Be part of the nation's most exciting cranial, spine and nerve meeting, located at the beautiful Silvertree Hotel in Snowmass Village, Colorado.

Objectives

- Summarize the minimalist approach to ordinary and extraordinary intracranial and spinal
- Review the neurocritical issues in the care of neurosurgical patients.
- Examine the application of radiosurgery for the treatment of intracranial pathologies.
- Explain treatments for intracranial neoplasms including medical management, surgery and radiation.
- Discuss the treatment options for lesions of the skull base including surgical techniques.
- Assess the treatment of anterior and posterior circulation aneurysms.
- Compare and contrast endovascular and aneurysm clipping.
- Describe the clinical decisions related to arthroplasty including contrasting an appropriate and non appropriate candidate.
- Assess and evaluate kyphoplasty and
- vertebroplasty for treatment of spinal disorders. • Describe the latest technology applied for
- cervical and lumbar arthroplasty. • Discuss the surgical treatment of spinal
- deformity and traumatic spine injury.

This activity is planned and implemented in accordance with the Essential Areas and Policies of The Ohio State Medical Association through joint sponsorship of The Christ Hospital and the Mayfield Clinic. The Christ Hospital is accredited by the OSMA to provide continuing medical education for physicians. The Christ Hospital Committee for Continuing Medical Education designates this educational activity for a maximum of 25 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

This educational activity may include the discussion of products for indications not approved by the FDA. Faculty members have been instructed to inform the participants when they discuss unapproved used of products. Any opinions expressed by the faculty with regard to unapproved uses of products are solely those of the faculty and are not endorsed by The Christ Hospital.

Monday, February 27, 2006

7:00 - 9:30am: Cerebrovascular

New Therapies for Cerebral Vasospasm Claudius Thomé, MD

Licox and Vasospasm: Preliminary Results Chiraz Chaalala, MD and Mario Zuccarello, MD

Long-Term Morbidity for Coiling Aneurysms Andrew J. Ringer, MD

PICA: The Other Posterior Circulation Aneurysm Harry R. van Loveren, MD & Samuel L. Barnett, MD

Interventional Neuroradiology in Rural Setting Douglas Chyatte, MD

Micro CT Angio in Wild Type & TIMP-1 Mice Chiraz Chaalala, MD

Endoscopic Microvascular Decompression Charles Teo, MD, MBBS, FRACS

STA-MCA Bypass for Ischemia: CT Angio Mario Zuccarello, MD

Posterior Cerebral Artery Aneurysms *Mario Zuccarello*, *MD*

Case Presentation: Surgery vs. Coiling Drs. Payner and Zuccarello

4:00 - 6:30pm: Tumor/Skull Base

Neurological Management of Pregnant Pt. Frederick B. Meyer, MD

The Varied Faces of the Sphenoid Bone *Jeffrey T. Keller, PhD and William Tobler, Jr.*

Epilepsy Surgery in Adults William Bingaman, MD

Esthesioneuroma: Grade & Stage Effects *Michael J. Link, MD*

Vertebral Artery Injury with Cervical Fractures *P. Andrew Utter, MD*

Treatment of Tentorial Meningiomas John M. Tew, Jr., MD

Infratemporal Fossa via FTOZ: Surgical Anatomy Sebastien Froelich, MD

Medical Management of Brain Tumor Pts. Glen H. J. Stevens, DO, PhD

Meningiomas: Patient Selection for Surgery *Joung Lee, MD*

Endovascular Training in Neurosurgery Andrew J. Ringer, MD

Tuesday, February 28, 2006

7:00 - 9:30am: Functional/General Topics

"Treated" Hydrocephalus: Imaging Findings Alice C. Patton, MD

Update on CREST David A. Miller, MD

DBS for Movement Disorders Robert Maciunas, MD

Balance Control Changes After STN-DBS George T. Mandybur, MD

Bleeding in the Neurosurgical Patient Lindsey A. Nelson, MD

Transfusion Thresholds in Neurocritical Care Michael A. DeGeorgia, MD

Head Injury: An Update Raj K. Narayan, MD

Update FSR: Acoustic Neuroma Experience David A. Andrews, MD, FACS

Transcranial Approach to Pituitary Adenoma Harry R. van Loveren, MD

MRI Features: Cavernous Sinus Meningiomas Sebastien Froelich, MD

4:00 - 6:30pm: Minimally Invasive

Keyhole Concept: Uses for Neuro-oncology Charles Theo, MD, MBBS, FRACS

Pituitary: Transsphenoidal & Gamma Knife Alain C. J. de Lotbiniere, MD

Expanded Transsphenoidal Approach Amin Kassam, MD

Logic Regression Applied to Minimally Invasive Skull Base Surgery

Harry R. van Loveren, MD The Membrane of Liliequist

Endoscopic Colloid Cyst Resection Kerry R. Crone, MD and Nicholas B. Levine, MD

Sebastien Froelich, MD and Jeffrey T. Keller, PhD

Complex Hydrocephalus & 3rd Ventriculostomy Charles Teo, MD, MBBS, FRACS

Complication Avoidance in Endoscopy Amin Kassam, MD

Panel Discussion: Neuroendoscopy Drs. Theodosopoulos, Teo, Kassam, and van Loveren

Wednesday, March 1, 2006

7:00 - 9:30am: Minimally Invasive Spine

Introduction to Spine and Nerve Program Charles Kuntz, IV, MD

MISS: Evidence Based Uses Michael W. Groff, MD

Review: Randomized Trial for MISS William D. Tobler, MD

Minimally Invasive Cervical Decompression Richard G. Fessler, MD, PhD

Image-guided Surgery of the Spine Gerald E. Rodts, Jr., MD

Iso-C Fluoroscopy in Image-guided Surgery *Eric W. Nottmeier, MD*

TLIF with Unilateral Pedicle Screws Douglas Chyatte, MD

Axial Lumbar Interbody Fusion William D. Tobler, MD

MISS: Where Are We Going?

Richard G. Fessler, MD, PhD

Case Discussion Drs. Shaffrey & Fessler

4:00 - 6:30pm: Trauma / Deformity

Sagittal Spinal Alignment Charles Kuntz, IV, MD

Importance of Sagittal Alignment in Fusion Christopher I. Shaffrey, MD

Restoring Cervical Sagittal Spinal Alignment

Stephen L. Ondra, MD

Is it Safe to Teach Spinal Instrumentation? Chad J. Morgan, MD

360° Surgery: Make Approach Fit Pathology *Joseph T. Alexander, MD*

Treatment Adult Deformity >70 Years of Age Iulius Fernandez, MD

Thoracic Kyphosis: Surgical Options *Praveen V. Mummaneni, MD*

Revision Surgery: Indications & Techniques Christopher I. Shaffrey, MD

Restoring Thoracic-Lumbar Sagittal Alignment Stephen L. Ondra, MD

Thursday, March 2, 2006

7:00 - 9:30am: Motion Preservation

Dynamic Stabilization: Alternative to Fusion? Joseph T. Alexander, MD

Dynesys Non-Fusion Stabilization Device William C. Welch, MD

Lumbar Arthroplasty: Fact and Fiction Chad J. Morgan, MD and Charles Kuntz, IV, MD

Prosthetic Disc Nucleus

Charles D. Ray, MD, MS, FACS Economics of Spinal Surgery/Arthroplasty *Isador H. Lieberman, MD, MBA, FRCS(C)*

Lumbar Biomechanics: Non-Fusion Device William C. Welch, MD

Axial Lumbar Interbody Motion Preservation William D. Tobler, MD

Cervical Arthroplasty: The PCM Disc Richard P. Schlenk, MD

Case Discussion Drs. Ondra & Alexander

4:00 - 6:30pm: Peripheral Nerve

Ulnar Nerve Entrapment at the Elbow John E. McGillicuddy, MD

latrogenic Nerve Injuries Robert J. Spinner, MD

Vagal Nerve Stimulation and Depression George K. Bovis, MD

Intra Op Monitoring of CN IX and X Robert G. Parrish, MD

10 Most Misdiagnosed Lesions: Upper Extremity Robert J. Spinner, MD

Robotic Sympathectomy Martin D. Herman, MD, PhD

Drs. Spinner & McGillicuddy

Case Discussion

Rechargeable Impulse Generators: Impact on Neurostimulation Claudio A. Feler, MD

Lessons: 30 years of Peripheral Nerve Surgery John E. McGillicuddy, MD

7:00 - 9:30am: Degenerative Spine

Multilevel ADCF with BMP Robert J. Bohinski, MD, PhD

Friday, March 3, 2006

Laminotomy Techniques for Lumbar Stenosis *Claudius Thomé*, *MD*

Vertebral Augmentation: State of the Art Review H. Gordon Deen, Jr., MD

Selective Cell Retention from Bone Marrow Isador H. Leiberman, MD, MBA, FRCS(C)

Spondylolisthesis: Treatment Options *Bernard H. Guiot, MD*

Lumbar Interbody Fusion Gerald E. Rodts, Jr., MD

Cervical Lateral Mass Fusion vs. Laminoplasty Praveen V. Mummaneni, MD

Long Term Results: Lateral Mass Fixation of H. Gordon Deen, Jr., MD

Case Discussion Drs. Lieberman & Alexander

4:00 - 6:30pm: Tumor / Injury

Spine Oncology: Goals of Resection *Michael W. Groff, MD*

Vascular Lesions of the Spinal Cord William E. Krauss, MD

Surgical Site Infections in Spinal Surgery P. Colby Maher, MD

Syringomyelia After Chiari I Decompression Nicholas M. Wetjen, MD

Spinal Dural Sealant John M. Tew, Jr., MD

New Treatment for Spinal Cord Injury Robert G. Grossman, MD

Surgical Management of Spinal Infections Richard P. Schlenk, MD

Electrodeposition of Ca²⁺: Instrumentation Edmund H. Frank, MD, FACS

Treatment of Metastatic Spine Tumors Nicholas B. Levine, MD

Lodging and Location

Snowmass Village is a beautiful resort area perfect for winter time fun. Nestled in the Colorado Rockies, Snowmass provides a serene backdrop for skiing, snowboarding, shopping, dining, and relaxing.

The Silvertree Hotel is the Village's only full-service, ski-in,

ski-out hotel. Improvements this year include a remodel of

all public areas of the hotel and the addition of high speed,

wireless internet access throughout The Silvertree Hotel,

lobby and redecorated rooms.

Wildwood Lodge and the Snowmass Conference Center. The Wildwood Lodge, offers the relaxed atmosphere and comfort of a mountain lodge. This year, the Wildwood Lodge staff is ready to welcome guests into the newly remodeled

studios to spacious, private residences. Accommodations are available directly on the slopes or just a short shuttle ride away. When you register, remember to make lodging reservations as well. Please call 800-525-9402. A limited number of rooms/ condos have been reserved for those attending The Winter

Clinics. Reservations will be accepted based on availability.

Village Property Management Condominiums offers value-priced

Exhibitors*



Meditronic



To register, visit

Full Program

Cranial program only

www.winterclinics.com

Tuition

\$1200

\$1000

or call 1-800-325-7787

Registration deadline:

February 11, 2006









INTEGRA ® SYNTHES







Facultu

-Martin D. Herman, MD, PhD **Emory University** -Praveen V. Mummaneni, MD

Geisinger Health System -Douglas Chyatte, MD

Indiana University -Michael W. Groff, MD

-Stephen L. Ondra, MD **Oregon Health Sciences** -Charles Teo, MD, MBBS, FRACS

-Glen H. J. Stevens, DO, PhD

-Robert Parrish, MD PhD

-Claudius Thomè, MD

-Richard G. Fessler, MD, PhD **University of Cincinnati / Mayfield** Clinic / Cincinnati Children's -Chiraz Chaalala, MD -Kerry R. Crone, MD -Lindsey A. Nelson, MD

University of Michigan

-William C. Welch, MD -Samuel L. Barnett, MD

University of Tennessee -Claudio A. Feler, MD

-Julius Fernandez, MD

University of Washington

-Joseph T. Alexander, MD **Yale University**

Center of Brain & Spine Surgery -George K. Bovis, MD

-Gerald E. Rodts, Jr., MD

Indianapolis Neurosurgical Group -Troy D. Payner, MD

Mayo Clinic -H. Gordon Deen, Jr MD -David A. Miller, MD -Eric W. Nottmeier, MD -William Krauss, MD -Michael J. Link, MD -Frederic B. Meyer, MD -Alice C. Patton, MD -Robert J. Spinner, MD -P. Andrew Utter, MD

-Nicholas M. Wetjen, MD **Neurosurgical Associates, P. C.** P. Colby Maher, MD

-Edmund H. Frank, MD, FACS

Northwestern University

Prince of Wales Private Hospital

The Cleveland Clinic Foundation -William E. Bingaman, Jr., MD -Michael De Georgia, MD -Joung H. Lee, MD -Isador H. Lieberman, MD, MBA, FRCS(C) -Richard Schlenk, MD

The Methodist Hospital -Robert Grossman, MD

Thomas Jefferson University -David W. Andrews, MD, FACS

University Hospitals Health System -Robert Maciunas, MD

University Hospital Mannheim

-Robert J. Bohinski, MD PhD -Jeffrey T. Keller, PhD -Charles Kuntz, IV MD -Nicholas B. Levine, MD -George T. Mandybur, MD

-Chad J. Morgan, MD

University of Chicago

-Raj K. Narayan, MD -Andrew J. Ringer, MD -John M. Tew, Jr., MD -Philip V. Theodosopoulos, MD -William D. Tobler, MD -Mario Zuccarello, MD -Sebastien Froelich, MD

-John E. McGillicuddy, MD **University of Pittsburgh** -Amin Kassam, MD

University of South Florida -Bernard Guiot, MD -Harry R. van Loveren, MD

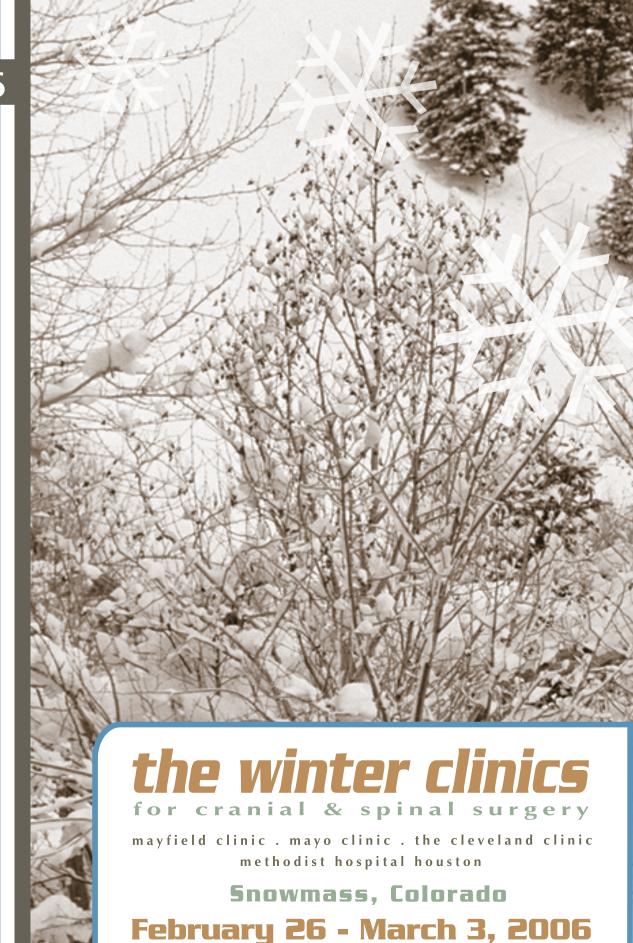
University of Virginia -Christopher I. Shaffrey, MD

-Andrew T. Dailey, MD **Wake Forest University**

-Alain C. J. de Lotbiniere, MD

Charles D. Ray, MS MD FACS

FIRST CLASS U.S. POSTAGE CINCINNATI, OH PERMIT NO. 6523 2006





*as of December 1, 2005