ◆ Le Centre Sheraton
(514) 878-2000
- ◆ Delta Montréal
(514) 286-1986
- ◆ Hotel Inter-Continental Montréal
(514) 987-9900
- ◆ Marriott Chateau Champlain
(514) 878-9000
- ◆ The Queen Elizabeth Hotel
(514) 861-3511
- ◆ Le Westin Mont-Royal
(514) 284-1110

Hotel Reservations

Please reference page 48.

Airline Information

Please reference page 48.

CNS Shuttle Service

The CNS will provide shuttle service at regular intervals between the Montréal Convention Centre and official CNS hotels. A shuttle schedule will be posted at all official CNS hotels and at the Montréal Convention Centre. Shuttle hours will be:

Saturday	1:00 PM-7:30 PM
Sunday	6:45 AM-7:00 PM
Opening Reception at Bell Amphitheatre*	6:30 PM-9:00 PM
Monday	6:45 AM-6:00 PM
Tuesday	6:45 AM-6:00 PM
Wednesday	6:45 AM-5:30 PM

*Shuttle Service will be provided from official CNS Hotels to the Opening Reception at the Bell Amphitheatre beginning at 6:20 PM.

Speaker Ready Room

The Speaker Ready Room will be available Sunday through Wednesday from 7:00 AM-5:00 PM at the Montréal Convention Centre for speakers wishing to preview their slides.

Smoking

Smoking will be prohibited in all meeting rooms and exhibit areas.

Message Center

The Message Center will be located in the CNS Registration Area during registration hours. Messages will be posted.

important dates

August 26, 1996

Deadline for housing reservations. The official CNS Housing Form must be used to ensure convention rates.

August 28, 1996

Last day for receipt of Advance Registration applications at the CNS Annual Meeting Office. Advance registration forms received after this date pay full price registration fees.

Registration cancellations received on or before this date will receive a full refund. Cancellation requests must be received by mail or fax (847) 692-4225.

August 29-September 23, 1996

Registration cancellations received on or between these dates will receive a refund less a \$75 processing fee.

September 24, 1996

Refunds of registration fees will not be allowed on or after this date.



resident REGISTRATION

Meeting registration for Resident Members is complimentary. Non-member Residents have a reduced fee of \$75. All even-numbered Luncheon Seminars (i.e., 102, 104) are discounted for residents. Please indicate the appropriate resident course number on the registration form to register for these courses. Because of limited availability of resident tickets for some courses, early registration is suggested. On-site availability of discounted course tickets can be determined at the registration desk.

Dear Residents:


On behalf of the Resident Program Committee of the Congress of Neurological Surgeons, I would like to welcome you to the 1996 Annual Meeting in Montréal, Canada. The focus of the Scientific Program this year is clinical decision-making and outcomes. Neurosurgical disorders will be examined with respect to the decision-making process involved in determining appropriate treatment options. Our president, Stephen J. Haines, has been an advocate of outcome-based neurosurgical research, and this year's Scientific Program is sure to offer resident participants a thorough understanding of neurosurgical decision-making. The program will be a unique opportunity for you to interact with today's leaders in neurosurgery.

A special resident program has been organized for the Montréal meeting, including a luncheon with our honored guest, Dr. Peter Jannetta. As you know, Dr. Jannetta has been a leader in residency training, and a pioneer in the basic and clinical research of neurovascular compression syndromes. The luncheon will be a special opportunity for you to ask questions of one of the outstanding neurosurgeons of our day.

We have also organized an exciting social program in Montréal to compliment the scientific and educational activities for the resident neurosurgeon. Montréal will be an ideal setting for you to associate with your neurosurgical brethren and experience the special camaraderie that makes our specialty so unique.

I look forward to seeing you in Montréal.

Sincerely,


Lawrence D. Dickinson, MD
Resident Program Chairman

Place d'Armes - Old Montréal • Courtesy of Greater Montréal Convention and Tourism Bureau.

scientific program

committee

Scientific Program Chairman
Mitchel S. Berger

General Scientific Session I
Walter A. Hall

General Scientific Session II
Winfield S. Fisher III

General Scientific Session III
Thomas C. O'rigitano

General Scientific Session IV
M. Sean Grady

International Scientific Program
Ian McCutcheon

Luncheon Seminars
James T. Rutka
Curtis A. Dickman

Open Scientific Session
David W. Newell

Poster Session
Richard G. Ellenbogen

Practical Courses
Griffith R. Harsh IV
H. Louis Harkey III

Special Courses
Philip E. Stieg

Joint Sections Programs
Vincent Traynelis

Residents Program
Lawrence D. Dickinson

Program Evaluation
Scott Shapiro

SCIENTIFIC PROGRAM at-a-glance

Sunday, September 29

MORNING AND AFTERNOON

- ◆ Practical Courses

Monday, September 30

MORNING

- ◆ General Scientific Session I - Criteria for Patient Selection
- ◆ Honored Guest Presentation
- ◆ Presidential Address

AFTERNOON

- ◆ International Luncheon and Program
- ◆ Nurses Luncheon
- ◆ Luncheon Seminars
- ◆ Special Course I - Thoracic and Lumbar Spine Sagittal Symposium
- ◆ Joint Section on Neurotrauma and Critical Care
- ◆ Joint Section on Cerebrovascular Surgery
- ◆ Joint Section on Stereotactic and Functional Neurosurgery

Tuesday, October 1

MORNING

- ◆ General Scientific Session II - How the Operation Is Done
- ◆ Honored Guest Presentation
- ◆ Convocation and Awards Presentation

AFTERNOON

- ◆ Residents/Honored Guest Luncheon
- ◆ Nurses Luncheon
- ◆ Luncheon Seminars
- ◆ Special Course II - Neurosurgical Management of Sports Injuries
- ◆ Joint Section of State Neurosurgical Societies
- ◆ Joint Section on Pediatric Neurological Surgery
- ◆ Joint Section on Disorders of the Spine and Peripheral Nerves
- ◆ Annual Business Meeting

Wednesday, October 2

MORNING

- ◆ General Scientific Session III - Analysis of Outcome
- ◆ Honored Guest Presentation
- ◆ CNS Resident Award Paper

AFTERNOON

- ◆ Nurses Luncheon
- ◆ Luncheon Seminars
- ◆ Special Course III - Outcome Analysis in Neurosurgery
- ◆ Joint Section on Tumors
- ◆ Joint Section on Pain

Thursday, October 3

MORNING

- ◆ General Scientific Session IV - Treatment of Posterior Fossa Tumors
- ◆ Honored Guest Presentation

scientific program

SUNDAY, SEPTEMBER 29, 1996

SUNDAY-AT-A-GLANCE

8:00 AM-5:00 PM	All Day Practical Courses
8:00 AM-12:00 NOON	Morning Practical Courses
1:00 PM-5:00 PM	Afternoon Practical Courses
6:30 PM-9:00 PM	Opening Reception

8:00AM-5:00PM/all day courses

001 Microsurgical Anatomy:
Ventricles, Deep Cisterns, Cranial Nerves

Course Directors:
Faculty:

Albert L. Rhoton, Evandro de Oliveira, Toshio Matsushima,
Alberto C. Cardoso, Toshio Matsushima, Hiroshi Muratani,
Evandro de Oliveira, Albert L. Rhoton, Helder Tedeschi,
Hung T. Wen, Yoshihiro Natori, Eduardo Seone

001 Learning Objective: The microsurgical anatomy of the ventricles, cisterns, cavernous sinus, cranial nerves, and cranial fossae will be taught through lecture and hands-on cadaver dissection under the microscope. Upon completion of this course, participants will be able to identify surgical approaches for the ventricles, cisterns, cavernous sinus, cranial nerves, and cranial fossae and describe the microsurgical anatomy of each area.

002 Carotid Surgery: Diagnostics and Techniques

Course Director:
Faculty:

M. Christopher Wallace
Robert Cote, Terrence Coyne, Robert J. Dempsey,
J. Max Findlay, R. Loch MacDonald, Richard G. Perrin,
M. Christopher Wallace, Joseph Zabramski

002 Learning Objective: The current indications for surgical and medical therapy for symptomatic and asymptomatic carotid disease will be reviewed. The surgical anatomy and approaches will be demonstrated through lecture and anatomical dissection. The participants will be able to recognize the indications for medical and surgical treatment of extracranial carotid disease and will be able to evaluate the use of non-invasive Doppler imaging of the extracranial and intracranial circulation.

003 Critical Care for the Neurosurgeon

Course Director:
Faculty:

Jack E. Wilberger
Brian T. Andrews, John Atkinson, Ross Bullock, Daniel F. Kelly,
Donald W. Marion, Nelson Oyesiku, Richard Ptaczynski,
Charles H. Tator, Alex Valadka, Anthony Zikos,
David W. Newell, Daniel Scodary

003 Learning Objective: The practicing neurosurgeon, resident and critical care specialist will be provided with a comprehensive and interactive course in the management of neurologically compromised patients with critical multi-system disease. The participant will be able to recognize the basic concepts in intracranial and cardiorespiratory physiology as they relate to critical care of neurosurgical patients and will be able to assess the need for utilization of the following technologies: intracranial pressure monitoring; Swan-Ganz monitors; transcranial Doppler; cerebral blood flow monitoring; and jugular venous oxygen monitoring.

004 Managed Care, Contracts, and Coding

Course Directors:
Faculty:

John A. Kusske, Richard A. Roski
John A. Kusske, Richard A. Roski, Karen Zupko

004 Learning Objective: Using lecture, discussion, and question and answer sessions this interactive course will help participants understand how they can survive and prosper in the present health care environment. An update on Medicare rules for CPT coding will be reviewed and instruction on coding properly for operative procedures will be presented. Upon completion of this course, participants will be able to describe the current status of managed care in the United States and how this market will change in the next 12 months, analyze practice costs, initiate practice systems to manage contracts, interpret changes in Medicare rules for CPT coding, use proper coding for operative procedures, and review coding changes for 1997.

**opening reception at the bell amphitheatre:
sunday, september 29 from 6:30PM-9:00PM**

Shuttle service will be provided from all official CNS hotels beginning at 6:20 PM.

scientific program

SUNDAY, SEPTEMBER 29, 1996

8:00AM-5:00PM/all day courses (continued)

005	Neuroaugmentative Procedures for Pain Control	Course Directors: Kim J. Burchiel, Samuel J. Hassenbusch Faculty: Jaimie Henderson, Richard D. Penn, Joel L. Seres; Andrew G. Shetter, Richard L. Weiner, Marilyn McGuire, Samuel J. Hassenbusch, Robert M. Levy, Richard B. North	005
<p>Learning Objective: The current techniques of pain control with implantable technology will be discussed. The indications for the specific procedures as well as their risks, benefits, and outcome data will be reviewed. The participant will be able to list the indications for management of pain with implantable devices and select the most appropriate method for a given clinical situation.</p>			

006	Thoracoscopy	Course Directors: Curtis A. Dickman, Daniel Rosenthal Faculty: Richard Fessler, Stephen Papadopoulos, J. Patrick Johnson, Volker Sonntag, Charles Reidel, Christopher Paramore, John Hurlbert, Nikitas Vrodos, Juan Ronderos, Peter Hall, Rick Sasso, Dean Karahalios, Nicholas Theodore	006
<p>Learning Objective: The indications and techniques for thoracoscopic spinal surgery will be taught through lecture and hands-on cadaver experience. Upon completion of this course, participants will be able to recognize the role of thoracoscopic spinal techniques for sympathectomy, neural decompression, and spinal reconstruction. The participant will be able to describe the anatomy and surgical approaches for the various thoracoscopic procedures.</p>			

8:00AM-12:00NOON/morning courses

007	Anterior Skull Base Approaches to Common Problems	Course Directors: Harry R. Van Loveren, Jeffrey Keller Faculty: Harry R. Van Loveren, Jeffrey Keller, Murali Guthikonda, Magdy El-Kalliny, Sami Rosenblatt, Hillel Baldwin, Alain Bouthillier, Michael Tauber, Adam Lewis	007
<p>Learning Objective: Anterior skull base approaches to the medial sphenoid wing will be taught through lecture and hands-on cadaver experience. Upon completion of this course participants will be able to describe the surgical anatomy of the medial sphenoid wing. They will also be able to identify approaches to this region that will result in a more complete resection of tumors in this region with lower morbidity.</p>			

008	Intraoperative Functional Mapping and Epilepsy Surgery	Course Directors: Mitchel S. Berger, Nicholas M. Barbaro Faculty: George Ojemann, Carl Sartorius, Nicholas M. Barbaro, Youssef Comair, Roy A.E. Bakay, Warwick Peacock, Andre Olivier, Mike Dogali	008
<p>Learning Objective: The practical aspects of functional mapping for intracranial pathology and epilepsy surgery will be presented via lecture, slide presentation, and cadaveric demonstration. The participant will be able to summarize the technical aspects of language and motor mapping, subcortical mapping, seizure detection, and resective strategies for temporal lobectomy, hemispherectomy, and subpial resection.</p>			

009	Intracranial Endoscopy	Course Director: Kim H. Manwaring Faculty: Carl B. Heilman, John Frazee, Axel Perneczky, Gerard Rodziewicz, Marion L. Walker, Michael Gaab, Christian Matula	009
<p>Learning Objective: The indications and techniques of intracranial endoscopy will be presented relevant to specific disease management considerations. These include endoscopic third-ventriculostomy, excision of the colloid cyst, the endoscope as an adjunct to skull base surgery, the endoscope as an adjunct to aneurysmal dissection and clipping, and stereotaxic applications including frameless stereotaxy. Hands-on models will convey technical aspects and a sense of the learning curve to master this skill. Upon completion of this course, participants will be able to evaluate whether the neuroendoscope would be a potential beneficial adjunct or principal tool in the management of these conditions.</p>			

housing deadline: august 26, 1996
advance registration deadline: august 28, 1996

scientific program

SUNDAY, SEPTEMBER 29, 1996

8:00AM-12:00NOON/morning courses (continued)

010	Craniovertebral Junction and Upper Cervical Spine Stabilization	Course Director: Faculty:	H. Louis Harkey III Nevan Baldwin, Brian Cuddy, H. Louis Harkey III, Michael Fehlings, Vincent Traynelis, Rick Tippets, Chris Paramore, Gerry Tuite, Richard Assaker, Gerald E. Rodts, Stephen Papadopoulos, Bill Krauss, Charles L. Branch, Jr.	010
	Learning Objective: The indications, techniques, and complications of both anterior and posterior instrumentation for the upper cervical spine and craniovertebral junction will be reviewed using lecture and hands-on instruction with anatomical models. The participant will be able to recognize the indications for upper cervical and craniovertebral junction instrumentation and will be able to describe the technical application of such instrumentation.			
011	Thoracolumbar Instrumentation and Fusion	Course Director: Faculty:	Russell P. Nockels Richard A. Berkman, Scott C. Erwood, Bruce McCormack, Perry A. Ball, Andrea L. Halliday, J. Patrick Johnson, James P. Hollowell, Russell P. Nockels, Mike Sturgill, Charles Stillerman	011
	Learning Objective: Basic concepts of thoracolumbar biomechanics, construct design, and instrument applications will be discussed. The basic indications and techniques of implantation of anterior and posterior thoracolumbar instrumentation will be taught through lecture and hands-on laboratory experience using anatomical specimens. The participant will be able to recognize the basic indications for thoracolumbar instrumentation and will be able to describe the basic technical application of thoracolumbar instrumentation.			
012	Minimally Invasive Spinal Surgery	Course Director: Faculty:	Noel I. Perin Noel I. Perin, Tom Mehalic, Rick Fessler, Maurice Smith, Kevin Foley, Parviz Kambin, Bruce McCormack, Mario Zucarella	012
	Learning Objective: The indications and techniques of percutaneous spinal surgery will be taught through lecture and hands-on laboratory experience using anatomical specimens. The participant will be able to recognize the role of percutaneous spinal techniques in key treatment of patients with spinal disorders. The participant will be able to differentiate the specific clinical applications of this technology.			
013	Anterior Circulation Aneurysms	Course Directors: Faculty:	H. Hunt Batjer, Arthur L. Day Ralph G. Dacey, Jr., Daniel L. Barrow, Tom Oritano, Robert A. Solomon	013
	Learning Objective: The anatomy and surgical treatment of supratentorial intracranial aneurysms will be thoroughly reviewed through didactic lectures and video case presentations. Upon completion of this course, participants will be able to thoroughly describe the surgical management of supratentorial intracranial aneurysms and specific exposures helpful in their management.			
014	Ablative Neurosurgery for Pain Control	Course Director: Faculty:	Robert J. Coffey Nicholas Barbaro, Samuel Hassenbusch, Marc Goldman, John Gorecki, Andres Lozano, Michael Munz	014
	Learning Objective: Ablative procedures that have proved useful in the management of intractable pain will be discussed in lecture format and pertinent anatomy will be demonstrated on preserved anatomic specimens. Upon completion of this course, the participant will be able to assess the techniques and limitations of ablative neurosurgery for pain and will also be able to describe patient selection, surgical contraindications, and potential complications associated with ablative pain procedures.			
015	Outcome Research for Clinical Practice	Course Director: Faculty:	Richard M. Toselli Richard M. Toselli, Estrada Bernard, A. John Popp, Robert Harbaugh, Beverly Walters	015
	Learning Objective: Utilizing an evidence-based approach, this course will teach how to apply outcome research and outcome assessment to clinical practice. Upon completion of this course, the participant will be able to define how simple outcome assessment tools can be used in practice.			
016	Critical Care for Nurses	Course Director: Faculty:	Lisa Miller Lawrence Dickinson, Michael Sheinberg, Allan Pelkington, Barbara Boss, Judy Rusek	016
	Learning Objective: This course will review physiologic principles pertinent to the neurologically compromised patient. Intracranial and cardiopulmonary concepts, monitoring devices, and treatment options will be addressed. The participant will be able to discuss appropriate neurosurgical management of the patient in the acute care setting.			

scientific program

SUNDAY, SEPTEMBER 29, 1996

1:00PM-5:00PM/afternoon courses

017	Lateral Skull Base Approaches	Course Directors: Faculty:	Donald C. Wright, Laligam Sekhar Donald C. Wright, Laligam Sekhar, Nathalie Gauthier, Sunil Patel, Brian Holmes, Ghassan Bejjani, David Weitman, Brian Sullivan	017
	<p>Learning Objective: Lateral skull base approaches will be taught through lecture and hands-on cadaveric experience. The participant will be able to describe the surgical anatomy of several lateral skull base approaches and recognize the most appropriate approach for various clinical situations.</p>			
018	Stereotactic Radiosurgery	Course Director: Faculty:	Douglas S. Kondziolka Eben Alexander III, Bruce Pollock, Allan J. Hamilton, Griffith Harsh IV, Christer Lindquist, Abbas Sadikot	018
	<p>Learning Objective: The principles of current and developing stereotactic radiosurgery for the management of brain tumors, vascular malformations and functional disorders will be reviewed. Basic radiobiology pertinent to radiosurgery, dose selection parameters, and clinical criteria for patient selection for these techniques, as well as complication avoidance and management will be presented. The information will be presented through lecture and hands-on use of different stereotactic radiosurgery workstations. Upon completion of this course, the participant will be able to define the role of stereotactic radiosurgery for specific patients with brain disease, understand the specifics of each radiosurgical technology, and discuss complication management.</p>			
019	Intracranial Endoscopy	Course Director: Faculty:	Kim H. Manwaring Carl B. Heilman, John Frazee, Axel Perneczky, Gerard Rodziewicz, Marion L. Walker, Michael Gaab, Christian Matula	019
	<p>Learning Objective: The indications and techniques of intracranial endoscopy will be presented relevant to specific disease management considerations. These include endoscopic third-ventriculostomy, excision of the colloid cyst, the endoscope as an adjunct to skull base surgery, the endoscope as an adjunct to aneurysmal dissection and clipping, and stereotaxic applications including frameless stereotaxy. Hands-on models will convey technical aspects and a sense of the learning curve to master this skill. Upon completion of this course, the participant will be able to evaluate whether the neuroendoscope would be a potential beneficial adjunct or principal tool in the management of these conditions.</p>			
020	Posterior Cervical Stabilization Techniques	Course Director: Faculty:	Vincent Traynelis Richard Assaker, Perry Ball, Charles L. Branch Jr., Michael G. Fehlings, H. Louis Harkey III, Paul Maurer, Richard Osenbach, T. Glenn Pait, Gerald E. Rodts, Timothy C. Ryken	020
	<p>Learning Objective: The indications, techniques, and complications for posterior cervical instrumentation will be reviewed using lecture and hands-on instruction with anatomical models. Upon completion of this course, the participant will be able to recognize the indications for posterior cervical instrumentation and describe the technical application of posterior cervical instrumentation.</p>			
021	Lumbosacral Instrumentation and Fusion Techniques	Course Directors: Faculty:	Regis Haid, Eric Woodard Joseph Alexander, Nevan Baldwin, Brian Cuddy, Scott Erwood, Mark Hadley, Regis Haid, James Hollowell, J. Patrick Johnson, Paul McCormick, Dennis Vollmer, Eric Woodard, William Krauss	021
	<p>Learning Objective: The indications, techniques, and complications for posterior lumbosacral stabilization will be reviewed using lecture and hands-on instruction with anatomical models. Upon completion of this course, the participant will be able to list the indications for lumbosacral stabilization, describe the technique, and recognize the complications of pedicle screw placement, and will also be able to describe methods of sacral and iliac instrumentation.</p>			
022	Minimally Invasive Spinal Surgery	Course Director: Faculty:	Noel I. Perin Noel I. Perin, Tom Mehalic, Richard Fessler, Maurice Smith, Kevin Foley, Parviz Kambin, Bruce McCormack, Mario Zuccarello	022
	<p>Learning Objective: The indications and techniques of percutaneous spinal surgery will be taught through lecture and hands-on laboratory experience using anatomical specimens. Upon completion of this course, the participant will be able to recognize the role of percutaneous spinal techniques in the treatment of patients with spinal disorders and differentiate the specific clinical applications of this technology.</p>			

scientific program

SUNDAY, SEPTEMBER 29, 1996

1:00PM-5:00PM/afternoon courses (continued)

Movement Disorders

Course Director:
Faculty:

Roy A.E. Bakay
Jerry Vitek, L. Dade Lunsford, Roy A.E. Bakay,
Philip Gildenberg, Andres Lozano, Kim Burchiel,
Patrick Kelly, Fredrick Lenz, Ronald Tasker

023

Learning Objective: The practical aspects of functional stereotactic surgery will be represented via lecture, video presentation, and equipment demonstration. The primary emphasis will be on Parkinson's disease but tremor dystonia and hemiballismus will also be discussed. Upon completion of this course, the participant will be able to list patient selection criteria, select preoperative evaluation studies, and describe intraoperative technique. The participant will also be able to discuss anatomical and physiological target localization techniques.

023

Starting a Neurosurgical Practice: All the Business You Need to Know

Course Director:
Faculty:

Emily D. Friedman
Paul Camarata, Robert E. Florin, Mark H. Camel,
Craig A. Van Der Veer, John A. Kusske, Philip W. Tally

024

Learning Objective: The business aspects of neurosurgical practice will be reviewed. Topics to be discussed include: evaluation of contracts, vertical integration and other group practice models, office computerization, coding, billing, and outcome measures as they relate to the private practice setting. Upon completion of this course, the participant will be able to interpret neurosurgical business contracts, evaluate practice models and discuss computerization, coding, billing, and outcome measures as they relate to the private practice setting.

024

Brain Anatomy Workshop for Nurses

Course Director:
Faculty:

Lisa Miller
Lawrence Dickinson

025

Learning Objective: This workshop is designed to familiarize participants with basic neuroanatomy. A hands-on laboratory environment combined with lecture and discussion provides a highly interactive forum. Upon completion of this course, the participant will be able to describe basic anatomical structures and functions, as well as relate anatomical concepts to the assessment of the neurosurgical patient.

025

exhibit hours

Over 350 exhibit booths will be located in Hall A/B of the Montréal Convention Centre. Hours are:

Monday, September 30

8:30 AM-4:00 PM

Tuesday, October 1

8:30 AM-4:00 PM

Wednesday, October 2

8:30 AM-4:00 PM

Support CNS exhibiting companies. Their financial contribution to the Annual Meeting is essential to its success.

scientific program

MONDAY, SEPTEMBER 30, 1996

MONDAY-AT-A-GLANCE

7:30 AM-11:15 AM	General Scientific Session I - Criteria for Patient Selection
8:30 AM-9:00 AM	Honored Guest Presentation
8:30 AM-4:00 PM	Exhibit Viewing
9:00 AM-9:45 AM	Coffee Break in Exhibit Hall
10:30 AM-11:15 AM	Presidential Address
11:15 AM-12:00 NOON	Coffee Break in Exhibit Hall
12:00 NOON-2:30 PM	International Luncheon and Program
12:00 NOON-2:30 PM	Nurses Luncheon
12:00 NOON-2:30 PM	Luncheon Seminars
2:30 PM-5:30 PM	Special Course I - Thoracic and Lumbar Spine Sagittal Symposium
2:30 PM-5:30 PM	Joint Section on Neurotrauma and Critical Care
2:30 PM-5:30 PM	Joint Section on Cerebrovascular Surgery
2:30 PM-5:30 PM	Joint Section on Stereotactic and Functional Neurosurgery
3:30 PM-4:00 PM	Coffee Break in Exhibit Hall

7:30AM-12:00NOON

CRITERIA FOR PATIENT SELECTION

Presiding Officer: Stephen Haines
Moderator: Walter Hall

Learning Objective: This session is devoted to methods for development of criteria for patient selection. The series of didactic presentations will describe the methodology for evaluating patient selection criteria protocols. The participant will be able to describe appropriate strategies for patient treatment plan.

GENERAL SCIENTIFIC SESSION I

GENERAL SCIENTIFIC SESSION I

7:30 AM-7:45 AM	Degenerative Lumbar Spine Instability	Paul McCormick
7:45 AM-8:00 AM	Upper Cervical Spine Trauma	Vincent Traynelis
8:00 AM-8:15 AM	Low Grade Gliomas	Joseph Piepmeier
8:15 AM-8:30 AM	Parkinson's Disease	Ronald Tasker
8:30 AM-9:00 AM	HONORED GUEST PRESENTATION: Posterior Fossa Cranial Nerve Compression Syndromes	Peter Jannetta
9:00 AM-9:45 AM	COFFEE BREAK/EXHIBITS	
9:45 AM-10:00 AM	Temporal Lobe Epilepsy	George Ojemann
10:00 AM-10:15 AM	Carotid Artery Disease	Fredric B. Meyer
10:15 AM-10:30 AM	Monitoring in Traumatic Brain Injury	Raj Narayan
10:30 AM-11:15 AM	PRESIDENTIAL ADDRESS Introduction Presidential Address	Paul Nelson Stephen Haines
11:15 AM-12:00 NOON	COFFEE BREAK/EXHIBITS	

scientific program

MONDAY, SEPTEMBER 30, 1996

12:00NOON-2:30PM

INTERNATIONAL LUNCHEON AND PROGRAM

Introduction: Raymond Sawaya

Speaker: Melvin Cheatom

Learning Objective: This session will feature the International Guest. Participants will be able to evaluate the international distribution of neurosurgery including the needs for technical advancement and education.

12:00NOON-2:30PM/luncheon seminars

101/101

Practical Clinical Spinal Biomechanics:
"Made Ridiculously Simple"

Moderator:
Speakers:

Edward Benzel
Eric Woodard, Nevan Baldwin, Vincent Traynelis

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to describe spinal biomechanical principles and apply biomechanical concepts to specific clinical disorders.

100

101/102

103/103

Anterior Endoscopic Approaches to the
Thoracic & Lumbar Spine: Thoracoscopy,
Laparoscopy & Retroperitonealoscropy

Moderator:
Speakers:

Curtis A. Dickman
H. Louis Harkey III, Stephen Papadopoulos, Daniel Rosenthal

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to differentiate anterior techniques for endoscopic treatment of spinal disorders and their indications, contraindications, and selection criteria.

103/104

105/105

"How I Do It"—Cervical Spine

Moderator:
Speaker:

Mark Hadley
Volker Sonntag

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to improve their ability to manage complicated disorders of the cervical spine and select among different treatment alternatives.

105/106

107/107

Consultants Corner—Cerebrovascular

Moderator:
Speakers:

Arthur Day
Nicolas De Tribolet, Gazi Yasargil, Robert Solomon,
Ralph Dacey, L. N. Hopkins, Joshua Bederson

Learning Objective: The format of this seminar utilizes case studies. After this course, the participant will be able to improve their ability to diagnose complicated cerebrovascular disorders based on history, physical exam, and radiological evaluation. The participant will also improve their ability to organize appropriate information for decision making and to assess treatment alternatives for complicated cerebrovascular disorders.

107/108

109/109

Management of Acute Cerebral Ischemia

Moderator:
Speakers:

Philip Stieg
John Anson, Frederic Meyer, Joseph Eskridge, Warren Selman

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to recognize various acute cerebral ischemia syndromes and differentiate between treatment options for cerebral ischemia.

109/110

111/111

Advances in Critical Care Management
of Subarachnoid Hemorrhage

Moderator:
Speakers:

Winfield Fisher III
J. Max Findlay, Lawrence Dickinson, Jacques Morcos,
David W. Newell

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. The latest advances in critical care management of subarachnoid hemorrhage will be discussed. These advances are directed toward maintaining proper cerebral perfusion, minimizing vasospasm, and preventing recurrent hemorrhage. After this course, the participant will be able to analyze the applicability of these methods for their clinical practice.

111/112

scientific program

MONDAY, SEPTEMBER 30, 1996

12:00 NOON-2:30 PM/luncheon seminars (continued)

113/114

Cerebrovascular Crises Associated with Pregnancy

Moderator: Christopher Loftus
Speakers: Joseph Zabramski, Issam Awad, Daniele Rigamonti

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to describe the management of cerebrovascular disorders associated with pregnancy and select appropriate treatments.

113/114

115/116

New Therapeutic Strategies for the Management of Head Injuries

Moderator: Sean Grady
Speakers: M. Ross Bullock, Julian Bailes, Donald Marion

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to compare the new treatment approaches for traumatic brain injury and recognize how these modalities can influence functional outcome.

115/116

NURSING LUNCHEON SEMINAR

117

Contemporary Issues in Neuro-Oncology Nursing

Moderator: Lisa Miller
Speakers: Catherine Oliverio, William Couldwell, Karen Smith

Learning Objective: This seminar will be directed toward neuroscience nurses in practice as well as interested physician assistants and allied health professionals. Innovative concepts in the management of the neuro-oncology patient assist in the understanding of how Tomoxifen drug therapy and other strategies may optimize patient outcomes.

117

119/120

Intracranial Frameless Surgical Navigations Systems

Moderator: Robert Maciunas
Speakers: John Alder, Barton Guthrie, Richard Bucholz

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to describe applications for intraoperative guidance systems and stereotactic techniques in neurosurgery.

119/120

121/122

Treatment of CNS Infections

Moderator: Mark Rosenblum
Speakers: Paul Cooper, Isabelle Germano, Robert Levy

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to differentiate the treatment options for CNS infections.

121/122

123/124

Preparation for Oral Neurosurgery Board Examinations

Moderator: Julian T. Hoff
Speakers: Raj Narayan, J. Charles Rich, Howard Kaufman

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice who are interested in preparing for the oral examination for the American Board of Neurological Surgeons. After this course, the participant will be able to approach clinical problems in neurosurgery using logical and appropriate management strategies similar to those employed in the oral board format.

No Category 1 Credits Awarded

123/124

125/126

Percutaneous Management of Trigeminal Neuralgia

Moderator: Robert Wilkins
Speakers: Kim Burchiel, Jeffrey Brown, G. Robert Nugent

Learning Objective: In this seminar, the various percutaneous methods for treating patients with trigeminal neuralgia will be reviewed. The techniques of partial sensory rhizotomy, radiofrequency thermal coagulation, glycerol rhizolysis, and percutaneous balloon compression will be described. The participant will be able to evaluate treatment results after percutaneous methods have been tried, and learn how to differentiate trigeminal neuralgia from other facial pain syndromes.

125/126

127/128

Video Seminar: Advances in Cranial Neuroendoscopy

Moderator: Alan Cohen
Speakers: James Drake, Kim Manwaring, Carolyn Carey, Harold ReKate

Learning Objective: In this seminar, the applications of cranial neuroendoscopy to neurosurgical disease processes will be presented and highlighted with videotape footage of selected surgical cases. After this seminar, the participant will be able to explain the expanding role of neurosurgical endoscopic surgery in the treatment of hydrocephalus, loculated ventricles, shunt placement, and tumor removal.

127/128

scientific program

MONDAY, SEPTEMBER 30, 1996

12:00NOON-2:30PM/luncheon seminars (continued)

129/130	"How I Do It"—Craniopharyngioma	Moderator: Speaker:	Fred Epstein Harold J. Hoffman	129/130
	Learning Objective: In this seminar, a complete overview of the management of the patient with a craniopharyngioma will be presented by one of the world's foremost authorities on the subject. After this seminar, the participant will be able to assess the different strategies involved in selecting a given or combined surgical approach to a craniopharyngioma.			
131/132	Issues and Controversies in Pallidotomy	Moderator: Speakers:	Michael Dogali Roy A.E. Bakay, Andres Lozano, Ron Alterman	131/132
	Learning Objective: In this seminar, the rationale for selection of patients and choice of different techniques for pallidotomy for Parkinson's disease will be discussed and outcome data reviewed. The issues of imaging, microelectrode use, and the size and location of lesions will be considered and the relative effects of pallidotomy on dopa dyskinesia, bradykinesia, and tremor. After this seminar, the participant will be able to select appropriate patients for pallidotomy, and be able to improve their ability to perform the procedure with realistic outcome.			
133/134	Epilepsy Surgery in Children	Moderator: Speakers:	Robert Maxwell Frederick Boop, Warwick Peacock, Jean-Guy Villemure, Daniel Silbergeld	133/134
	Learning Objective: This seminar will review the work-up and investigation of children with epilepsy who are candidates for surgery. The different seizure types will be presented along with the imaging modalities now available to uncover structural lesions. After this seminar, the participant will be able to determine which children will benefit from surgery and assess the different surgical options available for each type of condition.			
135/136	"Point: Counterpoint": Acoustic Tumors	Moderator: Speakers:	Lawrence Pitts Charles Tator, L. Dade Lunsford	135/136
	Learning Objective: After this seminar, the participant will be able to determine the indications for surgery and radiosurgery for patients with acoustic neuromas. This seminar will review the natural history, patient presentation, and surgical outcome of patients with acoustic neuromas. Selection of patients and outcome will also be presented for patients treated by stereotactic radiosurgery. The session will be conducted in the format of a debate with a critical appraisal of the relative merits of surgery and radiosurgery.			
137/138	Advances in Pituitary Surgery	Moderator: Speakers:	Ivan Ciric Jules Hardy, Nelson Oyesiku, Edward R. Laws, Jr.	137/138
	Learning Objective: This seminar will present the latest advances in pituitary surgery including the utility of diagnostic imaging studies and sophisticated endocrinologic investigations. After this seminar, the participant will be able to classify lesions of the pituitary region, and formulate diagnostic and treatment methods based on a review of these latest advances.			
139/140	Risks and Complications of Skull Base Surgery	Moderator: Speakers:	Chandraneth Sen Ossama Al-Mefty, Marc Mayberg, Laligam Sekhar	139/140
	Learning Objective: In this seminar, the major approaches to the cranial skull base will be presented. Emphasis will be on the selection of a given approach for a selected lesion, and the risks and complications which may arise from radical surgery. After this seminar, the participant will be able to determine the approach for selected lesions and recognize the risks and complications which may arise from radical surgery of the skull base.			
141/142	Upper Extremity Entrapment Syndrome	Moderator: Speakers:	John McGillicuddy Peter Richardson, Allan Friedman, Raj Midha	141/142
	Learning Objective: In this seminar, the surgical management of upper extremity entrapment syndrome will be reviewed as well as the relevant surgical anatomy. After this seminar, the participant will be able to recognize common patient presentation patterns of nerve entrapment, and evaluate electrophysiologic tests to aid in diagnosis.			
143/144	Pineal Region Tumors—Surgical Approaches and Diagnostic Challenges	Moderator: Speakers:	Jeffrey Bruce Michael L.J. Apuzzo, Tadanori Tomita, Christian Sainte-Rose	143/144
	Learning Objective: In this seminar, a contemporary view of the spectrum of processes affecting the pineal region will be presented. After this seminar, the participant will be able to recognize, interpret, and discuss the major issues in the management of pineal region masses in adults and children, and will also be able to formulate a comprehensive differential diagnosis of tumor types residing in the pineal region.			

scientific program

MONDAY, SEPTEMBER 30, 1996

2:30PM-5:30PM

THORACIC AND LUMBAR SPINE SAGITTAL ALIGNMENT: DIAGNOSIS AND MANAGEMENT CONSIDERATIONS

Moderator: Edward Benzel

Learning Objective: This course is directed to practicing neurosurgeons, neurosurgical residents, physician assistants, nurse clinicians, and nurses participating in the care of patients with thoracic and lumbar spine alignment abnormalities. After this course, the participant will be able to assess and evaluate management of sagittal alignment as well as the techniques used for fusion and instrumentation of the thoracolumbar spine. The management of complex sagittal plane deformities will be reviewed in detail as well as the diagnosis and treatment of degenerative and post-traumatic thoracolumbar deformities. Upon completion of this course, the participant will have a thorough understanding of the etiology, pathophysiology, and management of thoracolumbar sagittal alignment abnormalities.

SPECIAL COURSE I
INTERNATIONAL SPINE SYMPOSIUM

SPECIAL COURSE I
INTERNATIONAL SPINE SYMPOSIUM

2:30 PM-2:50 PM	Sagittal Balance: Assessment and Management Options	Roger Jackson
2:50 PM-3:10 PM	Fusion and Instrumentation Techniques	Paul McCormick
3:10 PM-3:30 PM	Management of Degenerative Deformities	Kevin Foley
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:20 PM	Management of Post-traumatic Deformities	Max Aebi
4:20 PM-4:40 PM	Management of Complex Sagittal Plane Deformities	Phillipe Gillet
4:40 PM-5:30 PM	OPEN CASE DISCUSSION	All Speakers

2:30PM-5:30PM

NEUROSURGICAL CRITICAL CARE—WHO'S IN CHARGE?

Moderator: Jack Wilberger

Learning Objective: After attending this session, the participant will have an improved understanding of the management of neurotrauma in the critical care setting. The participant will be able to evaluate the management of neurotrauma from both an academic, intensivist, and private practitioner's perspective, and will also have an increased understanding of current research in neurotrauma.

JOINT SECTION ON NEUROTRAUMA AND CRITICAL CARE

JOINT SECTION ON NEUROTRAUMA AND CRITICAL CARE

2:30 PM-2:45 PM	Neurotrauma Critical Care Survey	Donald W. Marion
2:45 PM-3:00 PM	Neurotrauma Critical Care—The Academic Perspective	Michael J. Rosner
3:00 PM-3:15 PM	Neurotrauma Critical Care—The Intensivist's Perspective	Dan Hanley
3:15 PM-3:30 PM	Neurotrauma Critical Care—The Private Practitioner's Perspective	Jeff Lobosky
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:10 PM	Brain Trauma Fellowship Presentation	Nelson Oyesiku
4:10 PM-5:30 PM	Open Scientific Session	Moderators: Alex Valadka, John Atkinson

scientific program

MONDAY, SEPTEMBER 30, 1996

2:30PM-5:30PM

CONTROVERSIES IN THE MANAGEMENT OF CAROTID ARTERY STENOSIS

Moderators: Joshua B. Bederson and H. Hunt Batjer

Learning Objective: After attending this session, the participant will have an improved understanding of the treatment of carotid stenosis, and will be able to define the indications for preoperative angiography and describe the management of asymptomatic carotid stenosis, restenosis, and occlusion. The participant will also be able to describe techniques of carotid exposure, endarterectomy, and reoperation as well as define adjuncts which are helpful during surgery. In addition, the participant will have an increased understanding of the endovascular treatment of carotid stenosis and the current state of research in the field of vascular neurosurgery.

2:30 PM-2:50 PM	Indications for Preoperative Angiography for Carotid Endarterectomy	Christopher Ogilvy
2:50 PM-3:10 PM	Management of Asymptomatic Carotid Stenosis, Restenosis, and Occlusion	David Piepgras
3:10 PM-3:30 PM	Techniques of Carotid Exposure, Endarterectomy, and Reoperation	Christopher Loftus
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:20 PM	Adjuncts During Carotid Surgery	Joseph Zabramski
4:20 PM-4:40 PM	Endovascular Treatment of Carotid Stenosis	L. N. Hopkins
4:40 PM-5:30 PM	Open Scientific Session	Moderators: Joshua B. Bederson, H. Hunt Batjer

JOINT SECTION ON CEREBROVASCULAR SURGERY

JOINT SECTION ON CEREBROVASCULAR SURGERY

2:30PM-5:30PM

CURRENT AND FUTURE MANAGEMENT OF METASTATIC BRAIN TUMORS

Moderators: L. Dade Lunsford and Eben Alexander III

Learning Objective: After attending this session, the participant will have an improved understanding of the treatment of metastatic brain tumors, and will be able to define the role of surgery, stereotactic radiosurgery, and radiation therapy in the treatment of these lesions. The participant will also be able to describe the cost effectiveness of various treatments of brain tumors. After attending this session, the participant will have an increased understanding of the current research that is ongoing in the field of stereotactic and functional neurosurgery.

2:30 PM-2:45 PM	Surgical Removal	Raymond Sawaya
2:45 PM-3:00 PM	Stereotactic Radiosurgery	Eben Alexander III
3:00 PM-3:15 PM	Cost Effective Analysis	Michael Rutigliano
3:15 PM-3:30 PM	The Role of Radiation Therapy	Minesh Mehta
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:30 PM	Panel Discussion	
4:30 PM-5:30 PM	Open Scientific Session	Moderators: L. Dade Lunsford, David Roberts

JOINT SECTION ON STEREOTACTIC AND FUNCTIONAL NEUROSURGERY

JOINT SECTION ON STEREOTACTIC AND FUNCTIONAL NEUROSURGERY

scientific program

TUESDAY, OCTOBER 1, 1996

TUESDAY-AT-A-GLANCE

7:30 AM-11:15 AM	General Scientific Session II - How the Operation Is Done
8:30 AM-9:00 AM	Honored Guest Presentation
8:30 AM-4:00 PM	Exhibit Viewing
9:00 AM-9:45 AM	Coffee Break in Exhibit Hall
11:05 AM-11:15 AM	Convocation and Awards Presentation
11:15 AM-12:00 NOON	Coffee Break in Exhibit Hall
12:00 NOON-2:30 PM	Residents/Honored Guest Luncheon
12:00 NOON-2:30 PM	Nurses Luncheon
12:00 NOON-2:30 PM	Luncheon Seminars
2:30 PM-5:30 PM	Special Course II - Neurosurgical Management of Sports Injuries
2:30 PM-5:30 PM	Joint Council of State Neurosurgical Societies
2:30 PM-5:30 PM	Joint Section on Pediatric Neurological Surgery
2:30 PM-5:30 PM	Joint Section on Disorders of the Spine and Peripheral Nerves
3:30 PM-4:00 PM	Coffee Break in Exhibit Hall
4:30 PM-5:30 PM	Annual Business Meeting

7:30AM-12:00NOON

HOW THE OPERATION IS DONE

Presiding Officer: Marc Mayberg

Moderator: Winfield Fisher III

Learning Objective: This general scientific session will be directed towards residents and neurosurgeons in practice as well as interested nurses and physicians assistants. The session will address current issues regarding each of these surgical procedures and clinical presentations, but more specifically, will deal with "how to" aspects of each of the surgical techniques. The participant will be able to evaluate the technical aspects of operative procedures employed in the treatment of various neurosurgical procedures.

7:30 AM-7:50 AM	Degenerative Lumbar Spine Instability	Volker Sonntag
7:50 AM-8:10 AM	Upper Cervical Spine Trauma	Curtis Dickman
8:10 AM-8:30 AM	Low Grade Gliomas	Mitchel Berger
8:30 AM-9:00 AM	HONORED GUEST PRESENTATION Posterior Fossa Cranial Nerve Compression Syndromes	Peter Jannetta
9:00 AM-9:45 AM	COFFEE BREAK/EXHIBITS	
9:45 AM-10:05 AM	Parkinson's Disease	Roy A.E. Bakay
10:05 AM-10:25 AM	Temporal Lobe Epilepsy	Andre Olivier
10:25 AM-10:45 AM	Carotid Artery Disease	Christopher Loftus
10:45 AM-11:05 AM	Monitoring in Traumatic Brain Injury	Lawrence H. Pitts
11:05 AM-11:15 AM	CONVOCATION AND AWARD PRESENTATIONS	
11:15 AM-12:00 NOON	COFFEE BREAK/EXHIBITS	

GENERAL SCIENTIFIC SESSION II

GENERAL SCIENTIFIC SESSION II

scientific program

TUESDAY, OCTOBER 1, 1996

12:00NOON-2:30PM

RESIDENTS/HONORED GUEST LUNCHEON

Moderator: Peter Janetta

Learning Objective: This luncheon will feature the Honored Guest. The participant will be able to evaluate the etiologies, diagnostic strategies, treatment plans, and outcomes in the treatment of posterior fossa syndromes.

12:00NOON-2:30PM/luncheon seminars

Degenerative Lumbar Spondylolisthesis:
"To Fuse or Not to Fuse?"

Moderator:
Speakers:

Charles L. Branch, Jr.
John A. Jane, Charles Stillerman, Paul Nelson

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to compare different treatment options for decompression and for stabilization of the lumbar spine for patients with degenerative spondylolisthesis.

Approaches to the Thoracic Spine:
Indications & Techniques for
Anterior vs. Posterior Approaches

Moderator:
Speakers:

Richard G. Fessler
Michael G. Fehlings, Christopher Paramore, Gerald Rodts

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to compare the options available to surgically approach thoracic spine.

Techniques of Bone Grafting
and Biology of Spinal Fusion

Moderator:
Speakers:

Mark N. Hadley
Regis Haid, Jr., James Hollowell, Christopher Shaffrey

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to discuss methods to maximize bone healing and graft incorporation, and choose operative techniques that will enhance surgical success.

"How I Do It"—Intracranial Aneurysms

Moderator:
Speaker:

Thomas Origitano
Gazi Yasargil

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to describe the available techniques for management of aneurysms, and choose a variety of operative approaches.

Therapeutic Options for AVMs

Moderator:
Speakers:

Philip Stieg
L. Dade Lunsford, Cameron McDougall, Duke Samson,
Nobuo Hashimoto

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to improve their evaluation and treatment of intracranial arteriovenous malformations.

Vascular Augmentation Techniques
for Cerebral Ischemia

Moderator:
Speakers:

Howard Yonas
Harry Goldsmith, M. Christopher Wallace, Robert E. Spetzler

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to recognize various symptoms associated with cerebral ischemia and differentiate between treatment options.

scientific program

TUESDAY, OCTOBER 1, 1996

12:00NOON~2:30PM/luncheon seminars (continued)

213/214

"Point: Counterpoint": Basilar Tip Aneurysms—Coils Versus Clips

Speakers: H. Hunt Batjer, L. N. Hopkins

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to compare endovascular approaches and surgical approaches for the treatment of basilar tip aneurysms.

213/214

215/216

New Therapeutic Strategies for the Management of Spinal Cord Injuries

Moderator: Charles Tator
Speakers: Albert Aguayo, Wise Young, Barth Green

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to differentiate specific injury patterns, appropriate treatment and outcomes for spinal cord injuries.

215/216

217/218

Critical Care Strategies for the Head Injured Patient

Moderator: Jack Wilberger
Speakers: Randall Chesnut, Claudia Robertson, Raj Narayan

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. The faculty will describe and illustrate the state-of-the-art critical care management of patients with head injury. After this course, the participant will be able to analyze treatment methodology and formulate appropriate protocols in the treatment of the head injured patient.

217/218

NURSING LUNCHEON SEMINAR

219

Current Topics for Nurses: Neurotrauma and Pediatric Update

Moderator: Lisa Miller
Speakers: Barbara Boss, Emmy Miller, Erica Ciro

Learning Objective: Neurotrauma and pediatric related presentations explore patient care issues from the ambulatory care to rehabilitation phases of acute traumatic brain injury, spinal cord injury, and myelomeningocele patients. After this course, the participant will be able to describe current research, theory, and clinical practice relevant to the care of patients throughout the healthcare experience.

219

221/222

The Revolution in the Delivery of Neurosurgical Health Care in the Present Marketplace: "Why Am I Working Harder and Making Less?"

Moderator: Stanley Pelofsky
Speakers: James Bean, Timothy Harrington, Lyal Leibrock, Russell Travis

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be familiar with current changes in health care organization and delivery, as it pertains to the clinical proactive and business practice of neurosurgery.

No Category 1 Credits Awarded

221/222

223/224

Neurosurgical Treatments for Cancer Pain

Moderator: Andrew G. Shetter
Speakers: Richard Penn, Ronald Tasker, Michael Stechison

Learning Objective: This seminar will discuss a wider variety of options for treatment of cancer pain including spinal and ventricular infusing, electrical stimulation techniques, and ablative methods. After this course, the participant will be able to assess the variety of surgical techniques available for the treatment of cancer pain, including the indications for each technical method employed and their success rates, as well as the complications.

223/224

225/226

"Consultants Corner" - Challenging Cases in Pediatric Neurosurgery

Moderator: Robin Humphreys
Speakers: Jack Walker, Terence Myles, Claude Mercier, Bruce Storrs

Learning Objective: This seminar brings together a panel of experts in pediatric neurosurgery who will present some of their most challenging cases. Registrants are encouraged to bring their difficult cases to share with the panel. After this course, the participant will be able to manage difficult cases in pediatric trauma, spinal dysraphism, neuro-oncology, and vascular disease.

225/226

scientific program

TUESDAY, OCTOBER 1, 1996

12:00NOON-2:30PM/luncheon seminars (continued)

227/228

Posterior Fossa and Brainstem Tumors in Children

Moderator: James T. Rutka
Speakers: Corey Raffel, Liliana Goumnerova, Joseph Petronio

Learning Objective: This seminar will review the clinical presentation, investigation and management of a child with a posterior fossa or brainstem tumor. After this seminar, the participant will be able to describe the current classification system of brainstem tumors in children and manage the treatment of children with cerebellar astrocytomas, ependymomas, and medulloblastomas.

227/228

229/230

"How I Do It"—The Tethered Cord

Moderator: Mark Dias
Speaker: David McLone

Learning Objective: In this seminar, one of the world's leading authorities on spinal dysraphism will describe the presentation, investigation, diagnosis, and management of the patient with a tethered spinal cord. After this seminar, the participant will be able to diagnose patients presenting with tethered cord syndromes and to make appropriate treatment recommendations.

229/230

231/232

Epilepsy Surgery in Adults

Moderator: George Ojemann
Speakers: Nicholas Barbaro, Andre Olivier, Dennis Spencer

Learning Objective: The purpose of this seminar will be to explore the practical applications of new advances in evaluating patients with medically intractable seizures. The faculty will examine controversies such as the appropriate epileptogenic volume for resection and the type of operation employed in the adult population. After this seminar, the participant will be able to classify methods of surgical treatment for epilepsy.

231/232

233/234

Approaches to Lateral and Third Ventricles

Moderator: Albert Rhoton
Speakers: Michael L.J. Apuzzo, William Shucart, Harold Rekate

Learning Objective: In this seminar, a classification system will be presented for lesions which are located in the lateral and third ventricles. The different surgical approaches to these lesions and the salient neuroanatomy of the lateral and third ventricles will be reviewed. After this seminar, the participant will be able to explain how patient presentation and features on the diagnostic imaging studies influence the neurosurgeon's selection of a given approach to the lateral and third ventricles.

233/234

235/236

"How I Do It"—Surgery for Cerebral Gliomas

Moderator: Mark Rosenblum
Speaker: Charles B. Wilson

Learning Objective: In this seminar, one of the world's foremost authorities on cerebral gliomas will present the role of surgery on the removal of low grade and anaplastic gliomas. After this seminar, the participant will be able to describe the classification system of cerebral gliomas in adults and the selection of a surgical approach based on tumor size, location, and patient age.

235/236

237/238

Consultants Corner: Neuro-Oncology

Moderator: Donlin Long
Speakers: Michael L.J. Apuzzo, Bill Couldwell, Philip Gutin

Learning Objective: This seminar will utilize case studies. The participant will be able to improve his/her ability to make a differential diagnosis of complicated cranial tumors based on history, physical examination, and radiological evaluations. After this seminar, the participant will also improve their ability to organize appropriate information for decision-making and assess treatment alternatives for cranial tumors.

237/238

239/240

History Vignettes in Neurosurgery (I)

Moderator: James Goodrich
Speakers: Samuel Greenblatt, Richard Davis

Learning Objective: In this seminar, topics of historical importance in neurosurgery will be presented such as the history of skull base surgery, phrenology, and the role of neurosurgeons in World War II. After this seminar, the participant will be able to describe the role of history in the development of neurosurgical principles and practice.

No Category 1 Credits Awarded

239/240

housing deadline: august 26, 1996
advance registration deadline: august 28, 1996

scientific program

TUESDAY, OCTOBER 1, 1996

12:00NOON-2:30PM/luncheon seminars (continued)

241/242

"How I Do It"—Evaluation and Management of Brachial Plexus Injuries

Moderator: Michel Kliot
Speaker: David Kline

Learning Objective: In this seminar, one of the world's foremost authorities on brachial plexus surgery will review the evaluation and management of brachial plexus injuries in patients. The selection of patients into non-operative and operative subtypes will be emphasized. After this course, the participant will be able to localize lesions as they occur within the brachial plexus based on neurological exam, imaging studies, and electrophysiologic tests.

241/242

243/244

Innovations in Technology and Techniques in Neurosurgery: A Look Toward the Future

Moderators: Richard Bucholz, M. Peter Heilbrun

Learning Objective: Submitted abstracts will focus on innovations in surgical techniques and technological advances. Presentations will cover the spectrum of initial laboratory prototypes to "state of the art" clinical applications. The session will provide an interactive environment for audience participation. After this course, the participant will be able to evaluate the state of current technology for clinical application today, with a glimpse toward the future.

243/244

2:30PM-5:30PM

NEUROSURGICAL MANAGEMENT OF SPORTS INJURIES

Moderator: Joseph Maroon
Co-Moderator: Julian Bailes

Learning Objective: This course is directed toward the practicing neurosurgeons, neurosurgical residents, physician assistants, nurse clinicians, and nurses participating in the care of patients who have sustained head injuries as a result of sports activities. The etiology, classification, biomechanics, and decision analysis algorithms in the treatment of athletic concussions will be reviewed. After this course, the participant will be able to describe metabolic basis of cerebral concussion and its implications in the management of patients. Upon completion of this course, the participant will have a thorough understanding of the metabolic basis, pathophysiology, treatment, and outcome in patients who sustain concussive injuries secondary to athletic activities.

SPECIAL COURSE II

SPECIAL COURSE II

2:30 PM-2:50 PM	The Metabolic Basis of Cerebral Concussion—Implications for Management	Donald Becker
2:50 PM-3:10 PM	Cerebral Concussion in Athletics—Definitions, Biomechanics, and Decision-Making	Joseph Maroon
3:10 PM-3:30 PM	Neuropsychological Testing in High School and Professional Athletes—A New Paradigm for Management	Julian Bailes
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:20 PM	Professional Boxing and Repetitive Head Injury—Relationship to Alzheimer's Disease or Parkinson's? Should a Ban Be Recommended by Organized Neurosurgery?	Barry Jordan
4:20 PM-4:40 PM	Post-Concussion Syndrome and the Professional Athlete—Personal Perspective on Concussion	Harry Carson, Merryl Hodge
4:40 PM-5:00 PM	Controversial Problems in Athletes with Spinal Abnormalities	Julian Bailes
5:00 PM-5:30 PM	PANEL DISCUSSION	

scientific program

TUESDAY, OCTOBER 1, 1996

2:30PM-5:30PM

WHAT MAKES A GOOD QUALITY RESIDENCY TRAINING PROGRAM AND PRACTICING NEUROSURGEON

Moderators: Sidney Tolchin and Richard Toselli

Learning Objective: After attending this section seminar, the participant will have an improved understanding of quality issues referable to residency training programs and practicing neurosurgeons. The participant will be able to describe the American Board of Neurological Surgery's requirements for certification in the specialty of neurological surgery and an increased understanding of current research topics in the field of socioeconomic issues as they relate to neurological surgery.

2:30 PM-2:45 PM	Overview of the Methodological Measurements of Quality	Sidney Tolchin
2:45 PM-3:00 PM	Institutional and Program Requirements for Neurosurgical Training in the U.S.	David Piepgras
3:00 PM-3:15 PM	A System for Selecting Good Quality Individuals for Neurosurgery Residency Training	Donlin Long
3:15 PM-3:30 PM	What Factors Make a Neurosurgery Training Program Produce a Good Quality Neurosurgeon	Edward R. Laws, Jr.
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:15 PM	Requirements for Certification by the American Board of Neurological Surgery	Julian Hoff
4:15 PM-4:30 PM	What Is a Good Quality Practicing Neurosurgeon?	James Bean
4:30 PM-5:00 PM	PANEL DISCUSSION	David Piepgras, Donlin Long, Julian Hoff, James Bean, Edward R. Laws, Jr.
5:00 PM-5:30 PM	OPEN SCIENTIFIC SESSION	Moderators: Stan Pelofsky, Lyal G. Liebrock

2:30PM-5:30PM

SEVERE PEDIATRIC HEAD INJURY

Moderator: Tom Luerssen

Learning Objective: After attending this seminar, the participant will be able to define the management controversies which involve the treatment of severe pediatric head injury. The participant will be able to describe the pharmacologic treatments for pediatric head injuries as well as the role for intracranial pressure monitoring in these patients. After attending this session, the participant will have an increased understanding of the current research which is ongoing in the field of pediatric neurosurgery.

2:30 PM-2:45 PM	Management Controversies	Tom Luerssen
2:45 PM-3:00 PM	Pharmacologic Treatments: Past, Present, and Future	Ann-Christine Duhaime
3:00 PM-3:15 PM	Intracranial Pressure Monitoring—Indication, Techniques and Role of CSF Drainage	Bruce Cherny
3:15 PM-3:30 PM	DISCUSSION	
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-5:30 PM	OPEN SCIENTIFIC SESSION	Moderators: Harold L. Rekate, John P. Laurent

scientific program

TUESDAY, OCTOBER 1, 1996

2:30PM-5:30PM

CURRENT APPROACHES TO SPINAL INJURY

Moderators: Edward Benzel and Vincent C. Traynelis

Learning Objective: After attending this section session, the participant will have an improved understanding of the treatment of spinal injuries and will be able to explain the management of pediatric spinal column injuries, cervical spinal trauma, and thoracolumbar spinal trauma. The participant will have an increased understanding of the current research which is ongoing in the field of the spine and peripheral nerves.

2:30 PM-2:50 PM	Pediatric Spinal Column Injuries	Arnold H. Menezes
2:50 PM-3:10 PM	Cervical Spine Trauma	Curtis Dickman
3:10 PM-3:30 PM	Thoracolumbar Spinal Trauma	David Cahill
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-5:30 PM	OPEN SCIENTIFIC SESSION	Moderators: Mark Hadley, Dennis Vollmer

JOINT SECTION ON DISORDERS OF
THE SPINE & PERIPHERAL NERVES

JOINT SECTION ON DISORDERS OF
THE SPINE & PERIPHERAL NERVES

4:30PM-5:30PM

ANNUAL BUSINESS MEETING

President Stephen Haines will preside over the 1996 Annual Business Meeting.

registration hours

Saturday, September 28	2:00 PM-7:00 PM
Sunday, September 29	7:00 AM-5:30 PM
Monday, September 30	7:00 AM-5:30 PM
Tuesday, October 1	7:00 AM-5:30 PM
Wednesday, October 2	7:00 AM-5:30 PM

scientific program

WEDNESDAY, OCTOBER 2, 1996

WEDNESDAY-AT-A-GLANCE

8:00 AM-11:15 AM	General Scientific Session III - Analysis of Outcome
8:30 AM-9:00 AM	Honored Guest Presentation
8:30 AM-4:00 PM	Exhibit Viewing
9:00 AM-9:45 AM	Coffee Break in Exhibit Hall
9:45 AM-9:55 AM	CNS Resident Award Paper
11:15 AM-12:00 NOON	Coffee Break in Exhibit Hall
12:00 NOON-2:30 PM	Nurses Luncheon
12:00 NOON-2:30 PM	Luncheon Seminars
2:30 PM-5:30 PM	Special Course III - Outcome Analysis in Neurosurgery
2:30 PM-5:30 PM	Joint Section on Tumors
2:30 PM-5:30 PM	Joint Section on Pain
3:30 PM-4:00 PM	Coffee Break in Exhibit Hall
6:30 PM-9:30 PM	Annual Reception and Buffet Dinner

7:30AM-12:00NOON

ANALYSIS OF OUTCOME

Presiding Officer: H. Hunt Batjer

Moderator: Tom O'rigano

Learning Objective: After attending this session, the participant will gain an understanding of the mechanism by which outcome analysis is performed for each topic and learn how to apply outcome analysis to their clinical practice as it applies to each topic in areas of patient satisfaction, intervention, and interactions with third party payers.

7:30 AM-7:50 AM	Degenerative Lumbar Spine Instability	Richard G. Fessler
7:50 AM-8:10 AM	Upper Cervical Spine Trauma	Regis W. Haid
8:10 AM-8:30 AM	Low-Grade Gliomas	Mark Bernstein
8:30 AM-9:00 AM	HONORED GUEST PRESENTATION Posterior Fossa Cranial Nerve Compression Syndromes	Peter Jannetta
9:00 AM-9:45 AM	COFFEE BREAK/EXHIBITS	
9:45 AM-9:55 AM	CNS RESIDENT AWARD PAPER	TBA
9:55 AM-10:15 AM	Parkinson's Disease	G. Rees Cosgrove
10:15 AM-10:35 AM	Temporal Lobe Epilepsy	Webster Pilcher
10:35 AM-10:55 AM	Carotid Artery Disease	Marc Mayberg
10:55 AM-11:15 AM	Monitoring in Traumatic Brain Injury	Jack Wilberger
11:15 AM-12:00 NOON	COFFEE BREAK/EXHIBITS	

GENERAL SCIENTIFIC SESSION III

GENERAL SCIENTIFIC SESSION III

scientific program

WEDNESDAY, OCTOBER 2, 1996

12:00NOON-2:30PM/luncheon seminars

301/302

Clinical Applications of Spinal Stereotaxis

Moderator:
Speakers:

Kevin Foley
Iain Kalfas, Allan Hamilton, Richard G. Fessler

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to differentiate the different methods available for spinal stereotaxis and understand their range of clinical applications.

301/302

303/304

Cervical Spondylosis—When To Operate and Choosing an Operative Approach

Moderator:
Speakers:

M. Sean Grady
Gary Rea, Charles Fager, Richard Saunders

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to compare the different clinical options for evaluating and treating cervical spondylosis.

303/304

305/306

Consultants Corner: Cervical Spine

Moderator:
Speakers:

Stewart Dunsker
Vincent Traynelis, Dennis Vollmer, Richard Assaker,
H. Louis Harkey III, Ronald Apfelbaum, Renn Holness

Learning Objective: The format of this seminar utilizes case studies. After this course, the participant will be able to improve their ability to make differential diagnoses of complicated disorders of the cervical spine based on history, physical exam, and radiological evaluation and also improve their ability to organize appropriate information for decision-making and improve their ability to assess treatment alternatives for complicated cervical spine disorders.

305/306

307/308

Endovascular Therapy for Cerebrovascular Disorders

Moderator:
Speakers:

Duke Samson
L. N. Hopkins, Joseph Eskridge, Cameron McDougall

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to differentiate among cerebrovascular disorders which are amenable to endovascular therapy. The results and complications will be reviewed.

307/308

309/310

Management of Carotid Occlusive Disease

Moderator:
Speakers:

Fredric B. Meyer
Marc Mayberg, Christopher Loftus, Winfield Fisher III,
Gerard Mohr

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to describe various techniques used for treatment of carotid occlusive disease.

309/310

311/312

Management of Poor-Grade Aneurysm Patients

Moderator:
Speakers:

Joshua Bederson
H. Hunt Batjer, Robert Solomon, Robert F. Spetzler

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to formulate treatment strategies for poor-grade patients with intracranial aneurysms.

311/312

313/314

Management of Penetrating Craniocerebral Injuries

Moderator:
Speakers:

Michael Carey
Richard Ellenbogen, Timothy Harrington, Howard Kaufman

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to formulate treatment strategies for patients with penetrating craniocerebral injuries.

313/314

NURSING LUNCHEON SEMINAR

315

Functional Neurosurgery: New Perspectives for Nurses

Moderator:
Speakers:

Susan Grube
Richard Bucholz, Carol Bauman, Elspeth Sime, Janice Duff

Learning Objective: Participants will be introduced to new frontiers in functional neurosurgery. Topics will include the Stealth System, Pallidotomy, and Deep Brain Stimulation. After this course, the participant will be able to discuss surgical alternatives, patient management, and the expanded nursing roles related to state-of-the-art technology.

315

scientific program

WEDNESDAY, OCTOBER 2, 1996

12:00NOON-2:30PM/luncheon seminars

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2
317/318

Survival Strategies for Reimbursement in Contemporary Neurosurgery

Moderator:
Speakers:

Stanley Pelofsky
Robert Florin, A. John Popp, Richard A. Roski

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to discuss the health care options available for medical practice in the current dynamic health care environment.

317/318

319/320

Video Seminar: Microneurosurgical Dissection Techniques

Moderator:
Speakers:

Daniel Barrow
Nobuo Hashimoto, Takanori Fukushima, Albert Rhoton

Learning Objective: This video descriptive seminar will detail microsurgical dissection techniques applicable to neurosurgeons and related clinicians. After this course, the participant will be able to describe specific microsurgical techniques and treatment strategies.

319/320

321/322

Management of Pain Associated with "Failed Back" Syndrome

Moderator:
Speakers:

Donlin Long
Kenneth Follett, Hubert Rosomoff, Richard North

Learning Objective: This seminar will be directed toward residents and neurosurgeons in practice as well as interested nurses and physician assistants. After this course, the participant will be able to recognize the manifestations of "Failed Back" syndrome and will be able to describe surgical and nonsurgical procedures designed to relieve the pain experienced in this disorder.

321/322

323/324

Skull Base and Craniofacial Challenges in Pediatrics

Moderator:
Speakers:

Derek Bruce
Dominique Renier, John Phillips, Enrique Ventureyra

Learning Objective: In this seminar, simple and complex congenital craniofacial disorders in children will be presented as well as acquired lesions which affect the skull base in the pediatric population. After this course, the participant will be able to recognize patients with sagittal, coronal and lambdoid synostosis. The treatments for these underlying congenital craniofacial conditions will be better understood. Approaches to the skull base for acquired pediatric skull base lesions will also be learned.

323/324

325/326

"Point: Counterpoint": Management of Optic Pathway Tumors

Speakers:

Jeff Wisoff, Leslie Sutton

Learning Objective: This seminar will review the presentation, investigation, and management of patients with optic pathway tumors. The surgical management of these patients will be presented in the form of a debate. After this course, the participant will be able to diagnose patients with optic pathway tumors, and how to formulate a treatment algorithm based on patient presentation.

325/326

327/328

How To Minimize CSF Shunt Complications

Moderator:
Speakers:

James Drake
John Kestle, Paul Chumas, Christian Sainte-Rose

Learning Objective: This seminar will review the incidence and cause of CSF shunt complications. Through a better understanding of CSF shunt techniques and function, the participant will be able to minimize their shunt complications.

327/328

329/330

Stereotactic Biopsy: How, When, and Why I Do It

Moderator:
Speakers:

Michael L.J. Apuzzo
Douglas Kondziolka, Donald Ross, Mike McDermott

Learning Objective: Stereotactic methods of treating neurosurgical patients have become an essential part of neurosurgical practice. In this seminar, the indications and applications of stereotactic technology will be discussed. After this course, the participant will be able to describe operative techniques for image-based stereotactic biopsy and operative techniques for image-based (stereotactic) craniotomy.

329/330

✓
3
331/332

Gene Therapy: Results of Recent Trials and Future Directions

Moderator:
Speakers:

Edward Oldfield
Roberta Glick, Jonathan Haines, James Rutka, Richard LeBlanc

Learning Objective: This seminar will describe the possible future role of gene therapy for neurological diseases including brain tumors, functional and neurodegenerative disorders. After this course, the participant will be able to describe the biological behavior of neurological diseases, and how conventional therapies have failed to the present time. The latest strategies, potential applications, and rate-limiting steps of gene therapy will be learned with an emphasis on gene delivery to target tissues.

331/332

scientific program

WEDNESDAY, OCTOBER 2, 1996

12:00NOON-2:30PM/luncheon seminars (continued)

333/334

Surgical Management of Spinal Canal Tumors Moderator: Barth Green
Speakers: Paul Cooper, Paul McCormick, Richard Penn

Learning Objective: In this seminar, a classification system for tumors affecting the spinal canal will be presented. After this course, the participant will be able to diagnose spinal tumors as they affect the spinal cord or nerve roots at different levels. A review of tumors in the extradural and intradural compartments will be presented, as will a comprehensive approach to these tumors including surgical extirpation and spinal stabilization.

333/334

335/336

History Vignettes in Neurosurgery (II) Moderator: William Feindel
Speakers: Gilles Bertrand, T. Glenn Pait, Eugene Flamm

Learning Objective: In this seminar, topics of historical importance in neurosurgery will be presented such as the history of early disc surgery, functional brain mapping, and epilepsy surgery. After this seminar, the participant will be able to describe the role of history in the development of neurosurgical principles and practices.

No Category 1 Credits Awarded

335/336

2:30PM-5:30PM

OUTCOME ANALYSIS IN NEUROSURGERY

Moderator: Stephen J. Haines

Learning Objective: At the conclusion of this course, the participant will be able to describe certain individual measures of clinical outcome, their characteristics and the general characteristics, of individual outcome measurement instruments. The participant will be able to explain the historical development of measuring outcomes, ways in which outcome measurement can be incorporated into the daily clinical practice of neurosurgery, how the results of outcome research are used to formulate treatment policy, how such policies may affect reimbursement of neurosurgical services, and how to incorporate the results of outcome research into individual neurosurgical practices.

SPECIAL COURSE III

2:30 PM-2:35 PM	Introduction	Stephen J. Haines
2:35 PM-2:50 PM	Outcomes: A Historical Perspective	Issam A. Awad
2:50 PM-3:10 PM	Individual Outcomes in Practice	Perry Camp
3:10 PM-3:30 PM	Outcome Research Becomes Policy: Practice Parameters	Beverly C. Walters
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:30 PM	Evidence Based Reimbursement: Practice Parameters with Teeth	Richard A. Roski
4:30 PM-5:00 PM	Ethical Imperatives in Outcome Research	Dennis D. Spencer
5:00 PM-5:30 PM	Summary: Incorporating Outcome Research Reports into Practice	Stephen J. Haines

SPECIAL COURSE III

satellite meetings OCTOBER 3-4

JOINT SECTION ON PAIN SATELLITE WORKSHOP - Interventional Therapies in Chronic Pain Management

JOINT SECTION ON TUMORS SATELLITE SYMPOSIUM - Epidemiology & Prognosis; Radiobiology; Regulation of Cell Growth; Molecular Therapy

For more information, please see pages 34 and 35.

scientific program

WEDNESDAY, OCTOBER 2, 1996

2:30PM-5:30PM

MEDICAL AND SURGICAL MANAGEMENT OF PITUITARY TUMORS

Moderators: William Couldwell and William Chandler

Learning Objective: After attending this seminar, the participant will have an improved understanding of the medical and surgical management of pituitary tumors. The participant will be able to describe the management of recurrent adenoma, acromegaly, and Cushing's disease, and will also be able to explain avenues for future therapy of pituitary tumors. After attending this session, the participant will have an increased understanding of the current research which is ongoing in the field of neuro-oncology.

2:30 PM-2:50 PM	The Recurrent Adenoma	Edward R. Laws, Jr.
2:50 PM-3:10 PM	Contemporary Surgical Management of Cushing's Disease	Edward Oldfield
3:10 PM-3:30 PM	Avenues for Future Therapy	Rudolph Fahlbusch
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-5:30 PM	OPEN SCIENTIFIC SESSION	Moderators: Mark Bernstein, Mark Rosenblum

JOINT SECTION ON TUMORS

JOINT SECTION ON TUMORS

2:30PM-5:30PM

NEUROSURGICAL PROCEDURES IN PAIN MANAGEMENT

Moderator: Samuel J. Hassenbusch

Learning Objective: After attending this seminar, the participant will have an improved understanding of the neurosurgical procedures utilized in pain management, and will be able to describe pain neurotransmission and the basic mechanism of spinal stimulation. The participant will be able to explain the basic pharmacology of opioid and nonopioid analgesics and the rationale for performing either ablative or augmentive procedures for pain control. The participant will be able to identify procedures specifically targeted at ameliorating certain types of pain. After attending this session, the participant will have an increased understanding of the current research which is ongoing in the field of pain management.

2:30 PM-3:00 PM	Pain Neurotransmission and Basic Mechanism of Spinal Stimulation	Richard North
3:00 PM-3:15 PM	Basic Pharmacology of Opioid and Nonopioid Analgesics	Samuel J. Hassenbusch
3:15 PM-3:30 PM	Ablative Versus Augmentive Procedures	Nicholas Barbaro
3:30 PM-4:00 PM	COFFEE BREAK/EXHIBITS	
4:00 PM-4:20 PM	Types of Pain and Possible Procedures Therapy Decision Framework	Robert M. Levy
4:20 PM-5:30 PM	OPEN SCIENTIFIC SESSION	Moderator: Robert M. Levy

JOINT SECTION ON PAIN

JOINT SECTION ON PAIN

scientific program

THURSDAY, OCTOBER 3, 1996

THURSDAY-AT-A-GLANCE

8:00 AM-12:00 NOON	General Scientific Session IV - Treatment of Posterior Fossa Tumors
9:20 AM-10:05 AM	Honored Guest Presentation
10:05 AM-10:40 AM	Coffee Break

8:00AM-12:00NOON

TREATMENT OF POSTERIOR FOSSA TUMORS

Presiding Officer: William Friedman
Moderator: Sean Grady

Learning Objective: After this session, the participant will gain insight into the surgical approach of a variety of tumors of the posterior fossa ranging from skull base to meningiomas to primary CNS tumors and others. The participant will be able to improve their ability to diagnose and treat different pathologies in this complex region of the brain.

8:00 AM-8:20 AM	Tentorial Meningiomas	Ossama Al-Mefty
8:20 AM-8:40 AM	Foramen Magnum Meningiomas	Robert F. Spetzler
8:40 AM-9:00 AM	Chordomas, Chondrosarcomas and Other Cranial Bone Tumors	Arnold H. Menezes
9:00 AM-9:20 AM	Epidermoids and Dermoids	Charles Wilson
9:20 AM-10:05 AM	HONORED GUEST PRESENTATION Vestibular Schwanneomas	Peter Jannetta
10:05 AM-10:40 AM	COFFEE BREAK	
10:40 AM-11:00 AM	Glomus Tumors	Jon H. Robertson
11:00 AM-11:20 AM	Brainstem Gliomas	Harold J. Hoffman
11:20 AM-11:40 AM	Ependymomas	James Rutka
11:40 AM-12:00 NOON	Medulloblastomas	Robert A. Sanford

GENERAL SCIENTIFIC SESSION IV

GENERAL SCIENTIFIC SESSION IV

future meeting sites

1997	New Orleans	2000	San Antonio
1998	Seattle	2001	San Diego
1999	Boston	2002	Philadelphia

october 3-4, 1996
montreal, québec
SATELLITE MEETINGS

joint section on pain

SATELLITE WORKSHOP

jointly sponsored by the american association of neurological surgeons

INTERVENTIONAL THERAPIES IN CHRONIC PAIN MANAGEMENT SATELLITE WORKSHOP

The Chronic Pain Management Workshop, following the CNS Annual Meeting at Le Centre Sheraton Montréal, is jointly sponsored by The Joint Section on Pain and The American Association of Neurological Surgeons. The Workshop will be of interest to neurosurgeons wishing to become more familiar with the various neurosurgical pain procedures and provide more service to multidisciplinary pain management groups. This is a unique Workshop designed to facilitate comprehensive and intensive learning of interventional therapies for pain management. It will cover both ablative and augmentative therapies at spinal, trigeminal, intracranial, and peripheral nerve levels. The faculty is composed of 21 pain management neurosurgeons from North America and Europe, and will emphasize close interactions between the faculty and workshop participants.

Thursday, October 3

Morning topics at didactic sessions include: spinal and ablative procedures, physical medicine and management, basic radiofrequency electrode techniques, percutaneous cordotomy, spinal ablative techniques, and peripheral radiofrequency electrode techniques. Afternoon topics at the hands-on sessions include spinal and peripheral nerve ablative techniques.

Friday, October 4

Morning topics at didactic sessions include: spinal and peripheral nerve stimulation patient selection, spinal infusion pump patient selection, results of consensus conference, psychological evaluation and considerations, spinal cord stimulation - single and dual electrodes, spinal infusion pump - catheter and pump placement, complication management, and reimbursement coding and charges. Afternoon topics at the hands-on sessions include spinal cord stimulation electrode and generator placement, and spinal infusion catheter and pump placement.

The Pain Section's Wednesday afternoon symposium during the CNS Annual Meeting has been designed as an introduction to this course with an overview of pain treatment options and basic science presentations.

For questions concerning this program, please contact Dr. Samuel Hassenbusch at (713) 792-2400.

joint section on tumors

SATELLITE SYMPOSIUM

The 2nd Joint Section on Tumors Satellite Symposium is scheduled to take place in conjunction with the Congress of Neurological Surgeons meeting in Montréal, Canada on October 3-4, 1996. The conference chairmen are Drs. William Chandler and Peter Black and the Scientific Program Chairman is Dr. Raymond Sawaya.

Four general topics will be covered, including: epidemiology, radiobiology, cell cycle control, and molecular therapy. In addition, there will be three open scientific sessions, in which competitively selected abstracts will be presented.

A strong participation by the neurosurgical community was evident at the 1994 meeting and resulted in the exposure of advanced research in brain tumors. A similar experience is anticipated at this meeting, and extra efforts are being made to encourage the participation of all related disciplines.

For any questions concerning this program, please contact Dr. Raymond Sawaya at (713) 792-2400.

Thursday, October 3

EPIDEMIOLOGY AND PROGNOSIS

Moderators: Raymond Sawaya and William Chandler

1:00 PM-1:05 PM	Welcome	William Chandler
1:05 PM-1:15 PM	Introduction to Symposium	Raymond Sawaya
1:15 PM-1:45 PM		Susan Preston-Martin
1:45 PM-2:10 PM		Stuart Grossman
2:10 PM-2:35 PM		Douglas Arnold
2:35 PM-3:00 PM		Janet M. Bruner

Moderators: Peter Black and James Rutka

3:30 PM-6:00 PM	Free Papers Session
6:30 PM-8:30 PM	Dinner with Poster Review

Friday, October 4

RADIOBIOLOGY

7:30 AM-4:30 PM Poster Review

Moderators: Mark Bernstein and Mitchel Berger

7:30 AM-7:45 AM	Introduction	Mark Bernstein
7:45 AM-8:15 AM		Kie-Kian Ang
8:15 AM-8:45 AM		Jay Loeffler
8:45 AM-10:00 AM	Free Papers Session	

REGULATION OF CELL GROWTH

Moderators: Victor Levin and Tim Mapstone

10:30 AM-11:00 AM		Albert Wong
11:00 AM-11:30 AM		David Malkin
11:30 AM-12:00 NOON		David Beach

MOLECULAR THERAPY

Moderators: Henry Brem and Walter Hall

1:00 PM-1:15 PM	Introduction	Al Yung
1:15 PM-1:40 PM		Dao Nguyen
1:40 PM-2:05 PM		Lauf Huang
2:05 PM-2:30 PM		Edward H. Oldfield

Moderators: Joseph Piepmeyer and Ron Warnick

3:00 PM-4:30 PM Free Papers Session



ABOUT THE president

Stephen was born in Burlington, Vermont and raised in Schenectady, New York where his father practiced neurosurgery. He attended Dartmouth College and the University of Vermont College of Medicine. After residency training at the University of Pittsburgh, he studied the application of clinical trials to surgical procedures at Oxford University. He began his career in 1982 at the University of Minnesota where he is now Professor of Neurosurgery, Otolaryngology and Pediatrics.

Stephen has two sons, Christopher, a musician, and Jeremy, a computer scientist, with whom he shares his interest in electronic music. His interest in golf comes from his Scottish ancestors.

auxiliary NEWS

We hope that you will plan to attend the 46th Annual Meeting of the Congress of Neurological Surgeons in Montréal, Canada, Saturday, September 28th through Thursday, October 3rd.

The Opening Reception on Sunday, September 29th will be held at the Bell Amphitheatre. This unique site in the heart of Montréal includes the largest indoor skating rink in North America. The evening features professional entertainment on the ice, after which we are all invited to strap on skates and enjoy a truly Canadian pastime for a memorable finale to a grand evening.

The Auxiliary Educational Session will feature Denise Bombardier, an award-winning Canadian broadcast journalist and author of numerous books on subjects that reflect her expertise in sociology and political science, as well as novels and essays. Ms. Bombardier will speak on the differences in how men and women communicate. Immediately following the Session, the Auxiliary Luncheon will take place at Salon Montréal, located at the top of Olympic Park's Tower. Enjoy a stunning view of Montréal while dining inside the world's largest inclined tower.

The Annual Banquet on Wednesday, October 2nd is sure to be a thrilling evening. A fabulous circus performance, including many artists from the well-known "Cirque-du-Soleil," promises to be a spectacular conclusion to an exciting week. See page 45 for more exciting details.

The Auxiliary's Hospitality Suite, located in Salon 4/5 of Le Centre Sheraton Hotel, will be open Sunday through Wednesday, from 8:00 AM-5:00 PM. We hope to see you there for breakfast and refreshments—what a great opportunity to see old friends and meet new ones.

We have planned a program of events and tours that we hope will enable you to experience the beauty and diversity of Montréal and its environs. À bientôt au Montréal!

Sincerely,

Lindy Camel
Auxiliary Vice-President

AUXILIARY PROGRAM

at-a-glance

Sunday September 29	Monday September 30	Tuesday October 1	Wednesday October 2
<p>501 7:30 AM–8:30 AM Line Dancing \$5.00</p> <p>8:00 AM–5:00 PM Hospitality Suite*</p>	<p>507 7:30 AM–8:30 AM Aerobics Class \$5.00</p> <p>8:00 AM–5:00 PM Hospitality Suite*</p>	<p>514 7:30 AM–8:30 AM Line Dancing \$5.00</p> <p>8:00 AM–5:00 PM Hospitality Suite*</p>	<p>521 7:30 AM–8:30 AM Aerobics Class \$5.00</p> <p>8:00 AM–5:00 PM Hospitality Suite*</p>
<p>502 8:00 AM–9:00 AM Welcome to Montréal*</p>	<p>508 8:30 AM–4:00 PM Fall Foliage Laurentians Tour \$63.00</p>	<p>515 10:00 AM–11:00 AM Auxiliary Education Program with Denise Bombardier*</p>	<p>522 9:00 AM–1:00 PM Chef for a Day Featuring "Salads" \$72.00</p>
<p>503 9:00 AM–1:00 PM Chef for a Day Featuring "Appetizers" \$72.00</p>	<p>509 9:00 AM–1:00 PM Chef for a Day Featuring "Main Courses" \$72.00</p>	<p>516 11:30 AM–3:00 PM Auxiliary Luncheon at the Salon Montréal \$40.00</p>	<p>523 10:00 AM–3:00 PM Fort Chambly and Richelieu Valley Tour \$61.00</p>
<p>504 9:15 AM–12:45 PM Montréal City Tour \$29.00</p>	<p>510 9:30 AM–2:00 PM Tale of Two Buildings Tour \$58.00</p>	<p>517 11:15 AM–3:15 PM Chef for a Day Featuring "Desserts" \$72.00</p>	<p>524 1:00 PM–5:00 PM Shopping Shuttle*</p>
<p>505 10:00 AM–3:00 PM Montréal Olympic Park Botanical Gardens Tour \$67.00</p>	<p>511 1:00 PM–4:15 PM Le Bateau Mouche Cruise \$34.00</p>	<p>518 1:00 PM–5:00 PM Montréal Steeple Tour \$26.00</p>	
<p>506 12:15 PM–5:15 PM Museums Tour \$40.00</p>	<p>512 1:00 PM–5:00 PM Shopping Excursion \$26.00</p>	<p>519 1:15 PM–5:15 PM Golden Square Mile Museum Tour \$35.00</p>	
	<p>513 1:00 PM–4:00 PM Behind the Scenes at the Fur Industry \$30.00</p>	<p>520 1:30 PM–4:30 PM Walking Tour of Old Montréal \$22.00</p>	
<p>6:30 PM–9:00 PM Opening Reception*</p>	<p>600 5:30 PM–10:30 PM Dinner and the Montréal Symphony Concert \$98.00</p>	<p>601 6:00 PM–11:00 PM Chinese Lanterns and Montréal Lights \$72.00</p>	<p>602/603 Annual Reception and Buffet Dinner \$75.00 Adults \$30.00 Children</p>

*Included in Registration Fee

All Auxiliary Program Tours will depart from the Stanley Street entrance of Le Centre Sheraton Hotel.

auxiliary tours

SUNDAY, SEPTEMBER 29, 1996

501
Wake Up to Line Dancing ~
Bonjour Montréal Exercise
Class—\$5.00
7:30 AM—8:30 AM

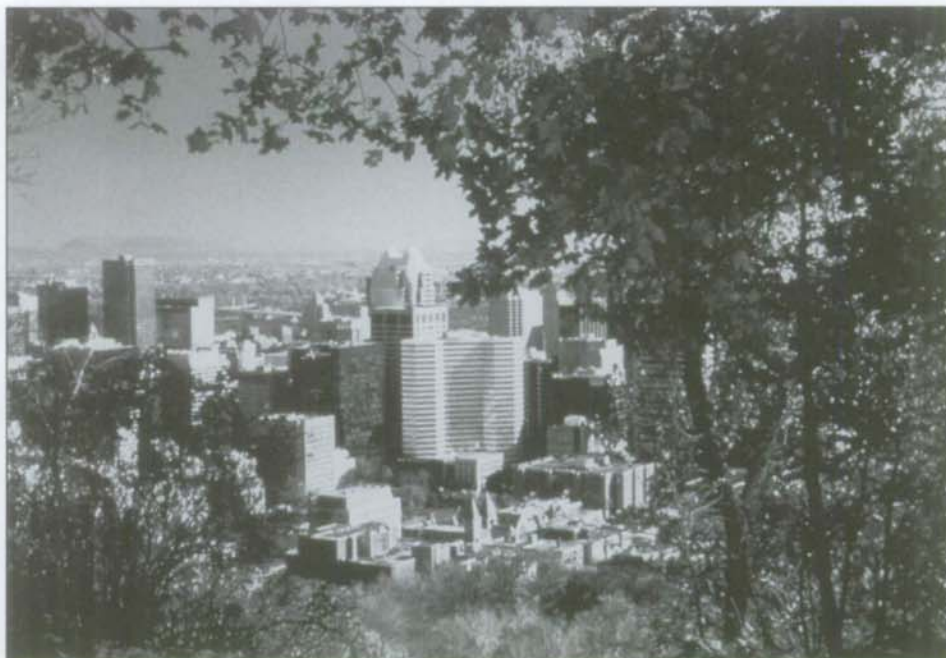
Start the morning right and get your Achy-Breaky Heart pumping to the beat of foot-stompin' country music! Never has exercise been so much fun. A health fitness professional will lead you through this highly entertaining workout that will keep you humming throughout the day.

502
Bonjour and Welcome to
Montréal—Complimentary
8:00 AM—9:00 AM

Our fair city is truly the jewel of the St. Lawrence Seaway—a taste of Europe right here in North America, from its old-world architecture to its charming street cafés. As a prelude to your stay in Montréal, this highly informative session given in the CNS Hospitality Suite will give you an overview of Montréal, French Canadian culture and history, and the Auxiliary Tours and activities being offered. A colorful slide presentation is included.

503
Chef for a Day Featuring
"Appetizers"—\$72.00
9:00 AM—1:00 PM

If you've ever wondered how a master chef prepares those magnificent dishes restaurant guests enjoy, then this is the perfect opportunity for you! On this day, the emphasis will be on the preparation of appetizers. A professional guide will take you to the kitchens of one of Montréal's leading culinary schools where the chef will lead you through the preparation of a delicious three-course meal. Clothed in classic chef hats and aprons, you are "Chef for the Day" in a professional kitchen and, best of all, you will enjoy the fruits of your own labors during lunch that you will help



Downtown view from Mount Royal • Courtesy of Greater Montréal Convention and Tourism Bureau

prepare. French cuisine cooking tips, plate presentation and decorative techniques with food are just some of the practical uses you will enjoy learning. You will receive copies of the recipes prepared. This is truly a tantalizing proposition!

504
Montréal City Tour—\$29.00
9:15 AM—12:45 PM

This city tour is ideal for first-time visitors as a professional guide takes you past some of Montréal's most interesting and important sites. Historic Old Montréal, resting along the mighty St. Lawrence Seaway, is the site of Montréal's founding in 1642. It is the place of cobblestone streets and buildings over three hundred years old. You will also enjoy a guided tour of the breathtaking Notre Dame Basilica; Olympic Park, site of the 1976 Summer Olympic Games; the "Golden Square Mile" on Sherbrooke Street with its exclusive residential and commercial buildings; scenic Mount Royal Park with

its beautiful view of the city; spectacular St. Joseph's Oratory which is the site of many a miracle; and the Latin Quarter, with its renovated Victorian Row houses and unique outdoor staircases, restaurants and night clubs. Join us for this scenic tour of Montréal! Please note that lunch is *not* included.

505
Montréal Olympic Park and
Botanical Gardens Tour with
Lunch—\$67.00
10:00 AM—3:00 PM

This tour takes you through the impressive Olympic Park, site of the 1976 Summer Games. The uniquely-shaped Olympic Stadium, affectionately known as the "Big O," is home to baseball's Montréal Expos as well as other major sporting events and exhibitions. Take a cable car ride up the world's largest inclined tower (45 degrees) and marvel as the spectacular scenery unravels before your eyes. Following lunch at a popular, nearby restaurant, our visit

auxiliary tours

SUNDAY, SEPTEMBER 29, 1996

continues on to the Botanical Garden, the largest in the world after the Kew Gardens in London. The garden boasts over 26,000 species and varieties of plants in 10 greenhouses and 30 special gardens. Delight in 2,300 acres of Japanese Garden which displays the largest bonsai collection outside Asia, and the magnificent Chinese Garden featuring the "Dream Lake" with a fabulous display of penjing and enhanced by seven traditional pavilions constructed from materials imported from China. Also at the Botanical Garden is a unique orchid collection, the Rose Garden, the Marsh & Bog Garden, the Québec Corner and the Monastery Garden. This tour includes a lot of walking and comfortable shoes are recommended.

506 Relive the History of Montréal by Museums Tour—\$40.00 12:15 PM—5:15 PM

This guided tour opens the door to the fascinating cultural and historic sides of Montréal as you explore two of this city's finest museums. The Point-à-Callière Archaeology & History Museum is a unique institution, located at the site where Montréal was founded. It examines the history of settlement in the region, from various Amerindian tribes to the different groups of European colonists through original artifacts and remains, a multimedia show and interactive displays. The McCord Museum is Canada's foremost historical museum and houses major collections of costumes, textiles, ethnographic artifacts, photographic archives, decorative arts, paintings, print and drawings, all dating from the 1700s to the present. It offers a truly unique and invaluable insight into the history of Montréal, Québec and Canada. Currently, there is a wonderful special exhibit on the history of hockey. It is recommended that you have lunch before this event as lunch is *not* included.

Opening Reception 6:30 PM—9:00 PM

Join your colleagues at the Bell Amphitheatre for an evening to remember! Bell Amphitheatre is a 10,000 square foot indoor ice rink that is simply breathtaking—enchanted waterfall, miniature trees, striking skylights—all enclosed in a magnificent glass atrium. While mingling with friends in the fabulous surroundings, professional skaters will perform short routines; enjoy a close up view of these internationally-renowned artists. Following the professional entertainment, it's time for you and your colleagues to entertain one another on the ice! Skates will be provided for all interested participants. Shuttle transportation will be provided from all official CNS hotels beginning at 6:20 PM. All registrants will receive one complimentary ticket to the Opening Reception.



*Performers at the Bell Amphitheatre •
Courtesy of the Bell Amphitheatre*



Open skating at the Bell Amphitheatre • Courtesy of the Bell Amphitheatre

auxiliary tours

MONDAY, SEPTEMBER 30, 1996

507

Get the Lead Out! - Bonjour Montréal Aerobics Exercise Class—\$5.00

7:30 AM-8:30 AM

Get your muscles primed and your circulation going early as a professional exercise instructor takes you through a musical one-hour low-impact workout that is both fun and invigorating.



Shopping in Montréal • Courtesy of Greater Montréal Convention and Tourism Bureau

508

Fall Foliage Laurentians Tour with Lunch—\$63.00

8:30 AM-4:00 PM

Autumn is a spectacular and colorful time to see the magnificent Laurentian Mountains, the world's oldest mountain range. They are located in the heart of the Laurentides region of Québec, an area renowned for its breathtaking fall foliage, summer resorts, and winter skiing. First settled by the Algonquins, amongst other Amerindian groups, the Laurentians were colonized by French Canadians in the 19th century. Just 45 minutes from Montréal, the Laurentians provide year-round recreation for Montréalers and many foreign visitors, offering a summer setting of luxuriant green valleys and a winter playground with the highest concentration of ski resorts in North America. This is an excellent opportunity to escape the hustle and bustle of the big city to view and experience the sublime beauty of forests and flowering meadows that descend the slopes of this mountainous region. The area also produces much of Québec's original artwork and handicrafts, such as pottery, wood and metal sculptures, hammered pewter, enameled copper and paintings, as well as many useful and decorative art objects. Enjoy this scenic tour which includes lunch at one of the region's quaint country inns.

509

Chef for a Day Featuring "Main Courses"—\$72.00

9:00 AM-1:00 PM

This program is also offered on Sunday morning, with the exception of the emphasis being on the preparation of main courses. See Sunday's program, Event #503, for description.

510

History Relived - A Tale of Two Buildings Tour with Lunch—\$58.00

9:30 AM-2:00 PM

This tour features two of Montréal's stately old buildings, the Maison du Gouverneur, a former prison, and the Maison Sir George-Étienne-Cartier, an elegant Montréal home. At the Sir George-Étienne-Cartier house, you will see 19th century living recreated in exquisite detail, complete with chambermaids who comment on the appropriateness of your dress (unfortunately you can't fire them for saying so). The Maison du Gouverneur is now a wine-tasting venue and headquarters of the liquor commission. If you're going to be in jail, this is the way to go! Enjoy a glass of wine with your lovely buffet lunch. This tour is sure to be a memorable part of your trip to Montréal!

auxiliary tours

MONDAY, SEPTEMBER 30, 1996

511

Le Bateau Mouche Cruise—\$34.00

1:00 PM-4:15 PM

The completely glass enclosed Bateau Mouche, modeled after the boats of the same name that cruise the River Seine in Paris, affords an unparalleled view of the beautiful Montréal skyline and its environs. Thanks to its low draft and turbine engines, the Bateau Mouche can navigate waters that are inaccessible to conventional watercraft, "to boldly go where no one has gone before!" Enjoy a narrated tour as you cruise the St. Lawrence River on the Bateau Mouche, which is climate controlled to add to your comfort. It is recommended that you have lunch before this event as lunch is *not* included.

512

Shop Till You Drop Shopping Excursion—\$26.00

1:00 PM-5:00 PM

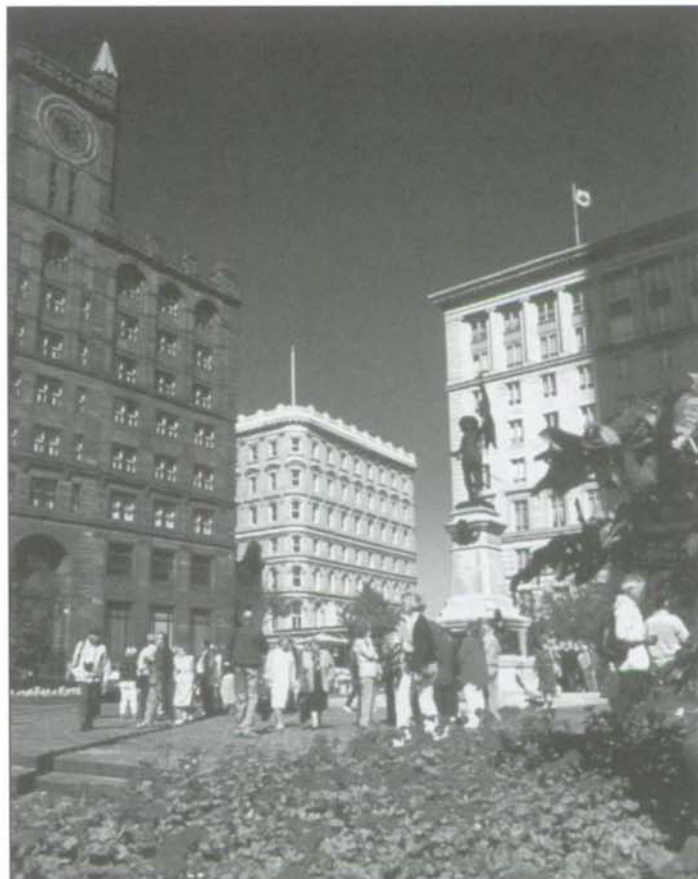
Be prepared to be taken through a unique shopping experience this afternoon. Our focus will be on the best buys of the season and why. You will learn how to build a dynamite wardrobe without breaking the bank. This fun afternoon begins with a glass of white wine in the lovely Tudor room located in the elegant and upscale Ogilvy department store. Our guest speaker, a fashion consultant, will then delight the audience with a one-hour talk on fashion, welcoming participation from everyone. Guests will also have the opportunity to shop in Ogilvy's, keeping in mind the trends and shopping tips learned from the guest speaker. We recommend that you have lunch before this event as lunch is *not* included.

513

Behind the Scenes Look at the Fur Industry—\$30.00

1:00 PM-4:00 PM

Canada's early fur trade played a key role in the economic development of Montréal and the nation. This fascinating tour begins at the Lachine Fur Trade Centre, housed in a 200-year-old stone warehouse on this national historic site. Activities include colorful audio-visual presentations and visits along the Lachine canal where furs were once loaded on ships for transport to European markets. The tour continues with a look at Montréal's modern fur industry through a visit to one of the city's leading fur manufacturers. The fine art of fur selection and assembly is explained, as you are guided through the cutting and sewing rooms. You will visit the storage room which is kept very cold to keep the furs preserved. Last you will visit the showroom where you will see the styles of the year and try on the fur coats. Lunch is *not* included.



Bonsecours Market - Old Montréal • Courtesy of the Department of Tourism of the Government of Québec

600

Dinner and the Montréal Symphony Concert—\$98.00

5:30 PM-10:30 PM

This elegant evening begins with a delicious dinner at one of Montréal's fine restaurants. After dinner, you will be transported to Place des Arts where the evening continues with a rare performance of Grieg's musical masterpiece "Peer Gynt." The work is narrated by actor John de Lancie, made famous by his portrayal of the mercurial "Q" on TV's "Star Trek: The Next Generation." Also on this evening, the celebrated basso, James Morris, incarnates the title role in Boito's "Mephistofele." This concert, which runs from approximately 8:00 PM to 10:00 PM, is performed by the world-renowned Montréal Symphony Orchestra, under the direction of Charles Dutoit.

auxiliary tours

TUESDAY, OCTOBER 1, 1996

514
**Wake Up to Line Dancing -
Bonjour Montréal Exercise
Class—\$5.00**
7:30 AM-8:30 AM

Start the morning right and get your Achy-Breaky Heart pumping to the beat of foot-stompin' country music! Never has exercise been so much fun. A health fitness professional will lead you through this highly entertaining workout that will keep you humming throughout the day.

515
**"Women and Men—Innate
Differences in Communicating
Ideas and Feelings," Auxiliary
Education Session with Denise
Bombardier—No Charge**
10:00 AM-11:00 AM

Come join the CNS Auxiliary Board members for this informative session about the different ways women and men communicate. Our speaker is Denise Bombardier, anchor of one of the most highly rated talk shows on Canadian television, *Raison Passion*, and author of several novels and essays, as she talks about the confusion between genders.



Denise Bombardier, speaker at the Auxiliary Education Session



Dorchester Square (Sun Life and 1000 de La Gauchetière buildings) - downtown • Courtesy of Greater Montréal Convention and Tourism Bureau

Denise Bombardier tackles the issue squarely. She shuns theoretical analysis in favor of concrete judgement. She debunks a few myths, restores truths that are best *not* left unsaid, flushes out old yearnings and underscores major contradictions. Come join us for this insightful and entertaining program!

516
**Auxiliary Luncheon at the
Salon Montréal—\$40.00**
11:30 AM-3:30 PM

Auxiliary Program guests are invited to join us for lunch at Salon Montréal, located at the top of Olympic Park's Tower—the world's largest inclined tower. Guests are sure to enjoy this delicious luncheon as they dine overlooking the beautiful, scenic, downtown Montréal. Come enjoy the camaraderie with the other auxiliary guests as we enjoy a delightful afternoon at the Salon Montréal.

517
**Chef for a Day
Featuring "Desserts"—\$72.00**
11:15 AM-3:15 PM

This program is also offered on Sunday morning, with the exception of the emphasis being on the preparation of desserts. See Sunday's program, Event #503, for description.

518
**Montréal: The City of a
Hundred Steeples—\$26.00**
1:00 PM-5:00 PM

American author Mark Twain once said of Montréal that a stone thrown in any direction is sure to hit a church window, referring to the great number of churches in the city. Follow our guide and discover the hidden treasures as well as the impressive exteriors of these houses of worship. You could almost imagine yourself in the Eternal City when you visit Mary, Queen of the World Cathedral, which is a copy in

auxiliary tours

TUESDAY, OCTOBER 1, 1996

miniature of St. Peter's in Rome. Nearby, St. Patrick's Basilica, built by Irish immigrants in the 19th century, will surprise you by the elegance of its interior. Finally you will visit the Sault-au-Récollet Church in the North of Montréal. Please plan accordingly, as lunch is *not* included on this tour.

519
Golden Square Mile and
Museum Tour—\$35.00
1:15 PM—5:15 PM

The Golden Square Mile used to be, from 1850 to 1930, the residential quarter of the upper middle class. Its shadowed road lined with magnificent Victorian houses gradually left their place to the modern world of business. Over 70% of Canada's wealth was in the hands of the Golden Square inhabitants, mostly Scottish immigrants. You will be invited to visit the Baumgarten House, better known as the McGill Faculty Club. This luxurious house was built by the founder of a successful sugar refinery and now shelters McGill University's teachers circle. The next stop will be the Redpath Museum. Discover precious objects that were found by the researchers and teachers of McGill University. You will find everything from Archaeology, Botany, Geology and Paleontology. Time permitting, we will conclude with a visit to the Montréal Museum of Fine Arts, the city's foremost art museum and one of Canada's best known galleries. Comfortable footwear is recommended. Lunch is *not* included, so please make your plans accordingly.

520
Walking Tour of Old Montréal:
"350 Years of History"—\$22.00
1:30 PM—4:30 PM

You will be enchanted with the rich cultural heritage of Old Montréal, which boasts one of the greatest concentrations of 17th, 18th and 19th century buildings on the continent, marked by old-world cobblestone streets, monuments and historic squares.

Small groups of 10–15 people will be accompanied by an experienced professional guide as they explore some of the many historical treasures of one of North America's oldest cities, including the spectacular Notre-Dame Basilica (1829), church of Montréal's first parish, and the

impressive Bank of Montréal building (1847), head office to the first permanent bank in North America. Comfortable footwear is encouraged. We recommend that you have lunch before this event as lunch is *not* included.

601
Evening Festival of Chinese Lanterns and Montréal Lights—
\$72.00
6:00 PM—11:00 PM

You will be transported to one of Montréal's fine downtown restaurants where you will enjoy a pleasant meal with other guests from the CNS. Following dinner, you will be brought to the Montréal Botanical Garden to enjoy the magic of the ancient Festival of Lanterns, featuring more than 900 Chinese lanterns shimmering with a thousand colors in the spectacular Chinese Garden. Fifty Chinese artists have labored over two months to produce these delicately hand-embroidered lanterns depicting characters of traditional Eastern folklore, from pretty little birds to a magnificent 18-foot dragon. A tradition in China for over 2000 years, the Festival of Lanterns offers a sight not to be missed in the world's largest Chinese garden outside of Asia.

The evening has more to offer...you will see the illuminated landscape of Montréal at night, which includes views of the islands, old Montréal, the skyscrapers of the City Centre, the cross atop Mount Royal and more! Truly an incandescent evening!



Musicians on the Place Ville Marie Terrace - McGill College Avenue • Courtesy of Greater Montréal Convention and Tourism Bureau

auxiliary tours

WEDNESDAY, OCTOBER 2, 1996

521
Get the Lead Out! – Bonjour Montréal Aerobics
Exercise Class—\$5.00
7:30 AM–8:30 AM

Get your muscles primed and your circulation going early as a professional exercise instructor takes you through a musical one-hour low-impact workout that is both fun and invigorating.



Montréal Trust Shopping Mall • Courtesy of Greater Montréal Convention and Tourism Bureau

522
Chef for a Day Featuring “Salads”—\$72.00
9:00 AM–1:00 PM

This program is also offered on Sunday morning, with the exception of the emphasis being on the preparation of salads. See Sunday's program, Event #503, for description.

523
Fort Chambly and Richelieu Valley Tour with
Lunch—\$61.00
10:00 AM–3:00 PM

This tour takes us southeast of Montréal to Fort Chambly and the Richelieu Valley area. This region is rich with history ranging from the French-Iroquois wars in the early 1600s to the French-British wars in the late 1600s and the American invasions of the 1700s. The day includes lunch at a charming area restaurant. Ample time will be given for photo opportunities, so bring your cameras—the spectacular fall foliage will be in its prime!

524
Shopping Shuttle—Complimentary
1:00 PM–5:00 PM

Don't forget about your souvenir shopping, gift for the sitter or something special for the kids. Buses will be leaving from Le Centre Sheraton.

A shopping shuttle will be available in the afternoon for die-hard shop-aholics. Our first shopping stop will be up-scale Laurier Street, one of the finest shopping avenues in Montréal. Here you will find renowned designer clothing boutiques, chocolate and bakery specialty shops, children's clothing and toys, and gift stores. Our next stop is popular St. Denis Street where there is a multitude of trendy stores for everyone's taste. Prices are reasonable on this shopping street and you will be able to find everything from fine French lace and hat shops to local artisan jewelry stores and sport boutiques.

Predetermined times and pick-up locations will provide you with an opportunity to shop at these two locations at your leisure. Stop by the Auxiliary Hospitality Suite for a schedule.

annual reception

WEDNESDAY, OCTOBER 2, 1996

#602/603

CNS Annual Reception & Buffet Dinner...

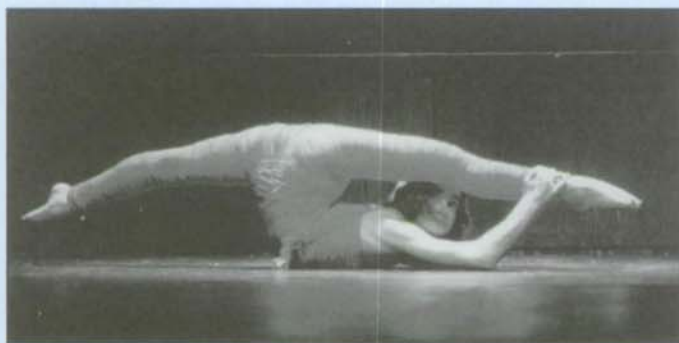
"An Evening at the Circus"

#602 Adult \$75.00

#603 Child (12 and under) \$30.00

6:30 PM-9:30 PM

Join your friends for an informal night of mystique and illusions as you are entertained by "An Evening at the Circus." This event will take place at Le Centre Sheraton as guests enjoy an entertaining cocktail reception and buffet dinner, followed by a private and unique circus



performance. Montréal is well-known for its famous circus, "Cirque du Soleil," in addition to having the only circus school in North America. The private show for CNS guests will include artists who have performed with "Cirque du Soleil" and helped make this world-renowned circus what it is today. Some of the professional artists also teach at the Montréal National Circus School.



From the moment you enter the room, your eyes will widen and your heart will pound with the excitement of the circus. You will be welcomed at the reception by talented artists from the circus who will entertain you throughout dinner. The grand finale will take place at the end of the evening as guests are awed and amazed by the stunning circus performance.

This "Evening at the Circus" won't be the type of circus you may be most familiar with...you won't see elephants, popcorn or big circus tents. What this evening will offer you is the opportunity to see some of the world's greatest circus talent, including trapeze artists, contortionists, sword swallows and more. This evening is sure to thrill and entertain all who attend...please join us for "An Evening at the Circus!"

Guests are encouraged to dress informally. Shuttle service will be provided from official CNS hotels beginning at 6:20 PM.



INTRODUCING key players

Terry and Marc Mayberg President-Elect and Auxiliary President-Elect

Marc R. Mayberg was raised in Minneapolis, and attended Harvard University where he graduated cum laude and played varsity football. During medical school at Mayo, he investigated cerebral vasospasm in the laboratory of Dr. Thoralf Sundt. Dr. Mayberg did his neurosurgical training at Massachusetts General Hospital, where he continued his research on trigeminal innervation of cerebral arteries and cerebral vasospasm with Dr. Michael Moskowitz and Dr. Nicholas Zervas. After residency, he was awarded the Van Wagenen Fellowship and investigated brainstem ischemia in Dr. Lindsay Symon's laboratory at Queen Square in London. Upon his return to the United States in 1985, Dr. Mayberg joined Dr. H. Richard Winn in the Department of Neurological Surgery at the University of Washington as an Assistant Professor. He was subsequently appointed Associate Professor in 1989 and Professor in 1994, and holds a joint appointment in the Department of Otolaryngology, Head and Neck Surgery.

Since his arrival in Seattle, Dr. Mayberg has continued his basic research in the area of vascular wall biology, with ongoing NIH and VA support for research programs in cerebral vasospasm, arterial response to injury and the effect



of radiation on arterial walls. In addition, he headed a multi-center prospective randomized VA trial which demonstrated the efficacy of carotid endarterectomy in patients with symptomatic stenosis.

Dr. Mayberg is currently Chief of Clinical Services for Neurosurgery at the University of Washington Medical Center, and specializes in surgery of acoustic neuromas, pituitary adenomas and skull base lesions. His wife, Dr. Terry Mayberg, is an Associate Professor in the Departments of Anesthesia and Neurological Surgery at the University of Washington. They have a son, Matthew, who was born in December, 1994.



Penny and Steve Papadopoulos Annual Meeting Chairman

Penny and Steve Papadopoulos live in Ann Arbor, Michigan. Steve is an Associate Professor at the University of Michigan with appointments in the Sections of Neurosurgery and Orthopaedic Surgery. He has a wide range of academic interests in neurosurgery with primary focus on spinal disorders. Penny is an Adult Nurse Practitioner in Occupational Health. They have three young boys, Michael, Matthew and Marcus, who joyfully occupy their spare time. The addition this year of a new dog, Puzzle, has added yet another dimension to a typically hectic home schedule. Both Steve and Penny are very active in the academic community locally and nationally. Their interest and work in the Congress of Neurological Surgeons is longstanding.

Lindy and Mark Camel **Vice President and Auxiliary Vice President**

Mark Camel was raised in Ladue, Missouri and attended the University of Rochester. He received his doctor of medicine from Washington University and trained in neurological surgery at Barnes Hospital in St. Louis. From 1986 through 1987, Mark was a research fellow in the Department of Pharmacology at Washington University, where he pursued his interest in pituitary hormone biosynthesis.

Lindy Chiswick Camel is from Downers Grove, Illinois and graduated from Oberlin College. She received a joint degree in law and social work from Loyola University of Chicago. Lindy served as a law clerk to the Honorable Gary M. Gaertner of the Missouri Court of Appeals, Eastern District. Since 1987, she has been associated with the law firm of Cummings & Lockwood.

Lindy and Mark reside in Greenwich, Connecticut with their son, Andrew. They all enjoy outdoor activities, especially tennis and sailing.



Joan and Mitch Berger **Scientific Program Chairman**



Joan and Mitch live in Mercer Island, Washington, directly adjacent to Seattle. Mitch is a Professor of Neurological Surgery at the University of Washington and represents the Washington Division of the American Cancer Society as its Clinical Oncology Professor. His primary area of

interest lies in the clinical realm of adult and pediatric neuro-oncology, and, is funded by the American Cancer Society and the National Institute of Health to pursue research into the mechanisms of DNA damage and repair. Joan is a dental hygienist and works in Seattle. She is also an avid skier and hiker. They have two wonderful children, Lindsay and Alex. As a family, they enjoy spending time together in the great Northwest.

Christiane and Gérard Mohr **Local Arrangements Chairman**



Gérard Mohr obtained his medical degree from the University of Strasbourg, France. After starting his residency at the University of Frankfurt, Germany, he completed his Neurosurgery training at the Hospital for Sick Children and at the Toronto General Hospital. He also received special training

in pituitary microsurgery at Notre Dame Hospital, University of Montréal where he was on staff for twelve years. In 1990, he became Chief of Neurosurgery at the Sir Mortimer B. Davis—Jewish General Hospital and is associate professor of Neurosurgery, McGill University and part-time member of the Montréal Neurological Institute. His special interests include CP-angle, cerebrovascular and pituitary microsurgery.

Christiane Mohr is a graduate of the Faculty of Law, University of Montréal. She shares her time between the private office of her husband and with their daughters, Caroline (25),

hotels—transportation

Hotel Reservations— Official CNS Hotels

To receive the special CNS discounted convention rate, the enclosed form must be mailed or faxed to make your hotel reservations.

Please mail or fax your Housing form to the CNS Housing Bureau. All reservation requests must be received by August 26, 1996. (NO PHONE CALLS WILL BE ACCEPTED.) Upon receipt of your request, a written acknowledgment will be mailed to you from the Housing Bureau. A written confirmation will be mailed directly from your assigned hotel. Please allow two weeks for processing.

Upon receipt of your confirmation, changes in arrival/departure or cancellations should be made directly with your assigned hotel.

Reservations must be guaranteed with a credit card number on the housing reservation form by August 26, 1996.

Early reservations are strongly suggested. Special discounted rates are available only through the cut-off date, August 26, 1996.

If more than one room is needed, additional forms must be submitted, one for each room. If room blocks are needed see housing form for procedures.

shuttle hours

Saturday	1:00 PM–7:30 PM
Sunday	6:45 AM–7:00 PM
Opening Reception at Bell Amphitheatre*	6:30 PM–9:00 PM
Monday	6:45 AM–6:00 PM
Tuesday	6:45 AM–6:00 PM
Wednesday	6:45 AM–5:30 PM

*Shuttle Service will be provided from official CNS Hotels to the Opening Reception at the Bell Amphitheatre beginning at 6:20 PM.

Transportation— Official CNS Airlines

The Congress of Neurological Surgeons is pleased to announce that Air Canada and Delta Air Lines have been designated as the Office Airlines of the 46th Annual Meeting being held in Montréal, Québec, Canada, September 28–October 3, 1996.

Each airline is pleased to offer special convention rates for travel to the 1996 CNS Annual Meeting, providing all rules and conditions of the airfare are met.

Individuals flying on Air Canada can earn United Airlines frequent flyer miles, which can be applied to their United Airlines frequent flyer account. Individuals flying on Delta will earn Delta SkyMiles frequent flyer miles.

To make your reservation, call one of the toll-free numbers listed below. A trained meeting specialist will be happy to assist you or your travel agent in confirming reservations to the CNS Annual Meeting. Don't forget to identify yourself as a CNS Annual Meeting participant and provide the special meeting file number indicated below. If making your reservations on Air Canada, the event number must properly be entered in the Tour Code box on each ticket.

For reservations call:



AIR CANADA
1-800-361-7585

8:00 AM to 8:00 PM Eastern time
5 days a week (Monday–Friday)
Event Number: CV961618



DELTA
1-800-241-6760

8:00 AM to 11:00 PM Eastern time
7 days a week
Meeting File Number: PØ344

These discounts are only available through the toll-free numbers listed above, so call today!

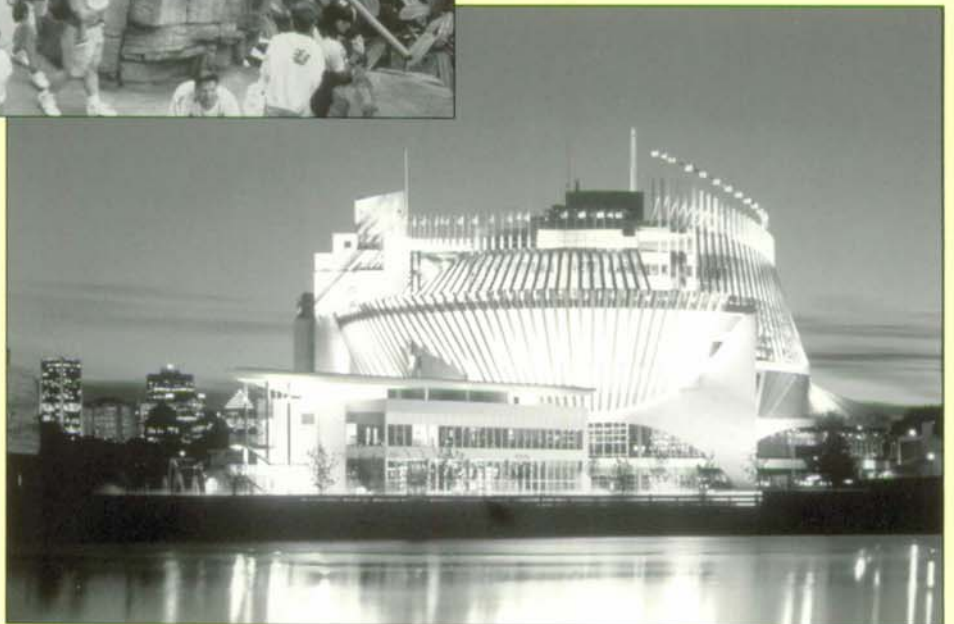
montréal



*above: Phillips Square - downtown • Courtesy
Greater Montréal Convention and Tourism
Bureau - Natalia Gagnacci*

*left: Montréal Biodome - Tropical Forest •
Courtesy ISTC - Pierre St-Jacques*

*below: Montréal Casino - Notre Dame Island
• Courtesy Société des casinos du Québec inc.*



JOIN US NEXT YEAR in...

new orleans

september 27-october 2, 1997



Carriage in front of St. Louis Cathedral. NOMCVB. © Ron Calamia.



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