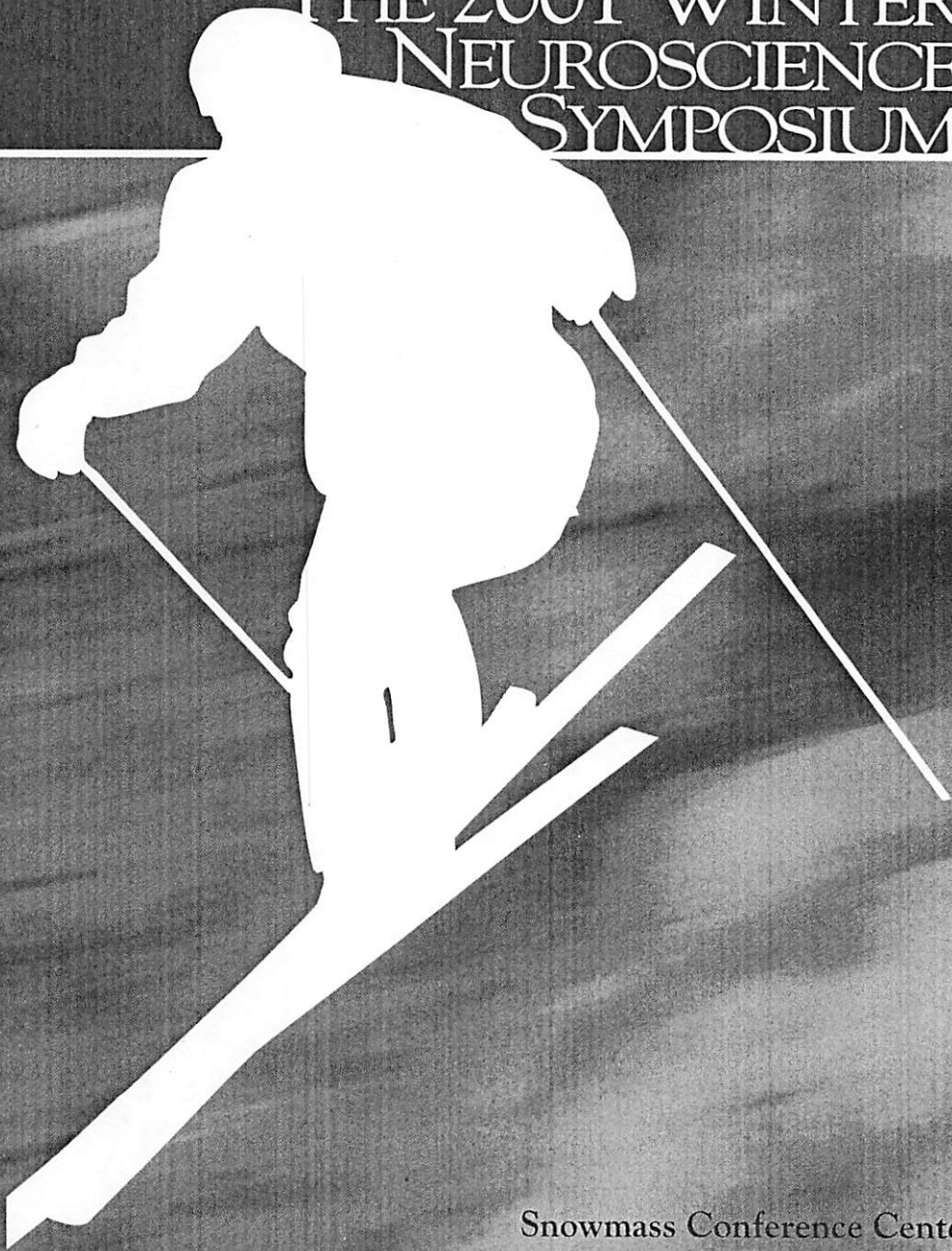


Mayfield Clinic in joint sponsorship with
The Cleveland Clinic
and Mayo Clinic
present

THE 2001 WINTER NEUROSCIENCE SYMPOSIUM



Snowmass Conference Center
Snowmass Village, Colorado
February 25 - March 2, 2001

THE 2001 WINTER NEUROSCIENCE SYMPOSIUM

The 2001 Winter Neuroscience Symposium is one of the nation's premiere neurosurgical symposiums, focusing on life-threatening and debilitating issues that affect more than 80% of Americans, such as spinal diseases and disorders, cerebrovascular disease, neuro-oncology, and neuro-functional diseases and disorders. Jointly sponsored by the Mayfield Clinic, The Cleveland Clinic, and Mayo Clinic, this symposium is targeted to neurosurgeons, orthopedists, neuroradiologists and neurologists. You're invited to attend one of neuroscience's most exciting neurosurgical symposiums.

Each day the program is divided into morning and evening sessions, leaving mid-day sessions open for skiing and enjoying the beautiful scenery of Snowmass Mountain, one of Colorado's highest peaks.

COURSE DIRECTORS

Jeffrey T. Keller, PhD
University of Cincinnati Medical Center
Joung Lee, MD
The Cleveland Clinic Foundation
Michael J. Link, MD
Mayo Clinic
John M. Tew, Jr., MD
University of Cincinnati Medical Center
William D. Tobler, MD
University of Cincinnati Medical Center
Thomas Tomsick, MD
University of Cincinnati Medical Center
Mario Zuccarello, MD
University of Cincinnati Medical Center

REGISTRATION

THE 2001 WINTER NEUROSCIENCE SYMPOSIUM

February 25-March 2, 2001

Registration Form, Course #020101

(Please Print)

Name _____
(First, middle initial, last & title-MD, RN, etc.)

Company _____

Address _____

City, State, Zip _____

Phone _____

Fax _____

Email _____

(Tear here)

- My check for the tuition fee of \$750, made payable to the Neurosciences Foundation, is enclosed. All foreign payments must be made by a draft on a U.S. bank.

Mail to:

Sheila Stuckey, Coordinator
Mayfield Clinic
506 Oak Street
Cincinnati, Ohio 45219
Phone: 800-325-7787, ext. 5251
Fax: 513-569-5365
e-mail: sstuckey@mayfieldclinic.com

COURSE REGISTRATION DEADLINE:
FEBRUARY 12, 2001



PROGRAM

MONDAY, FEBRUARY 26

MORNING SESSIONS

- 7:00 am NBCA Acrylic vs. PVA/Coils as Preoperative Adjunct: The NBCA Study
Thomas Tomsick, MD
- 7:20 am Endovascular Therapy for Intracranial Atherosclerosis
Andrew Ringer, MD
- 7:40 am Hemispherectomy & Durotomy for Hemispheric Stroke: Update on HeADDSFIRST Study
Douglas Chyatte, MD
- 8:00 am Intracerebral Hemorrhage
Mario Zuccarello, MD
- 8:20 am Surgical Treatment of Vascular Lesions at the Skull Base: Surgical Anatomy, the "sine qua non"
Jeffrey T. Keller, PhD, Mario Zuccarello, MD
- 8:40 am
- 9:00 am Consultant's Corner
Troy Payner, MD
- 9:30 am Adjourn for morning

AFTERNOON SESSIONS

- 4:00 pm Volumetric Quantification of Tumor Resection by Continuous Intraop Neuro & Language Assessments
Fredric Meyer, MD
- 4:30 pm The Role of Interleukins in the Treatment of Experimental Brain Tumors
Alessandro Olivi, MD
- 5:00 pm Delivery of Genetically Engineered Cells in Neoplastic Tissue: Wound Healing & Tissue Engineering
James R. Fick, MD
- 5:30 pm Regression of Experimental Gliomas in Animals Using Lipopolysaccharides
Michael R. Chicoine, MD
- 6:00 pm Failures in Endoscopic Treatments: Indications for an Endoscopic "Redo"
Christian Matula, MD, PhD
- 6:30 pm Adjourn for the evening
5 minute Q & A period is included in the allotted time for each speaker.

FACULTY

Cleveland Clinic Foundation/
Department of Neurosurgery
Cleveland, OH

John C. Andrefsky, MD
Edward C. Benzel, MD
Douglas Chyatte, MD
Christopher Kager, MD
Joung H. Lee, MD
Mike Vogelbaum, MD
Sarel Vorster, MD

University of Cincinnati/Mayfield Clinic & Spine Institute
Cincinnati, OH

Jeffrey T. Keller, PhD
Charles Kuntz, MD
Carl Shapiro, DO, Mayfield Spine Institute
John M. Tew, Jr., MD
William Tobler, MD
Thomas Tomsick, MD, University Neuro radiology
Mario Zuccarello, MD

TUESDAY, FEBRUARY 27

WEDNESDAY, FEBRUARY 28

Discogenic Pain and Physiology of the Disc
Charles Dean Ray, MD

Management of Referred vs. Radicular Pain
with Lumbar Trigger Point Injections
Carl M. Shapiro, DO

Cervical Spondylitic Myelopathy
Chris Kager, MD

Transoral Odontoid Decompression
and Management
William C. Welch, MD

Osteogenic Progenitor Cells:
How They Work and Are They Viable
Edmund H. Frank, MD

Consultant's Corner: Clinical Decisions
Regarding Cervical Spine Pathology
William C. Welch, MD, Mario Zuccarello, MD

Adjourn for the morning

Biomechanics of Cervical Spine
Edward C. Benzel, MD

Hands-on Workshop on Cervical Spine
Instrumentation
Edward C. Benzel, MD
Chris Kager, MD

Consultant's Corner: Issues Regarding
Cervical Spine Instrumentation
Edward C. Benzel, MD

Adjourn for the evening
*5 minute Q & A period is included
in the allotted time for each speaker.*

Glomus Jugulare Tumors
Murali Guthikonda, MD

Surgery of the Pediatric Cranial Base
David P. Gruber, MD

Metastatic Brain Tumors: Current Treatment
William D. Tobler, MD

Surgery vs. Radiosurgery for the Treatment of
Brain Metastases
Michael Vogelbaum, MD

Intraoperative Imaging and Neuronavigational
Techniques - Our Experience in Austria
Christian. Matula, MD, PhD

Consultant's Corner:
Intracranial Tumors - Treatment Options
William D. Tobler, MD

Adjourn for morning

Stage Volume AVM Surgery
Bruce Pollack, MD

Functional Radiosurgery
Michael J. Link, MD

Outcome of 205 Meningiomas using
Conventional Fraction Stereotactic Radiotherapy
David W. Andrews, MD

Stereotactic Radiosurgery for Recurrent
Head and Neck Tumors
Andrew J. Kokkino, MD

Consultant's Corner: Intracranial Tumors -
Diagnosis and Treatment Options
David W. Andrews, MD

Adjourn for the evening
*5 minute Q & A period is included
in the allotted time for each speaker.*

Mayo Clinic/Department of Neurosurgery
Rochester, MN

Mark B. Dekutoski, MD
Michael J. Link, MD
Fredric B. Meyer, MD
Bruce E. Pollack, MD
Robert Spinner, MD

University of Georgia Medical Center
Augusta, GA

James R. Fick, MD

Wayne State University Medical Center, Detroit, MI
Murali Guthikonda, MD

Thomas Jefferson University Medical Center
Pittsburgh, PA

David W. Andrews, MD

Washington University Medical Center, St. Louis, MO
Michael R. Chicoine, MD

Oregon Health Science University, Portland, OR
Edmund H. Frank, MD

University of Arizona Health Sciences Center
Tucson, AZ

Allan J. Hamilton, MD

THURSDAY, MARCH 1

Adjacent Segment Disease
Mark B. Dekutoski, MD

Rehabilitation Techniques for Spinal Pain:
Exercise, Modalities, Manipulation & Injection
Carl M. Shapiro, DO

Intradiscal Electrotherapy:
Patient Selection and Outcomes
William C. Welch, MD

Cage Fusions as Stand-Alone Quo Vadis
Charles Dean Ray, MD

Vertebroplasty and Kyphoplasty for
Osteoporotic Compression Fractures
Lee Gutterman, MD

Outcomes Research Methods
in Spinal Surgery
Sarel Vorster, MD

Consultant's Corner: Clinical Decisions
Regarding Thoracolumbar Spine Pathology
Mark B. Dekutoski, MD, Charles Dean Ray, MD

Adjourn for the morning

Overview of Thoracolumbar Instrumentation
Charles Kuntz, IV, MD

Hands-on Workshop of Thoracolumbar
Instrumentation
Charles Kuntz, IV, MD
Stephen M. Papadopoulos, MD

Image Guided Spine Workshop
William Tobler, MD
Stephen Papadopoulos, MD

Adjourn for the evening
*5 minute Q & A period is included
in the allotted time for each speaker.*

FRIDAY, MARCH 2

The Use of Hypothermia for Acute
Neurological Diseases
John C. Andrefsky, MD

Sarcoidosis - An Intracranial Impostor
Michael T. Stechison, MD, PhD

Results of the National Gliadel Study: A Report
Allan J. Hamilton, MD

Vestibular Nerve Sectioning for Intractable
Vertigo
Joung Lee, MD

Analysis of Resection of Pituitary Adenomas &
Cerebral Gliomas Using Intraoperative MRI
John M. Tew, Jr., MD

Common Peripheral Nerve Entrapment
Syndromes
Robert Spinner, MD

Adjourn
*5 minute Q & A period is included
in the allotted time for each speaker.*

Oregon Neurosurgery Specialists, Eugene, OR
Andrew J. Kokkino, MD

University of Vienna Medical Center, Austria
Christian Matula, MD, PhD

Johns Hopkins University School of Medicine
Baltimore, MD
Alessandro Olivi, MD

University of Michigan, Ann Arbor, MI
Stephen M. Papadopoulos, MD

Indianapolis Neurosurgical Group, IN
Troy D. Payner, MD

Eastern Virginia Medical College, VA
Charles Dean Ray, MD

SUNY Medical Center, Buffalo, NY
Lee Gutterman, MD & Andrew J. Ringer, MD

South Georgia Neurosurgery, PC, Albany, GA
Michael T. Stechison, MD, PhD

University of Pittsburgh Medical Center, PA
William C. Welch, MD

OBJECTIVES

- Upon completion of the symposium, participants should be able to:
- Describe current therapies and treatment modalities for vascular lesions including aneurysm, intracerebral hemorrhage and stroke.
 - Describe experimental and clinical treatment modalities for neoplastic intracranial lesions.
 - Describe treatment modalities for pathology of cervical spine.
 - Demonstrate current, state-of-the-art spinal instrumentation applied in surgical treatment of the cervical spine.
 - Describe various treatment modalities including surgery and radiosurgery, for intracranial tumors of children and adults.
 - Demonstrate the application of radiosurgery for the treatment of vascular and neoplastic lesions of the head and neck.
 - Describe the surgical and nonsurgical treatment of thoracolumbar pathology.
 - Demonstrate current, state-of-the-art spinal instrumentation applied in the surgical treatment of thoracolumbar pathology.
 - Discuss the disease processes of the nervous system including trigeminal neuralgia and sarcoidosis and their treatment as well as physiological aspects of edema and hypothermia.

ACCREDITATION

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Education through joint sponsorship of The Cleveland Clinic Center for Continuing Education, Mayfield Clinic and Mayo Clinic. The Cleveland Clinic Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education (ACCME*) to sponsor continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this continuing educational activity for a maximum of 21 hours in Category 1 credit towards the AMA Physicians Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in this educational activity.

DISCLAIMER

This information is provided for general medical education purposes only and is not meant to substitute for the independent medical judgement of a physician relative to diagnostic and treatment options of a specific patient's medical condition. In no event will the The Cleveland Clinic Center for Continuing Education, Mayfield Clinic or Mayo Clinic be liable for any decision made or action taken in reliance upon the information provided through this activity.

FACULTY DISCLOSURE

*Current guidelines state that participants in CME activities should be made aware of any affiliation or financial interest that may affect the speaker's presentation(s) and/or who will be discussing off-label therapies. Each speaker has been requested to complete a faculty disclosure form. The names of faculty members declaring a potential conflict of interest, discussing off-label therapies, and those who decline to sign a statement will be shown in the activities syllabus.

LODGING & TUITION

The SilverTree Hotel, which is adjacent to the Snowmass Conference Center, and the Timberline Condominiums are holding a limited number of rooms. Make reservations by calling 800-598-2004. A minimum of 7 nights stay is required for Timberline Condominiums. Room reservation deadline is December 24, 2000; after that date, reservations will be accepted upon availability. When calling, identify yourself as being with the Winter Neuroscience Symposium.

\$750.00 payable to Neurosciences Foundation with pre-registration. A \$100 cancellation fee will be charged for withdrawals after February 12, 2001. Written notification is required to process a refund.

QUESTIONS

For information on best ski equipment rental for beginner, intermediate and expert skiers, call Snowmass Sports at 800-950-3567. Discounts are available.

United and United Express have joined with Snowmass Conference Center to offer discounts on airfare when lodging is arranged at Snowmass Village. For information call Snowmass Central Travel, 800-598-2004.