North American Skull Base Society
23rd ANNUAL MEETING
The Complexity of Measuring True Quality in Skull Base Surgery
February 15-17, 2013 with Pre-Meeting Practical Dissection Course, February 13-14, 2013

THE DORAL HOTEL
MIAMI, FLORIDA

PRESIDENT: Carl Heilman, MD
SCIENTIFIC PROGRAM CHAIRS: Michael Chicoine, MD, Siviero Agazzi, MD, Nik Blevins, MD, & Mark Varvares, MD
PRACTICAL COURSE DISSECTION WORKSHOP CHAIRS: Vijay K. Anand, MD, Carlos David, MD, James Evans, MD, & Sandeep Samant, MD

WWW.NASBS.ORG
Welcome to the 2013 North American Skull Base Society Annual Meeting at the beautiful Doral Hotel in Miami, Florida. Michael Chicoine, MD, the Annual Meeting Chairman, has put together a spectacular scientific and social program. The theme of the 2013 annual meeting is “The Complexity of Measuring True Quality in Skull Base Surgery”. As physicians, we are increasingly being evaluated by hospital discharge billing information, on-line web sites, and patient satisfaction surveys. During the plenary sessions, we will delve into the complexity of determining true quality on multiple levels.

Our Keynote Speaker is Dr. Vinod Sahney. Dr. Sahney is a Senior Fellow at the Institute for Healthcare Improvement. He will speak on “Reliability: The Next Challenge in Health Care Quality Improvement”. Also during the plenary sessions, quality surgery will be debated regarding endoscopic endonasal vs transcranial microsurgery for anterior skull base meningiomas as well as sinonasal cancers. Fred Barker, MD, and Carl Snyderman, MD, will present their views on how quality in surgery is being determined.

The honored guests this year include two past presidents of the NASBS, Dr. Jon Robertson and Dr. Hugh Curtin. Dr. Robertson is also a past president of the American Association of Neurological Surgeons, the American Board of Neurological Surgeons and the Society of University Neurosurgeons. Dr. Curtin is a Professor of Radiology at Harvard Medical School and the Chairman of Radiology at the Massachusetts Eye and Ear Infirmary. The Plenary session will once again feature Skull Base Jeopardy with emcee John Golfinos back by popular demand.

As a new feature this year, the top 6 submitted abstracts will be presented in the Plenary Sessions followed by a comment from a senior NASBS member. The meeting will also feature a series of Breakfast Seminars on “How I Do It”, as well as numerous Concurrent Topic Sessions and Abstract Presentations.

The NASBS website, under the direction of Carlos David, MD, is now presenting a skull base “Case of the Month”. The first case has been posted, so please log on and indicate how you would manage this challenging case. We have also begun work on developing a skull base case registry, under the leadership of Ted Schwartz, MD. We hope to build a large database to allow analysis of outcomes on uncommon skull base pathologies.

The Executive Committee of the NASBS welcomes you to Miami and hopes you find this meeting extremely educational and stimulating.

Carl B. Heilman MD, President, NASBS
LEARNING OBJECTIVES
At the conclusion of this activity, participants should be able to:
• Explain the most recent recommendations for management of skull base pathologies.
• Express knowledge of the technical aspects of the surgical and radiosurgical management of these pathologies as learned from the experience of leaders in the field.
• Describe the 3D anatomy of the skull base and neurovascular structures pertaining to the management of skull base pathologies.
• List and apply the fundamentals of quality measurement and their specific application to skull base pathologies.
• Express knowledge of recent developments in the management of skull base pathologies as presented orally before final peer review publication and provide critical feedback to the presenter and to the audience.

WHO SHOULD ATTEND
The NASBS meeting is open to NASBS members and Non-members.

TARGET AUDIENCE
• Head and neck surgeons, neurosurgeons, reconstructive surgeons, radiotherapists, radiologists, medical oncologists, physical rehabilitation physicians, ophthalmologists, neurologists, maxillofacial surgeons, maxillofacial prosthodontists and endocrinologists
• Targeted allied health professionals will include physical therapists, oncology nurses, oral health specialists, occupational therapists, speech and language pathologists, optometrists, psychologists and anaplasologists.

ACCREDITATION STATEMENT
This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American College of Surgeons and the North American Skull Base Society. The American College Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

AMA PRA CATEGORY 1 CREDITS™
The American College of Surgeons designates this live activity for a maximum of 20.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

SAVE THE DATES!
Mark your calendars for these upcoming NASBS Meetings and Workshops
Summer Resident and Fellows Practical Dissection Workshop
July 26-28, 2013, LSU Health Sciences Center, New Orleans, LA
24th NASBS Annual Meeting
February 14-16, 2014
Pre-Meeting Practical Dissection Workshop February 12-13, 2014

www.NASBS.org
**PAST PRESIDENTS**

1990  Paul J. Donald, MD
1991  Laligam N. Sekhar, MD
1992  Ivo P. Janecka, MD
1993  Peter C. Smith, MD, PhD
1994  Albert L. Rhoton, Jr., MD
1995  Hugh Curtin, MD
1996  Gerald E. Brackmann, MD
1997  Ossama Al-Mefty, MD
1998  Steven A. Newman, MD
1999  John P. Leonetti, MD
2000  Robert F. Spetzler, MD
2001  Ian T. Jackson, MD
2002  Vinod K. Anand, MD
2003  Jon H. Robertson, MD
2004  Jatin Shah, MD
2005  Patrick J. Gullane, MD
2006  Anil Nanda, MD
2007  Guy J. Petruzzelli, MD
2008  Franco DeMonte, MD
2009  Daniel Nuss, MD
2011  Peter Neligan, MD
2012  Dennis Kraus, MD

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**WHY JOIN NASBS?**

Membership is based on an interest in skull base surgery and related sciences. Individuals with backgrounds in neurosurgery, otolaryngology-head and neck surgery, radiology, neuroradiology, otology, neurotology, plastic and reconstructive surgery, and others interested in skull base diseases are welcome to apply.

**MEMBERSHIP BENEFITS**

- **Scientific Journal:** Members will receive the official journal of the society, *Journal of Neurological Skull Base Surgery*, a quarterly publication that contains peer-reviewed original articles, review articles, and position papers. It will also present news and information on an international scope to keep members aware of recent and upcoming events, activities, and evolving developments in skull base surgery.

- **Continuing Medical Education:** Members will receive listings of continuing medical educational opportunities in skull base surgery, as well as scientific courses sponsored by NASBS and will receive reduced registration fees for national scientific meetings.

- **Membership Directory:** An annual directory of the membership will be provided.

- **NASBS Website Access:** Members will have access to Member-Only discussion areas on the Society’s website.

Please visit [www.nasbs.org/about/membershipinfo.php](http://www.nasbs.org/about/membershipinfo.php) for more information or email membership@nasbs.org.

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**REGISTRATION HOURS**

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<td>Thursday, February 14, 2013</td>
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<td>Friday, February 15, 2013</td>
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<td>Saturday, February 16, 2013</td>
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<td>Sunday, February 17, 2013</td>
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**SPEAKER PREP HOURS**

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**EXHIBIT HALL/POSTER HOURS**

**Friday, February 15, 2013**

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<th>Time</th>
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<tr>
<td>9:00 am – 4:00 pm</td>
<td>Exhibition Hall Open</td>
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<tr>
<td>5:30 pm – 7:00 pm</td>
<td>Exhibition Hall Open (Reception)</td>
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<tr>
<td>9:00 am – 9:30 am</td>
<td>Break in Exhibit Hall</td>
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<tr>
<td>12:00 pm – 1:00 pm</td>
<td>Lunch for Non Members in Exhibit Hall</td>
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<tr>
<td>3:30 pm – 4:00 pm</td>
<td>Break in Exhibit Hall</td>
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<tr>
<td>4:00 pm – 5:30 pm</td>
<td>Break for Exhibitors/Exhibit Hall Closed</td>
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<tr>
<td>5:30 pm – 7:00 pm</td>
<td>Reception in Exhibit Hall</td>
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**Saturday, February 16, 2013**

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<tr>
<td>7:30 am – 11:00 am</td>
<td>Exhibition Hall Open</td>
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<tr>
<td>7:30 am – 8:00 am</td>
<td>Breakfast in Exhibit Hall</td>
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<td>10:00 am – 10:30 am</td>
<td>Break in Exhibit Hall</td>
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Every year, the North American Skull Base Society recognizes individuals who have played an instrumental role in skull base surgery. This year, the NASBS would like to recognize Dr. John Robertson and Dr. Hugh Curtin. They have been innovators in skull base surgery and are teachers to colleagues, residents and students around the world.

**JON H. ROBERTSON, MD**

Dr. Jon Hobson Robertson attended Southwestern College (now Rhodes) in Memphis, Tennessee, receiving his BA degree in 1968. He graduated from the University of Tennessee Medical School in 1971. After completing an internship and a year of General Surgery at the City Of Memphis Hospitals, he worked as an ER physician and in general practice for several years before beginning his residency in Neurosurgery in 1975 at the University of Tennessee Center for Health Sciences. Immediately following completion of his residency training in 1979, Dr. Robertson became a member of the Semmes-Murphey Clinic and Assistant Professor in the Department of Neurosurgery at the University of Tennessee in 1997. He retired from the University of Tennessee in July, 2011. Dr. Robertson has continued a limited practice with the Semmes-Murphey Clinic, and enjoyed his role as a senior faculty member in the UT Neurosurgical Department.

Dr. Robertson has been active in numerous national and local neurosurgical organizations. He was President of the North American Skull Base Society in 2002, President of the Society of University Neurosurgeons in 2005, President of the American Association of Neurological Surgeons in 2008, and served as a Director on the American Board of Neurological Surgeons 2000-2006. Over the past two decades he has served on the Board of Directors of Semmes-Murphey Neurologic & Spine Institute and the Medical Education & Research Institute (MERI) in Memphis, Tennessee.

In addition to his volunteer and academic activities, Dr. Robertson has maintained an active practice in neurological surgery with the Semmes-Murphey Neurologic & Spine Institute for the past 33 years. His clinical practice has focused on the surgical management of tumors affecting the cranial base of the skull. Parents of five children and grandparents of twelve, Dr. Robertson and his wife, Carol Ann, have been married for 45 years. Dr. Robertson enjoys fly-fishing and spending time with his family.

**HUGH D. CURTIN, MD, FACR**

Hugh D. Curtin is a radiologist specializing in imaging of the head, neck and skull base. He is Chair of Radiology at the Massachusetts Eye and Ear Infirmary and Professor of Radiology at the Harvard Medical School. Born and raised in Canton, New York, he attended St. Michael’s College at the University of Toronto. After graduating from Upstate Medical University in Syracuse, he did a radiology residency at the University of Pittsburgh. He spent a year at the Ostra Sjukhuset in Goteborg, Sweden learning pediatric radiology and angiography. Then he returned to Pittsburgh. There he began doing head and neck radiology not really because he was driven by a specific interest but because nobody else wanted to do it and he was the most junior attending radiologist. Dr. Bertram Girdany, the Chair of Radiology at the University of Pittsburgh, asked Dr. Curtin to oversee the new radiology department at the Pittsburgh Eye and Ear Hospital on an interim basis.

In preparation, Dr. Curtin went to study at the Fondation Ophtalmologique Adolphe de Rothschild in Paris with Dr. Jacqueline Vignaud, one of world’s leaders in temporal bone imaging.

Back in Pittsburgh, Dr. Curtin worked closely with otolaryngologists and skull base surgeons. Dr. Curtin credits his interactions with Dr. Eugene Myers and Dr. Jonas Johnson with helping him to learn head and neck imaging. The Center for Cranial Base Surgery brought Drs. Ivo Janecka and Laligam Sekhar to Pittsburgh with further opportunities for imaging exploration of the skull base. Because of this interaction, Dr. Curtin was one of the founding members of the North American Skull Base Society. He was the President of the Society in 1995 and organized the meeting that year in Naples, Florida. Dr. Curtin moved to Boston in 1995 to become Chair of Radiology at the Massachusetts Eye and Ear Infirmary.

Dr. Curtin has served on the editorial board of the journal Skull Base and numerous other journals. He has authored or coauthored over 150 peer reviewed papers and lectured extensively nationally and internationally. Much of his effort has focused on publication of the textbook Head and Neck Imaging with Dr. Peter Som. The fifth edition has just been published. Dr. Curtin was awarded the Gold Medal of the American Society of Head and Neck Radiology (ASHNR) and the Presidential Citation of the American Academy of Otolaryngology- Head and Neck Surgery. He has served as President of the ASHNR as well as the North American Skull Base Society. Dr. Curtin is particularly proud of having received the teacher of the year award from the Massachusetts General Hospital radiology residents and also the teaching award from the Otolaryngology residents of Harvard Medical School. He was recently honored as “Distinguished Alumnus” by Upstate Medical University.

In Pittsburgh, Dr. Curtin met and married Carole Livingston. They have been married just over thirty years and currently live just west of Boston. Carole and Hugh have three children, Matthew, Eric and Rachel who are the pride and joy of their lives.
Siviero Agazzi, MD, MBA
University of South Florida
Tampa, FL, USA

Ryojo Akagami, MD
University of British Columbia/Vancouver Hospital, Gordon & Leslie Diamond Health Care Center
Vancouver, BC

Sudheer Ambekar, MD
University Health Sciences Center Shreveport
Shreveport, LA, USA

Chiazo Amene, MD
LSU HSC Shreveport
Shreveport, LA, USA

Mario Ammirati, MD, MBA
Ohio State University Columbus, OH, USA

Amjad N. Anaizi, MD
University of Cincinnati Cincinnati, OH, USA

Vijay Anand, MD, FACS
Weill Cornell Medical College New York Presbyterian Hospital Weill -Cornell Medical Center New York, NY, USA

Simon Angeli
University of Miami School of Medicine Miami, FL, USA

Donald J. Annino Jr., MD
Brigham & Women’s Hospital Boston, MA, USA

Ali Ayyad, MD
Johannes Gutenberg University Mainz, Germany

Ram Ayyar, MD
University of Miami School of Medicine Miami, FL, USA

Khaled M. Aziz, MD, PhD
Allegheny General Hospital Pittsburgh, PA, USA

Seilesh Babu, MD
MI Ear Institute Farmington Hills, MI, USA

Frederick G. Barker, MD
Massachusetts General Hospital Boston, MA, USA

Samuel L. Barnett, MD
University of Texas – Southwestern Medical Center Dallas, TX, USA

Mustafa Baskaya, MD
University of Wisconsin – Madison Madison, WI, USA

Pete Batra, MD
University of Texas Southwestern Medical Center Dallas, TX, USA

M Bergsneider, MD
UCLA Los Angeles, CA, USA

Antonio Bernardo, MD
Weill Cornell Medical College New York, NY, USA

Nikolas H. Blevins, MD
Stanford University School of Medicine Stanford, CA, USA

Gregory H. Branham, MD
Washington University St. Louis St. Louis, MO, USA

Ketan Bulsara, MD
Yale University SOM New Haven, CT, USA

Derald Brackmann, MD
House Ear Clinic Los Angeles, CA, USA

Gavin W. Britz, MD
Duke University Medical Center Durham, NC, USA

Matthew L. Carlson, MD
Mayo Clinic Rochester, MN, USA

Ricardo L. Carrau, MD
The Ohio State University Medical Center Columbus, OH, USA

Roy R. Casiano, MD
University of Miami Miller School of Medicine Miami, FL, USA

Andrea Castellucci, MD
University of Bologna Bologna, Italy

Luigi Maria Cavallo, MD, PhD
Università degli Studi di Napoli Federico II Naples, Italy

Kaisorn L. Chaichana
Johns Hopkins School of Medicine Baltimore, MD, USA

Kyle J. Chambers, MD
Massachusetts Eye and Ear Infirmary Harvard Medical School Boston, MA, USA

Annie W. Chan, MD
Massachusetts General Hospital Boston, MA, USA

Steven D. Chang, MD
Stanford University School of Medicine Stanford, CA, USA

Sergey Chernov, MD, PhD
Novosibirsk Novosibirsk, Russia

Rajesh Chhabra, MS, MCh
Department of Neurosurgery, PGIMER Chandigarh, India

Michael Chicoine, MD
Washington University School of Medicine St. Louis, MO, USA

Venkatakarrthikeyan Chokkalingam, MD
UM Miller School of Medicine Miami, FL, USA

Silky Chotai, MD
Nanfang Hospital – Southern Medical University China

Winward Choy, BA
Jonsson Comprehensive Cancer Center Los Angeles, CA, USA

Peter D. Costantino, MD
North Shore-Long Island Jewish Health System Manhasset, NY, USA

William T. Couldwell, MD, PhD
University of Utah School of Medicine Salt Lake City, UT, USA

Kelli L Crabtree, MD
University of Kansas Medical Center Kansas City, KS, USA
2013 MEETING FACULTY

Ammar H. Hawasli, MD, PhD
Washington University School of Medicine
St. Louis, MO, USA

Carl B. Heilman, MD
Tufts Medical Center
Boston, MA, USA

Edward Hepworth, MD
Colorado Sinus Institute
Denver, CO, USA

Marc W. Herr, MD
Massachusetts General Hospital and
Massachusetts Eye and Ear Infirmary
Boston, MA, USA

Thomas S. Higgins, MD, MSPH
Kentuckiana ENT/Johns Hopkins
University
Louisville, KY, USA

Peleg M. Horowitz, MD, PhD
Brigham and Women’s Hospital,
Children’s Hospital Boston, Dana-Farber
Cancer Institute, Harvard Medical School,
and Broad Institute of MIT and Harvard
Boston, MA, USA

Qasim Husain, BS
University of Medicine and Dentistry of
New Jersey – New Jersey Medical School
Edison, NJ, USA

Peter H. Hwang, MD
Stanford School of Medicine
Stanford, CA, USA

Gregory J. Imbarrato, DO
Geisinger Medical Center
Bloomington, PA, USA

Masaru Ishii, MD, PhD
Johns Hopkins University
Baltimore, MD, USA

John A. Jane, Jr., MD
University of Virginia Health System
Charlottesville, VA, USA

Taro Kaibara, MD
Barrow Neurosurgical Assoc Ltd
Phoenix, AZ, USA

Yashar Kalani, MD, PhD
Barrow Neurological Institute
Phoenix, AZ, USA

Peter Kan, MD
University of South Florida
Tampa, FL, USA

Daniel F. Kelly, MD
John Wayne Cancer Institute at Saint
John’s Health Center
Santa Monica, CA, USA

Osaama H. Khan, MD, MSc
University Health Network, Toronto
Western Hospital, University of Toronto,
Ontario, Canada, Mount Sinai Hospital,
University of Toronto, Ontario, Canada
Toronto, ON, Canada

Albert Kim, MD
Washington University
St. Louis, MO, USA

Grace G Kim, MD
University of North Carolina Hospitals –
Chapel Hill
Chapel Hill, NC, USA

Young II Kim
Department of Neurosurgery, Seoul St.
Mary’s Hospital, The Catholic University
of Korea, Seoul, Korea
Seoul, South Korea

Cristine N Klatt-Cromwell, MD
University of North Carolina at Chapel Hill
Chapel Hill, NC, USA

Maria Koutourousiou, MD
Center for Cranial Base Surgery
University of Pittsburgh Medical Center
Pittsburgh, PA, USA

Dennis H. Kraus, MD
Lenox Hill Hospital
New York, NY, USA

Boris Krischek, MD, PhD
University Health Network
Toronto, ON, Canada
Kingston, Canada

Ali F. Krisht, MD
AR Neuroscience Institute
Little Rock, AR, USA

Andrew D. Kroeker, MD
University of Michigan
Ann Arbor, MI, USA

James Kryzanski, MD
Tufts New England Medical Center
Boston, MA, USA

Michael Kupferman, MD
The University of Texas MD Anderson
Cancer Center
Houston, TX, USA

Tariq T. Lamki, MD
The Ohio State University
Columbus, OH, USA

Edward Laws, MD
Dana-Farber Cancer Institute
Boston, MA, USA

Joung H. Lee, MD
Neurological Institute, Cleveland Clinic
Cleveland, OH, USA

John P. Leonetti, MD
Loyola University Medical Center
Maywood, IL, USA

Carol M. Lewis, MD
University of Texas MD Anderson
Cancer Center
Houston, TX, USA

Yan Michael Li, MD PhD
State University of New York Upstate
Medical University
Syracuse, NY, USA

Seth Lieberman, MD
University of Miami
Miami, FL, USA

Norbert Liebsch, MD, PhD
Massachusetts General Hospital
Boston, MA, USA

Giant C. Lin, MD
University of Michigan
Ann Arbor, MI, USA

Michael J. Link, MD
Mayo Clinic
Rochester, MN, USA

Andrew S. Little, MD
Barrow Neurological Institute
Phoenix, AZ, USA

James K. Liu, MD
Neurological Institute of New Jersey,
UMDNJ – New Jersey Medical School
Newark, NJ, USA
Robert Malyapa, MD, PhD  
University of Florida Proton Therapy Institute  
Jacksonville, FL, USA

Lawrence J. Marentette, MD  
University of Michigan Medical Center  
Ann Arbor, MI, USA

Nevo Margalit, MD  
Tel Aviv University  
Ramat Aviv, Israel

Deidre Marshall, MD  
University of Miami Miller School of Medicine  
Miami, FL, USA

Junko Matsuyama, MD, PhD  
Department of Neurosurgery, Fukushima Medical University  
Minamisoma, Japan

Edward McCoul, MD, MPH  
Providence Regional Medical Center  
Everett, WA, USA

Jonathan L. McJunkin, MD  
Washington University School of Medicine  
St. Louis, MO, USA

Eamon J. McLaughlin, MD  
Department of Otorhinolaryngology, University of Pennsylvania Health System  
Philadelphia, PA, USA

Josh C. Meier, MD  
Massachusetts Eye and Ear Infirmary  
Boston, MA, USA

Madison Michael, MD  
Sennem Murphey Clinic  
Memphis, TN, USA

R. Millard  
Charing Cross Hospital London, UK  
London, United Kingdom

Mia E. Miller, MD  
Kaiser Permanente  
San Diego, CA, USA

Yutaka Mine, MD, PhD  
Department of Neurosurgery, Keio University School of Medicine  
Tokyo, Japan

Sandeep Mohindra, MD  
Postgraduate Institute of Medical Education and Research  
Chandigarh, India

Satyawati Mohindra, MD  
Postgraduate Institute of Medical Education and Research  
Chandigarh, India

Jacques J. Morcos, MD, FRCS(Eng), FRCS(Ed)  
University of Miami Miller School of Medicine  
Miami, FL, USA

Daniel T. Nagasawa, MD  
University of California Los Angeles, Department of Neurosurgery; University of Southern California, Department of Neurological Surgery  
Los Angeles, CA, USA

Anil Nanda, MD  
LSU Health Sciences Center  
Shreveport, LA, USA

Iman Naseri, MD  
University of Florida College of Medicine  
Jacksonville, FL, USA

Steven A. Newman, MD  
University of Virginia  
Charlottesville, VA, USA

Daniel W. Nuss, MD, FACS  
LSU Health Sciences Center  
Lafayette, LA, USA

Brian Nussenbaum, MD  
Washington University School of Medicine  
St. Louis, Missouri

Adam M. Olszewski, BS  
Thomas Jefferson University Hospital, Philadelphia, Pennsylvania; Albany Medical Center  
Albany, NY, USA

Niamh O’Shea  
Charing Cross Hospital London, UK

Jeffrey S. Pannell, MD  
The University of California San Diego  
San Diego, CA, USA

Phillippe Pasche, MD  
Associate Professor  
Centre Hospitalier Universitaire Vaudois  
Lausanne, Switzerland

Mihir R Patel, MD  
University of North Carolina at Chapel Hill - School of Medicine  
Chapel Hill, NC, USA

Troy Payner, MD  
Indianapolis Neurosurgical Group  
Indianapolis, IN, USA

Kevin A. Peng, MD  
University of California, Los Angeles  
Los Angeles, CA, USA

Maria Peris-Celda, MD, PhD  
Department of Neurological Surgery, University of Florida  
Gainesville, FL, USA

Daniel Pieper, MD  
Michigan Head & Spine Institute  
Novi, MI, USA

Kim Pollack  
Ave, Chicago, IL, USA

Vikram Prabhu, MD  
Loyola University Medical Center  
Maywood, IL, USA

Daniel M. Prevedello, MD  
The Ohio State University  
Columbus, OH, USA

Ivan Radovanovic, MD, PhD  
University Hospitals of Geneva  
Geneva, Switzerland

Jason P. Rahal, MD  
Tufts University School of Medicine  
Boston, MA, USA

Roheen Raithatha, MD  
New York Presbyterian/Weill Cornell Medical Center  
New York, NY, USA

Daniel M. Raper, MBBS  
University of Virginia  
Charlottesville, VA, USA

Christopher H. Rassekh, MD  
University of Pennsylvania  
Philadelphia, PA, USA

Elie Rebeiz, MD  
Tufts University School of Medicine  
Boston, MA, USA

Aaron K Remenschneider, MD  
Department of Otolaryngology and Laryngology, Harvard Medical School  
Boston, MA, USA

Andrew M Rivera, MD  
University of Miami Department of Otolaryngology  
Miami Beach, FL, USA
2013 MEETING FACULTY

Jon H. Robertson, MD
Semmes Murphey Clinic
Memphis, TN, USA

Marc R. Rosen, MD
Thomas Jefferson University
Philadelphia, PA, USA

Andrew Rosenberg, MD
University of Miami Miller School of Medicine
Miami, FL, USA

Robert Rostomilly, MD
University of Washington School of Medicine
Seattle, WA, USA

Vinod K. Sahney, PhD
Northeastern University
Boston, MA, USA

Sandeep Samant, MD
University of Tennessee Health Science Center
Memphis, TN, USA

Chris I. Sanders Taylor, MD
University of Cincinnati
Cincinnati, OH, USA

Theodore H. Schwartz, MD
Weill Cornell Neurological Surgery
New York, NY, USA

Chandranath Sen, MD
New York University Med Center
New York, NY, USA

Brent A. Senior, MD, FACS, FARS
University of North Carolina at Chapel Hill
Chapel Hill, NC, USA

Pradeep Setty, DO
St. John Providence Hospital
Royal Oak, MI, USA

Jatin P. Shah, MD
Memorial Sloan-Kettering Cancer Center
New York, NY, USA

Raj K. Shrivastava, MD
Mount Sinai Medical Center and Beth Israel Medical Center
New York City, NY, USA

Jonathan Sillman, MD
Tufts Medical Center
Boston, MA, USA

Joseph Simpson, MD
Department of Radiation Oncology
Washington University in St. Louis
St. Louis, MO

W G Singleton, BA (Hons), BM BCh (Oxon) MRCS
North Bristol NHS Trust
Bristol, United Kingdom

Alan Siu, MD
George Washington University Medical Center
Washington, DC, USA

Carl Snyderman, MD, MBA
University of Pittsburgh Medical Center
Pittsburgh, PA, USA

Hesham Soliman, MD
Kansas University
Kansas City, KS, USA

Ashish Sonig, MD MS MCh
LSU health Sciences Center ,
Shreveport, LA, USA

Christopher R. Spencer, MD, MS
Washington University School of Medicine in St. Louis
St. Louis, MO, USA

Douglas L. Stofko, DO
Geisinger Medical Center
Danville, PA, USA

Shirley Y. Su, MD
University of Pittsburgh Medical Center
Pittsburgh, PA, USA

Stephen E. Sullivan, MD
University of Michigan
Ypsilanti, MI, USA

Hai Sun, MD, PhD
Oregon Health & Science University
Portland, OR, USA

Peter F. Svider, BA
University of Medicine and Dentistry of New Jersey – New Jersey Medical School
Fair Lawn, NJ, USA

Oszkar Szentirmai, MD
New York Presbyterian/Weill Cornell Medical Center
New York, NY, USA

Abtin Tabaei, MD
Albert Einstein College of Medicine
New York, NY, USA

Bruce L Tai, PhD
University of Michigan
Ann Arbor, MI, USA

Yoko Takahashi, PhD
The University of Texas MD Anderson Cancer Center
Houston, TX, USA

Marcos S. Tatagiba, MD
Universitätsklinikum Tübingen
Klinik für Neurochirurgie
Tübingen, Germany

Fred F. Telischi, MEE, MD, FACS
University of Miami Miller School of Medicine
Miami, FL, USA

Constance EH Teo, MD
MD Anderson Cancer Center
Houston, TX, USA

Sergei Terterov, MD
David Geffen School of Medicine,
University of California Los Angeles
Los Angeles, CA, USA

Marc A. Tewfik, MD, MSc, FRCSC
McGill University Health Centre &
Jewish General Hospital
Montreal, Canada

Philip Theodosopoulos, MD
University of Cincinnati/Mayfield Clinic
Cincinnati, OH, USA

Ajith Thomas, MD
Beth Israel Deaconess Medical Center
Boston, MA, USA

B. Gregory Thompson, MD
University of Michigan Neurosurgery
Ann Arbor, MI

Christopher F. Thompson, MD
David Geffen School of Medicine at UCLA
Los Angeles, CA, USA
2013 AWARD WINNERS

On behalf of the North American Skull Base Society, the following awards were given this year:

BEST PAPER BY A MEDICAL STUDENT

“Prognostic Factors for Tumor Control Following Surgical Resection and Adjuvant Radiation Therapy for Intracranial Chordomas”

Winward Choy
University of California Los Angeles
Los Angeles, CA, USA

BEST CLINICAL PAPER BY A RESIDENT

“Modifications to the Endoscopic Approach for Anterior Skull Base Lesions Improve Postoperative Sinonasal Symptoms”

Christopher Thompson, MD
University of California Los Angeles
Los Angeles, CA, USA

BEST BASIC SCIENCE PAPER BY A RESIDENT

“FLLL32 STAT3 Inhibition is Effective Against Chordoma in Vitro”

Anthony Wang, MD
University of Michigan
Ann Arbor, MI, USA
In accordance with the ACCME Accreditation Criteria, the American College of Surgeons, as the accredited provider of this activity, must ensure that anyone in a position to control the content of the educational activity has disclosed all relevant financial relationships with any commercial interest. Therefore, it is mandatory that both the program planning committee and speakers complete disclosure forms. Members of the program committee were required to disclose all financial relationships and speakers were required to disclose any financial relationship as it pertains to the content of the presentations. The ACCME defines a ‘commercial interest’ as “any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients”. It does not consider providers of clinical service directly to patients to be commercial interests. The ACCME considers “relevant” financial relationships as financial transactions (in any amount) that may create a conflict of interest and occur within the 12 months preceding the time that the individual is being asked to assume a role controlling content of the educational activity.

ACS is also required, through our joint sponsorship partners, to manage any reported conflict and eliminate the potential for bias during the activity. All program committee members and speakers were contacted and the conflicts listed below have been managed to our satisfaction. However, if you perceive a bias during a session, please report the circumstances on the session evaluation form.

Please note we have advised the speakers that it is their responsibility to disclose at the start of their presentation if they will be describing the use of a device, product, or drug that is not FDA approved or the off-label use of an approved device, product, or drug or unapproved usage.

The requirement for disclosure is not intended to imply any impropriety of such relationships, but simply to identify such relationships through full disclosure, and to allow the audience to form its own judgments regarding the presentation.

*Faculty that are not listed below, have nothing to disclose*

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<thead>
<tr>
<th>NAME</th>
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<th>WHAT I OR SPOUSE/PARTNER RECEIVED</th>
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**PROGRAM COMMITTEE DISCLOSURES**

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<td>Investigator</td>
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*Drs. Siviero Agazzi, Carl Heilman and Mark Varvares have nothing to disclose.*

**CHECK OUT THE PROGRAM ON OUR MOBILE WEBSITE!**

The final program and abstracts can be viewed by visiting the following site: [nasbs2013.org](http://nasbs2013.org)

Works with any browser, desktop or mobile. Works best with **iPhone, iPad**, and **Android** devices.
EXHIBIT HALL FLOOR PLAN

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#201 Synthes CMF
#202 Biomet Microfixation
#203 Mizuho America, Inc.
#204 OsteoMed
#205 Cook Medical
#206 KARL STORZ Endoscopy-America, Inc.
#207 NICO Corporation
#300 Leica Microsystems
#301 Synthes Anspach
#302 KLS Martin
#303 Medtronic Surgical Technologies
#304 Piezovsurgery Incorporated
#305 Visionsense Corp.
#306 Kelyniam Global, Inc.
#307 Integra
EXHIBITOR PROFILES

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inomed North America Inc. is a medical technology company developing systems for intraoperative neuromonitoring (IONM), functional neurosurgery, pain treatment and neurological diagnostics. With 20 years of innovation, and development and manufacturing in Germany, we deliver quality products to customers in all major global markets. Our products are the result of decades of experience, clinical tests, and secure trials at some of the most prestigious centers in Germany and the European Union. This formula for success ensures that our customers and their patients benefit from the best possible treatment options.
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Mizuho America, Inc. is a cerebrovascular focused instrumentation company whose main products include Sugita T2 Aneurysm Clips, 7200B Operating Table, Micro-Instruments, Kelly Endonasal Set, Lawton Neurovascular Bypass Set, Evans Rotatable Set, Day-Bailes Suction Tubes, and Intracranial & Vascular Dopplers. When it’s Microsurgery, it’s Mizuho.

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NICO Corporation is progressing minimally invasive corridor neurosurgery by creating instruments that allow for safe tumor and cyst removal through smaller openings. This provides neurosurgeons opportunities for less brain retraction, shorter total resection time, and precise control to achieve a more effective gross total resection. NICO’s products offer the potential for less surgical trauma for patients, shorter hospital stays, better clinical outcomes, and improved clinical experiences.
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OsteoMed is a global and innovative leader in the development and manufacturing of specialty surgical implants for the neurosurgical market. The OsteoMed philosophy focuses on improved patient outcomes through anatomically friendly technology, and designs created through critical input from surgeons for streamlined surgical techniques.

Piezosurgery Incorporated
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Stryker is one of the world’s leading medical technology companies and is dedicated to helping healthcare professionals perform their jobs more efficiently while enhancing patient care. The company offers a diverse array of innovative medical technologies including reconstructive implants, medical and surgical equipment, and neurotechnology and spine products to help people lead more active and more satisfying lives.

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Dr. Sahney was Senior Vice President and Chief Strategy Office at Blue Cross Blue Shield of Massachusetts. Prior to joining the company, he served as Senior Vice President at Henry Ford Health System for 25 years, including responsibilities for Strategic Planning, Marketing, Government Relations, Public Relations, Community Affairs, Quality Resource Group, Special Events, Management Services, Information Services, New Enterprise Development Corporation, the Center for Health Services Research and the Center for Health Promotion and Disease Prevention.

Dr. Sahney has been elected to both the Institute of Medicine and the National Academy of Engineering. He has served on the faculty of Harvard University for the past 31 years and has been a faculty member for Harvard’s Executive Program in Health Policy and Management. He also served as one of nine judges for the Malcolm Baldrige National Quality Award and The Military Health Care Advisory Board.

Dr. Sahney is a co-author of a book titled “Reengineering Health Care: Building on CQI”. He has authored over 50 publications, including: books, chapters in books, publications in journals and conference proceedings. He has made over 100 presentations at national and international meetings.

His board service includes the Institute for Healthcare Improvement as a founding member, director and board chair; St. Joseph Mercy – Macomb Hospital; St. Joseph Mercy – Oakland Hospital; Enterprise Development Fund; Michigan’s Children; Group Practice Improvement Network as a founding member and director; Society for Healthcare Strategy and Market Development; founding member and president of the Society for Health Systems; Faculty Practice Plan at Washington University School of Medicine; and Henry Ford OptimEyes.

He has received a number of awards including the Dean Conley Award from the American College of Health Care Executives for the best paper published in health care management; the Best Paper Award and Quality Award from Health Care Information and Management Systems Society of the American Hospital Association; a Distinguished Service Award from the Institute of Industrial Engineers; the Founders Award from the Society of Health Systems; the Fellow Award from both IIE and HIMSS/AHA; the Distinguished Service Award from the University of Wisconsin, Madison; and the Gold Award from the Engineering Society of Detroit.
THURSDAY, FEBRUARY 14, 2013
2:00 pm – 6:00 pm  Registration/Speaker Prep  Gallery

FRIDAY, FEBRUARY 15, 2013
6:30 am – 7:00 am  Breakfast/Registration  Gallery
7:00 am – 8:00 am  Breakfast Seminars: How I Do It
   #1: Acoustic Neuroma  Doral Ballroom A
   #2: Skull Base Approaches for Aneurysms  Doral Ballroom B
   #3: Reconstructing the Skull Base  Doral Ballroom C
   #4: Sinonasal Tumors  Doral Ballroom D
8:00 am – 9:00 am  Concurrent Sessions
   #1: SNUC-Treatment Protocols & Outcomes  Doral Ballroom A
   #2: Craniopharyngiomas  Doral Ballroom B
   #3: Primary Facial Nerve Tumors  Doral Ballroom C
   #4: Vascular Lesions of the Skull Base: Approaches and Management Strategies  Doral Ballroom D
9:00 am – 9:30 am  Break with Exhibitors  Grand Ballroom
9:30 am – 12:00 pm  Plenary Session I  Doral Ballroom D
   9:30 am: Welcome
   9:35 am: 3D Anatomy: Nasal Sinuses and Anterior Skull Base
   10:00 am: Keynote Guest Lecturer: “Reliability: The Next Challenge in Health Care Quality Improvement”
   10:30 am: Presidential Address: “The Complexity of Determining True Quality in Skull Base Surgery”
   11:00 am: Top Abstract #1: "Risk Factors Associated With Post-Operative CSF Leak”
   11:10 am: Comment on Abstract #1
   11:13 am: "Determining Quality from Discharge Claims Data”
11:30 am – 12:00 pm  Honored Guest: “The Challenge of Educating Future Skull Base Surgeons”
12:00 pm – 1:00 pm  NASBS Business Meeting  Palms North
1:00 pm – 2:00 pm  Concurrent Sessions
   #5: Tumors of the Orbit & the Optic Nerve  Doral Ballroom A
   #6: Vestibular Schwannomas: Hearing Preservation & Restoration  Doral Ballroom B
   #7: Avoidance & Management of Vascular Complications in Skull Base Surgery  Doral Ballroom C
   #8: Radiation Oncology  Doral Ballroom D
2:00 pm – 3:30 pm  Proffered Paper Sessions
   Proffered Paper Session I: Anterior Skull Base  Doral Ballroom A
   Proffered Paper Session II: Chordomas & Various Endoscopic Approaches  Doral Ballroom B
   Proffered Paper Session III: General: Anatomy, Biomechanics & Approaches  Doral Ballroom C
   Proffered Paper Session IV: Sellar and Parasella Tumors  Laurel
   Proffered Paper Session V: General Session  Doral Ballroom D
3:30 pm – 4:00 pm  Break with Exhibitors  Grand Ballroom
4:00 pm – 5:30 pm  Proffered Paper Sessions
   Proffered Paper Session VI: CSF Leaks, Nasal Septal Flaps, Endoscopic Reconstructions  Doral Ballroom A
   Proffered Paper Session VII: Head & Neck Tumors  Doral Ballroom B
   Proffered Paper Session VIII: Meningiomas/Radiation Therapy  Doral Ballroom C
   Proffered Paper Session IX: Vascular  Laurel
   Proffered Paper Session X: General Session  Doral Ballroom D
5:30 pm – 7:00 pm  Welcome Reception in Exhibit Hall  Grand Ballroom

SATURDAY, FEBRUARY 16, 2013
6:30 am – 7:00 am  Breakfast/Registration  Gallery
7:00 am – 8:00 am  Breakfast Seminars: How I Do It
   #5: Endoscopic Approaches to Anterior Lateral Skull Base/ Middle Fossa  Doral Ballroom A
   #6: Sellar & Supra Sellar Tumors  Doral Ballroom B
   #7: Approach to Cavernous Sinuses  Doral Ballroom C
   #8: Petrous Apex Lesions  Doral Ballroom D
8:00 am – 9:00 am  
**Concurrent Sessions**

#9: Juvenile Nasopharyngeal Angiofibromas  
#10: Chordomas  
#11: Proffered Paper Session XI: Innovative Technologies & Approaches  
#12: Expert Case Review – unknown cases presented to panel for opinions and recommendations

9:00 am – 9:30 am  
**Break with Exhibitors**

9:30 am – 12:00 pm  
**Plenary II**


9:50 am: Top Abstract #2: “Factors Associated with Biochemical Remission After Open Transsphoidal; Surgery for Acromegaly”

10:00 am: Comment on Top Abstract #2

10:03 am: Quality and Performance Measures in an Academic Surgical Practice

10:25 am: Report from the Research Committee on Registry Development

10:30 am: Award Presentations (Lifetime Achievement, Top Resident & Medical Student Abstracts)

10:35 am: Top Abstract #3: “FILL32 STAT3 Inhibition Is Effective Against Chordoma In Vitro”

10:45 am: Comment on Top Abstract #3

10:48 am: Quality Care in Anterior Skull Base Meningioma Surgery

11:20 am: Journal Update

11:25 am: Top Abstract #4: “Modifications to the Endoscopic Approach for Anterior Skull Base Lesions Improve Postoperative Sinonasal Symptoms”

11:35 am: Comment on Top Abstract #4

11:38 am: “A Quality Based Approach to Skull Base Surgery”

12:00 pm – 1:00 pm  
**Lunch on own**

1:00 pm – 2:00 pm  
**Concurrent Sessions**

#13: The Cavernous Sinus  
#14: Adenoid Cystic Carcinoma & The Science of Perineural Invasion: Are Clear Margins Attainable for Advanced Disease?  
#15: Acoustic Tumors: Managing Facial Paralysis  
#16: CSF Leaks/Meningo-encephaloceles & SCC Dehiscence

2:00 pm – 3:30 pm  
**Proffered Paper Sessions**

Proffered Papers XII: Endoscopic Approaches/Anterior Skull Base

Proffered Papers XIII: Head & Neck Tumors & General Topics

Proffered Papers XIV: Sellar and Parasellar Tumors

Proffered Papers XV: Vestibular Schwannomas

3:30 pm – 4:00 pm  
**Break with Exhibitors**

4:00 pm – 4:20 pm  
**CPT Coding**

4:20 pm – 5:00 pm  
**Skull Base Jeopardy**

6:30 pm – 10:00 pm  
**Social Event: Havana Nights**

**SUNDAY, FEBRUARY 17, 2013**

7:30am – 8:00 am  
**Breakfast/Registration**

8:00 am – 9:00 am  
**Breakfast Seminars: How I Do It**

#9: Far Lateral Approach  
#10: Jugular Foramen  
#11: Petroclival Meningiomas

9:00 am – 10:00 am  
**Concurrent Sessions**

#17: NF2  
#18: Benign Tumors of the Anterior Skull Base Optimizing Outcome  
#19: Trigeminal Schwannomas  
#20: Expert Case Review – unknown cases presented to panel for opinions and recommendations

10:00 am – 10:30 am  
**Break with Exhibitors**

10:30 am – 12:45 pm  
**Plenary Session**

10:30 am: Quality Care for Anterior Skull Base Malignancy

11:10 am: Top Abstract #5: “Assessment of the Performamce of Frozen Section Margin Analysis During Esthesioneuroblastoma Surgery”

11:20 am: Comment on Top Abstract #5

11:23 am: Top Abstract #6: “Transoral Robotic Surgery for Paraharyngeal Space Masses: Indications and Results”

11:33 am: Comment on Top Abstract #6

11:36 am: 3D Anatomy Talk
Pre-Meeting Practical Courses*

Practical Course Dissection Workshop, Open & Endoscopic Approaches to the Skull Base

*Additional registration fee.

**Accreditation Statement:** This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American College of Surgeons and the North American Skull Base Society. The American College Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

**AMA PRA Category 1 Credits™:** The American College of Surgeons designates this live activity for a maximum of 17.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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**DAY ONE: FEBRUARY 13, 2013**

**COURSE CHAIRS:** Dr. Vijay Anand & Dr. James Evans  
**Held at the M.A.R.C. Institute, Miami, Florida**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Lecturer(s)</th>
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<tbody>
<tr>
<td>7:15 am</td>
<td>Welcome – Vijay Anand, MD</td>
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<tr>
<td>7:20 am</td>
<td><strong>3D Surgical Anatomy for Endoscopic Skull Base</strong> Surgeon</td>
<td>Juan Fernandez-Miranda, MD</td>
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<tr>
<td>7:40 am</td>
<td><strong>Role of Image Guidance in Endoscopic Skull Base Surgery</strong></td>
<td>Abtin Tabaee, MD</td>
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<td>8:00 am</td>
<td><strong>Surgical Corridors: Sellar and Supra Sellar Approaches</strong></td>
<td>Theodore Schwartz, MD</td>
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<td>8:40 am</td>
<td><strong>Challenges in Meningioma Management</strong></td>
<td>James Evans, MD</td>
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<td>9:00 am</td>
<td><strong>Pearls in Endoscopic Skull Base Reconstruction</strong></td>
<td>Marc Rosen, MD</td>
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<td>9:20 am</td>
<td><strong>Endoscopic management of Chordoma</strong></td>
<td>Peter Hwang, MD</td>
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<td>9:40 am</td>
<td><strong>Coffee Break</strong></td>
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<tr>
<td>10:00 am</td>
<td><strong>Endoscopic Skull Base Surgery – Quality of Life Evaluation</strong></td>
<td>Edward McCoul, MD</td>
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<tr>
<td>10:20 am</td>
<td><strong>Surgical Corridors: Infratemporal Fossa &amp; Cavernous Sinus</strong></td>
<td>Vijay Anand, MD</td>
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<td>10:40 am</td>
<td><strong>Endoscopic Management of Vascular Complications</strong></td>
<td>Brent Senior, MD</td>
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<tr>
<td>11:00 am</td>
<td><strong>Successful management of Complications of Skull Base Surgeries</strong></td>
<td>Roy Casiano, MD</td>
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<td>11:20 am</td>
<td><strong>Endoscopic Resection of Sino Nasal Malignancy</strong></td>
<td>Ehab Hanna, MD</td>
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<tr>
<td>11:40 am</td>
<td><strong>My Most Challenging Case</strong> MODERATOR: Vijay Anand, MD</td>
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<td></td>
<td>Brent Senior, MD, James Evans, MD, John Jane, Jr., MD, Theodore Schwartz, MD, Carl Heilman, MD, Ehab Hanna, MD &amp; Roy Casiano, MD</td>
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<tr>
<td>12:30 pm</td>
<td><strong>Lunch/Summation</strong></td>
<td>James Evans, MD</td>
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<td>1:30 pm</td>
<td><strong>Procsection &amp; Demonstration</strong></td>
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<tr>
<td>2:00 pm</td>
<td><strong>Lab Dissection</strong></td>
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<td>6:00 pm</td>
<td><strong>Adjourn</strong></td>
<td>Shuttle back to hotel</td>
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**DAY TWO: FEBRUARY 14, 2013**

**COURSE CHAIRS:** Dr. Sandeep Samant & Dr. Carlos David  
**Held at the M.A.R.C. Institute, Miami, Florida**

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Lecturer(s)</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td><strong>Introduction</strong></td>
<td>Carlos David, MD &amp; Sandeep Samant, MD</td>
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<tr>
<td>8:10 am</td>
<td><strong>Lecture: Anterior Transfacial Approaches</strong></td>
<td>Dennis Kraus, MD &amp; Michael Kupferman, MD</td>
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<tr>
<td>8:30 am</td>
<td><strong>Lecture: Cranial Orbital Zygomatic Approaches</strong></td>
<td>Carlos David, MD</td>
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<td>8:50 am</td>
<td><strong>Dissection Lab</strong></td>
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<tr>
<td>10:30 am</td>
<td><strong>Break</strong></td>
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<tr>
<td>10:45 am</td>
<td><strong>Lecture: Lateral Preauricular Infratemporal Approaches</strong></td>
<td>Daniel Nuss, MD</td>
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<td>11:05 am</td>
<td><strong>Lecture: Middle Fossa Approaches</strong></td>
<td>Chandranath Sen, MD</td>
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<td>11:25 am</td>
<td><strong>Dissection Lab</strong></td>
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<tr>
<td>1:00 pm</td>
<td><strong>Lunch</strong></td>
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<td>2:00 pm</td>
<td><strong>Lecture: Postauricular Transtemporal Approaches. Neurootology Perspective</strong></td>
<td>Rick Friedman, MD</td>
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<td>2:20 pm</td>
<td><strong>Lecture: Postauricular Transtemporal Approaches. Neurosurgery Perspective</strong></td>
<td>Mustafa Baskaya, MD</td>
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<tr>
<td>2:40 pm</td>
<td><strong>Dissection Lab</strong></td>
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<tr>
<td>4:20 pm</td>
<td><strong>Break &amp; Questions</strong></td>
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<tr>
<td>4:45 pm</td>
<td><strong>Case Presentations</strong></td>
<td>Carlos David, MD &amp; Sandeep Samant, MD</td>
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<td>(to be discussed by panel of invited faculty)</td>
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<tr>
<td>6:00 pm</td>
<td><strong>Adjourn</strong></td>
<td>Shuttle back to hotel</td>
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**Shuttle back to hotel**
### Thursday, February 14, 2013

- **2:00 pm – 6:00 pm**  
  Registration/Speaker Prep

### Friday, February 15, 2013

- **6:30 am – 7:00 am**  
  Breakfast/Registration
- **7:00 am – 8:00 am**  
  **Breakfast Seminars: How I Do It**

#### #1: Acoustic Neuroma
- **Doral Ballroom A**
- **Moderator:** Fred F. Telischi, MD
- **Panelists:** Derald Brackmann, MD, Marcos Tatagiba, MD, PhD & Fred F. Telischi, MD

*The North American Skull Base Society thanks Stryker for its support of this seminar.*

#### #2: Skull Base Approaches for Aneurysms
- **Doral Ballroom B**
- **Moderator:** Carlos David, MD
- **Panelists:** Ali Krisht, MD, Jacques Morcos, MD & Troy Payner, MD

#### #3: Reconstructing the Skull Base
- **Doral Ballroom C**
- **Moderator:** Matthew Hanasono, MD
- **Panelists:** Peter D. Costantino, MD, Bruce Haughey, MD & Lawrence Marenette, MD

*The North American Skull Base Society thanks Medtronic Surgical Technologies for its support of this seminar.*

#### #4: Sinonasal Tumors
- **Doral Ballroom D**
- **Moderator:** Dennis Kraus, MD
- **Panelists:** Franco DeMonte, MD & Patrick Gullane, MD

#### #1: SNUC-Treatment Protocols & Outcomes
- **Doral Ballroom A**
- **Moderator:** Jatin Shah, MD
- **Panelists:** Brian Nussenbaum, MD & Ehab Hanna, MD

#### #2: Cranioopharyngiomas
- **Doral Ballroom B**
- **Moderator:** John Jane, Jr., MD
- **Panelists:** Fred Gentili, MD, Theodore Schwartz, MD & Luigi Cavallo, MD

#### #3: Primary Facial Nerve Tumors
- **Doral Ballroom C**
- **Moderator:** John Leonetti, MD
- **Panelists:** Christopher Danner, MD, Rick Friedman, MD & Jonathan Sillman, MD

#### #4: Vascular Lesions of the Skull Base: Approaches and Management Strategies
- **Doral Ballroom D**
- **Moderator:** Khaled Aziz, MD
- **Panelists:** Khaled Aziz, MD, Ketan Bulsara, MD & Ivan Radovanovic, MD
9:00 am – 9:30 am  **Break with Exhibitors**  

9:30 am – 12:00 pm  **PLENARY SESSION I**  

**9:30 am**  
**Welcome** – Michael Chicoine, MD  

**9:35 am**  
**3D Anatomy: Nasal Sinuses and Anterior Skull Base**  
Juan Carlos Fernandez-Miranda, MD  
The North American Skull Base Society thanks Medtronic Surgical Technologies for its support of this session.

**10:00 am**  
**Keynote Guest Lecturer: “Reliability: The Next Challenge in Health Care Quality Improvement”**  
Vinoth Sahney, PhD, Introduction by Carl Heilman, MD

**10:30 am**  
**Presidential Address: “The Complexity of Determining True Quality in Skull Base Surgery”**  
Carl Heilman, MD  
The North American Skull Base Society thanks Stryker for its support of the Presidential Address.

**11:00 am**  
**Top Abstract #1**  
**133 RISK FACTORS ASSOCIATED WITH POST-OPERATIVE CSF LEAK** – Shannon Fraser, MD (presenter), Paul A Gardner, MD, Carl H Snyderman, MD, Maria Koutourousiou, MD, Juan Fernandez-Miranda, MD, Eric W Wang, MD, University of Pittsburgh

**11:10 am**  
**Comment on Abstract #1** – Jacques Morcos, MD

**11:13 am**  
**“Determining Quality from Discharge Claims Data”**  
Fred Barker, MD

**11:30 am**  
**Honored Guest: “The Challenge of Educating Future Skull Base Surgeons”**  
Jon Robertson, MD

**12:00 pm – 1:00 pm**  
**NASBS Business Meeting**  
All NASBS members welcome: lunch will be provided  
Lunch for non-members provided in Exhibit Hall

**1:00 pm – 2:00 pm**  
**CONCURRENT SESSIONS**

**#5: Tumors of the Orbit & the Optic Nerve**  
Doral Ballroom A  
- Role of Proton Beam Therapy in the Treatment of Skull Base Lesions of the Orbit  
- Neoadjuvant Intra-arterial Cytoreductive Chemotherapy for Adenoid Cystic Carcinoma of the Lacrimal Gland  
- Ophthalmic Complications of Orbital and Skull-base Surgery  
- Diagnostic Techniques for Skull Base Lesions In and Around the Orbit  
MODERATOR: Steven Newman, MD  
PANELISTS: Annie Chan, MD, David Tse, MD & Phil Custer, MD

**#6: Vestibular Schwannomas: Hearing Preservation & Restoration**  
Doral Ballroom B  
- Natural History of VS, Especially as it Relates to Hearing Outcomes from the University of Bologna Experience  
- Retrosigmoid Surgery with Direct Cochlear Nerve Monitoring and Hearing Outcomes  
- Hearing Outcomes with SRS and Use of SRS and Cochlear Implants in Patients with NF2 or an Only Hearing Ear  
MODERATOR: Michael Link, MD  
PANELISTS: Andrea Castellucci, MD, Roberto Cueva, MD & Michael Link, MD

**#7: Avoidance & Management of Vascular Complications in Skull Base Surgery**  
Doral Ballroom C  
- Veins & Venous Sinuses  
- Management of Internal Carotid Artery  
- Embolization  
MODERATOR: John Wilson, MD  
PANELISTS: Amir Dehdashti, MD, Joung Lee, MD & B. Gregory Thompson, MD

**#8: Radiation Oncology**  
Doral Ballroom D  
- Evidence Base for Radiation Including Meningiomas, Glomus Tumors, & Non-vestibular Schwannomas  
- Practical and Theoretical Differences Between Radiation Modalities (Gamma Knife, Linac, Cyberknife, IMRT, Proton Beam)  
MODERATOR: Joseph Simpson, MD, PhD  
PANELISTS: Steve Chang, MD, Robert Malyapa, MD & Joseph Simpson, MD
2:00 pm – 3:30 pm

PROFFERED PAPER SESSIONS
All oral presentations are 7 minutes in length. All Q&A sessions are 9 minutes.

PROFFERED PAPER SESSION I: Anterior Skull Base
MODERATORS: Donald Annino, MD & Murali Guthikonda, MD

001 LONG-TERM OUTCOMES OF ENDONASAL ENDOSCOPIC CEREBROSPINAL FLUID LEAK REPAIRS: A POOLED-DATA ANALYSIS USING KAPLAN-MEIER TECHNIQUES – Thomas S Higgins, MD MSPH (presenter), Bulent Ocal, MD, Gary L Gallia, MD, Douglas D Reh, MD, Kentuckiana ENT / Johns Hopkins University

002 THE USE OF HYPERBARIC OXYGEN THERAPY IN THE MANAGEMENT OF OSTEORADIONECROSIS OF THE SKULL BASE – Aaron K Remenschneider, MD (presenter), Kyle Chambers, MD, Josh Meier, MD, Marc Herr, MD, Alice Lin, MD, Derrick Lin, MD, Daniel G Deschler, MD, Stacey T Gray, MD, Department of Otolaryngology, Harvard Medical School

003 OLFACTORY NEUROBLASTOMAS PATTERNS OF METASTASES – Niamh O’Shea (presenter), Richard Millard, Peter Clarke, Ann Sandison, Charing Cross Hospital, London, UK

QUESTION & ANSWER SESSION

004 OUTCOMES FOR ENDOSCOPIC ENDONASAL RESECTION OF ADENOCYSTIC CARCINOMA OF THE SINONASAL CAVITY AND SKULL BASE – Shirley Y Su, MD (presenter), John R de Almeida, MD, Francisco Vaz Guimaraes Filho, MD, Maria Koutourousiou, MD, Eric W Wang, MD, Juan Fernandez-Miranda, MD, Paul A Gardner, MD, Carl H Snyderman, MD MBA, University of Pittsburgh Medical Center

005 ENDOSCOPIC ENDONASAL SURGERY FOR SQUAMOUS CELL CARCINOMA OF THE SINONASAL CAVITIES AND SKULL BASE – John R de Almeida, MD MSc (presenter), Shirley Y Su, MD MSc, Maria Koutourousiou, MD, Francisco Vaz Guimaraes Filho, MD, Juan C Fernandez Miranda, MD, Paul A Gardner, MD, Eric W Wang, MD, Carl H Snyderman, MD MBA, University of Pittsburgh Medical Center

006 ESTHESIONEUROBLASTOMA: AN UPDATE ON THE MASSACHUSETTS EYE AND EAR INFIRMARY AND MASSACHUSETTS GENERAL HOSPITAL EXPERIENCE WITH CRANIOFACIAL RESECTION, PROTON BEAM RADIATION, AND CHEMOTHERAPY – Marc W Herr, MD (presenter), Alice Lin, MD, William T Curry, MD, Fred G Baker, MD, Annie Chan, MD, Daniel G Deschler, MD FACS, Derrick T Lin, MD FACS, Massachusetts General Hospital and Massachusetts Eye and Ear Infirmary

QUESTION & ANSWER SESSION

007 VISUAL SYMPTOMATOLOGY OUTPACES ANATOMICAL OPTIC NERVE CHANGES IN OPTIC NERVE GLIOMA: CLUES TO EARLIER DETECTION AND DIAGNOSIS – Daniel M Raper, MBBS (presenter), Mark E Shaffrey, MD, Steven A Newman, MD, University of Virginia

008 COMBINED MODALITY MANAGEMENT OF SINONASAL UNDIFFERENTIATED CARCINOMA – R Millard, Mr (presenter), N O’Shea, Ms, H Powell, Mr, S Yalamanchilli, Ms, J Siddiqui, Ms, A Sandison, Dr, G Wong, Mr, P Clarke, Mr, Charing Cross Hospital London UK

009 ENDOSCOPIC ENDONASAL RESECTION OF SINONASAL UNDIFFERENTIATED CARCINOMA: THE UPMC EXPERIENCE – Shirley Y Su, MD (presenter), John R de Almeida, MD, Francisco Vaz Guimaraes Filho, MD, Maria Koutourousiou, MD, Eric W Wang, MD, Juan Fernandez-Miranda, MD, Paul A Gardner, MD, Carl H Snyderman, MD MBA, University of Pittsburgh Medical Center

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION II: Chordomas & Various Endoscopic Approaches
MODERATORS: Gavin Britz, MD & Elie Rebeiz, MD

010 INCIDENCE AND SURVIVAL PATTERNS OF CRANIAL CHORDOMA IN THE UNITED STATES – Kyle J Chambers, MD (presenter), Aaron Remenschneider, MD, Josh Meier, MD, Marc Herr, MD, Alice Lin, MD, Stacey Gray, MD, Lin Derrick, MD, Massachusetts Eye and Ear Infirmary, Harvard Medical School

011 PREDICTORS OF VISUAL OUTCOME FOLLOWING SURGICAL RESECTION OF MEDIAL SPHENOID WING MENINCIOMAS – Kaisorn L Chaichana (presenter), Neil Miller, Prem Subramanian, Michael Lim, Gary Gallia, Alessandro Olivi, Jon Weingart, Henry Brem, Alfredo Quinones-Hinojosa, Johns Hopkins School of Medicine

012 ENDOSCOPIC SKULL BASE SURGERY PRACTICE PATTERNS: SURVEY OF THE NORTH AMERICAN SKULL BASE SOCIETY – Pete S Batra, MD (presenter), Jivianne Lee, MD, Samuel L Barnett, MD, Brent A Senior, MD, Michael Setzen, MD, Dennis Kraus, MD, University of Texas Southwestern Medical Center, Orange County Sinus Institute, University of North Carolina School of Medicine, North Shore Health System

QUESTION & ANSWER SESSION

013 LONG-TERM SURVIVAL AND MRI ENHANCEMENT OF NASOSEPTAL FLAPS IN ENDOSCOPIC ENDONASAL SKULL BASE SURGERY – Stefan Mlot, MD, Roheen Raithatha, MD (presenter), Oszkar Szentirmai, MD, Vijay Anand, MD, Theodore Schwartz, MD, New York Presbyterian/Weill Cornell Medical Center
014 ENDOSCOPIC ENDONASAL TRANSSPHENOIDAL APPROACH TO LARGE AND GIANT PITUITARY ADENOMAS: INSTITUTIONAL EXPERIENCE AND PREDICTORS OF EXTENT OF RESECTION – Kyle Juruschka, BHS, Boris Krischek, MD PhD (presenter), Eric Monsalves, BS, Alex Kilians, Aisha Shaire, BS, Bruno L Godoy, MD, Alan Vescan, MD, Fred Gentili, MD MSc, Gelarad Zadeh, MD PhD, University Health Network, Toronto, Ontario, Canada

015 SPONTANEOUS CSF RHINORRHEA: PREVALENCE OF MULTIPLE SIMULTANEOUS CSF LEAKS AND SKULL BASE DEFECTS – Seth Lieberman, MD (presenter), Roy Casiano, MD, University of Miami

QUESTION & ANSWER SESSION

016 EXTENDED INFERIOR TURBINATE FLAP FOR ENDOSCOPIC SKULL BASE RECONSTRUCTION – Garret W Choby, MD, Carlos D Pinheiro-Neto, MD PhD, Eugenio C Ruiz-Valdepenas, MD, Eric W Wang, MD, Juan C Fernandez-Miranda, MD, Paul A Gardner, MD, Carl H Snyderman, MD MBA (presenter), University of Pittsburgh School of Medicine

017 MANAGEMENT OF OBSTRUCTIVE SLEEP APNEA FOLLOWING ENDOSCOPIC SKULL BASE SURGERY – Kevin A Peng, MD (presenter), Barbara M Van de Wiele, MD, Jeffrey D Suh, MD, Marvin Bergsneider, MD, Marilene B Wang, MD, University of California, Los Angeles

018 ENDOSCOPIC SURGERY FOR SINONASAL MUCOSAL MELANOMA – Andrew M Rivera, MD (presenter), Seth M Lieberman, MD, Roy R Casiano, MD, University of Miami Department of Otolaryngology

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION III: General: Anatomy, Biomechanics & Approaches

MODERATORS: Khaled Aziz, MD & Eric Wang, MD

019 SUPRAORBITAL KEY HOLE APPROACH FOR ECISION OF CRANIOPHARYNGIOMAS – Ali Ayyad, MD (presenter), department of neurosurgery, Johannes gutenberg university

020 QUANTITATIVE COMPARISON OF RETROSIGMOID INTRADURAL SUPRAMEATAL APPROACH AND RETROSIGMOID TRANSTENTORIAL APPROACH: IMPLICATIONS FOR TUMORS IN THE PETROCLIVAL REGION – Sudheer Ambekar, MD (presenter), Chiazo Amene, MD, Osama Ahmed, MD, Bharat Guthikonda, MD, Anil Nanda, MD MPH FACS, Department of Neurosurgery, Louisiana State University Health Sciences Center, Shreveport, 1501 Kings Highway, Shreveport, Louisiana 71130-3932

021 ANATOMICAL VARIANTS AND LANDMARKS FOR THE ANTERIOR ETMHOID ARTERY: A STUDY OF CT IMAGING – Rataphol Chris dhepnorrarat, MD FRACS (presenter), Ian Witterick, MD FRCSC, Mt Sinai Hospital, Toronto, Ontario, Canada

QUESTION & ANSWER SESSION

022 SURGICAL APPROACHES TO THE SUPRASELLAR INFRACHIASMATIC REGION: COMPARISON BETWEEN PTERIONAL, SUBFRONTAL AND ENDOSCOPIC ENDONASAL APPROACHES – Francisco A Vaz Guimaraes Filho, MD MSc (presenter), Rodrigo A Cavalcante, MD, Milton M Rastelli Jr, MD, Omar Ramirez, MD, Alessandro Paluzzi, MD, Carlos D Pinheiro-Neto, MD PhD, Juan C Fernandez-Miranda, MD, Paul A Gardner, MD, Carl H Snyderman, MD MBA, University of Pittsburgh Medical Center

023 NERVE TRANSFERS FOR FACIAL PALSY FOLLOWING SKULL BASE SURGERY – Nobutaka Yoshioka, MD (presenter), Saiseikai Nakatsu Hospital

024 BIOMECHANICAL EVALUATION OF THE CRANIOVERTEBRAL JUNCTION AFTER ANTERIOR UNILATERAL CONDYLECTOMY: IMPLICATIONS FOR ENDONASAL ENDOSCOPIC APPROACHES TO THE CRANIAL BASE – Andrew S Little, MD (presenter), Luis Perez-Orroibo, MD, Richard D Lefevre, BS, Phillip R Reyes, BS, Daniel M Prevedello, MD, Peter Nakaji, MD, Curtis Dickman, MD, Neil R Crawford, PhD, Barrow Neurological Institute, Ohio State University

QUESTION & ANSWER SESSION

025 TEMPORAL BONE ENCEPHALOCELE AND CEREBROSPINAL FLUID LEAK REPAIR VIA THE MIDDLE CRANIAL FOSSA APPROACH – Matthew L Carlson, MD (presenter), William R Copeland III, MD, Stanley Pelosi, MD, Colin L Driscoll, MD, Michael J Link, MD, David S Haynes, MD, Reid C Thompson, MD, Kyle D Weaver, MD, George B Wana, MD, Vanderbilt University, Nashville, TN 37232, USA; Mayo Clinic, MN 55905, USA

026 ACOUSTIC NEUROMA OBSERVATION LEADS TO AN INCREASE IN TINNITUS SEVERITY: RESULTS OF THE 2007-2008 ACOUSTIC NEUROMA ASSOCIATION SURVEY – Jamie J Van Gompel, MD (presenter), Jaymin Patel, BS, Chris Danner, MD, A. Sammy Youssef, MD, Harry R van Loveren, MD, Siviero Agazzi, MD, University of South Florida

027 ENHANCING VALUE OF PITUITARY SURGERY BY MAINTAINING QUALITY AND REDUCING COST – Sergei Tertorov, MD (presenter), Marvin Bergsneider, MD, Department of Neurosurgery, David Geffen School of Medicine, University of California Los Angeles

QUESTION & ANSWER SESSION
028 PATIENT AND PERIOPERATIVE FACTORS INFLUENCING BLOOD LOSS IN ENDOSCOPIC TRANSPHENOIDAL RESECTION OF PITUITARY TUMORS – Andrew D Kroeker, MD (presenter), Stephen Y Kang, MD, Thomas J Wilson, MD, Stephen Sullivan, MD, Erin L McKean, MD MBA, University of Michigan

029 PREDICTIVE VALUE OF Cavernous Sinus Invasion ON EXTENT OF RESECTION FOLLOWING ENDOSCOPIC TRANSPHENOIDAL RESECTION OF PITUITARY MACROADENOMAS – Christopher J Farrell, MD (presenter), Sonia Teufack, MD, Mary Petrone, BA, Rahul Sharma, BA, Tyler J Kenning, MD, Donald D Beahm, MD, Mark Friedel, MD, Gurston Nyquist, MD, Marc R Rosen, MD, James J Evans, MD, Thomas Jefferson University

030 ACTH SILENT TUMORS OF THE CLIVUS: SURGICAL MANAGEMENT AND OUTCOME – Raj K Shrivastava, MD (presenter), Satish Govindaraj, MD, Abtin Tabaei, MD, Eliza Geer, MD, Pauline Liao, MD, Mount Sinai Medical Center and Beth Israel Medical Center, NY

QUESTION & ANSWER SESSION

031 PSEUDOCAPSULAR RESECTION TECHNIQUE FOR LARGE PITUITARY MACROADENOMAS – M Bergsneider, MD (presenter), J Suh, MD, M B Wang, MD, UCLA

032 AIRWAY MANAGEMENT AND PERIOPERATIVE CONCERNS IN ACROMEGALY PATIENTS UNDERGOING ENDOSCOPIC SURGERY FOR PITUITARY TUMORS – Mark Friedel, MD (presenter), Marc R Rosen, MD, Gurston C Nyquist, MD, Christopher J Farrell, MD, James J Evans, MD, Thomas Jefferson University Hospital

033 KI-67 EXPRESSION FOR PREDICTING PROGRESSION OF POSTOPERATIVE RESIDUAL PITUITARY ADENOMAS, AND CLINICAL FEATURES OF ATYPICAL PITUITARY ADENOMAS – Junko Matsuyama, MD PhD (presenter), Tomoyoshi Oikawa, MD PhD, Kiyoshi Saito, MDPhD, Department of Neurosurgery, Fukushima Medical University

QUESTION & ANSWER SESSION

034 EVALUATION OF OUTCOME AFTER ENDOSCOPIC ENDONASAL SURGERY FOR LARGE AND GIANT PITUITARY MACROADENOMA – Gregory J Imbarrato, DO (presenter), Amir Dehdashti, MD FACS, Geisinger Medical Center

035 THE RECESSES OF THE SELLA WALL OF THE SPHENOID SINUS AND THEIR INTRACRANIAL RELATIONSHIPS – Maria Peris-Celda, MD PhD (presenter), Baris Kucukyuruk, MD, Alejandro Monroy-Sosa, MD, Takeshi Funaki, MD, Rowan Valentine, MD, Albert L Rothoton, MD, Department of Neurosurgery, University of Florida

036 RELATIONSHIP OF OPTIC CHIASM TO SELLA TURCICA AND PITUITARY STALK: CORRELATION OF CAVERNERIC AND IMAGING FINDINGS – Christoph J Griessenauer, MD (presenter), Joel Raborn, Martin M Mortazavi, MD, Shane R Tubbs, MS PAC PhD, University of Alabama at Birmingham

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION V: General Session

MODERATORS: Mario Ammirati, MD & James Liu, MD

037 THE UTILITY OF HIGH RESOLUTION INTRAOPERATIVE MRI IN ENDOSCOPIC TRANSPHENOIDAL SURGERY FOR PITUITARY MACROADENOMAS: EARLY EXPERIENCE IN THE ADVANCED MULTIMODALITY IMAGE GUIDED OPERATING (AMIGO) SUITE – Kenneth De Los Reyes, MD (presenter), Daniel A Donoho, Ananth Narayan, MD, Carni Barkhoudarian, MD, Ning Lin, MD, Jordina Rincon-Torreola, Sean Jackson, Janice Fairhurst, Mukundan Srinivasan, MD PhD, Edward R Laws, MD, Brigham and Women's Hospital, Harvard Medical School

038 ENDOSCOPIC ENDONASAL ANATOMY OF THE OPTIC CANAL – Francisco A Vaz Guimaraes Filho, MD MSc (presenter), Omar Ramirez, MD, Yancy Acosta, MD, Luis R Bonilla, MD, Milton M Rastelli Jr, MD, Maria Koutourousiou, MD, Juan C Fernandez-Miranda, MD, Paul A Gardner, MD, Carl H Snyderman, MD MBA, University of Pittsburgh Medical Center

039 THE ENDOSCOPIC HEMI-TRANSSEPTAL APPROACH TO THE SELLA TURCICA: A TECHNIQUE ALLOWING PRESERVATION OF THE NASOSEPTAL FLAP FOR SELECTIVE USE IN RECONSTRUCTION – Marc A Tewfik, MD MSc FRCSC (presenter), Constanza J Valdes, MD, Anthony Zeitouni, MD FRCSC, Denis Sirhan, MD FRCSC, Salvatore Di Maio, MD FRCSC, McGill University Health Centre & Jewish General Hospital

QUESTION & ANSWER SESSION

040 REGIONAL DISPARITIES AND EVOLVING PRACTICE PATTERNS IN SURGICAL APPROACHES TO PITUITARY TUMORS IN THE UNITED STATES – Peter F Svider, BA (presenter), Brieze Keeley, BA, Qasim Husain, BS, Kevin Mauro, Michael Setzen, MD, Jean Anderson Eloy, MD FACS, James K Liu, MD, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

041 ANTI-ANGIOGENIC AGENTS FOR NON-MALIGNANT BRAIN TUMORS – Ammar H Hawasli, MD PhD (presenter), Joshua B Rubin, MD PhD, David D Tran, MD PhD, Douglas R Adkins, MD, Shahid Waheed, MD, Timothy E Hullar, MD, David H Gutmann, MD PhD, John Evans, RN, Michael R Chicoine, MD, Washington University School of Medicine
042 Evolution of Far-Lateral Approach: Single Surgeon Experience from Louisiana State University, Shreveport – Anil Nanda, MD MPH FACS, Sudheer Ambekar, MD (presenter), Osama Ahmed, MD, Ashish Sonig, MD, Anirban D Banerjee, MD, Louisiana State University Health Sciences Center, Shreveport, 1501 Kings Highway, Shreveport, Louisiana 71130-3932

Question & Answer Session

043 *Abstract withdrawn

044 Prognostic Factors for Tumor Control Following Surgical Resection and Adjuvant Radiotherapy for Intracranial Chordomas – Winward Choy, BA (presenter), Daniel T Nagasawa, MD, Andy Trang, BS, Marko Spasic, BA, Yinn Ooi, MD, Sergei Terterov, MD, William Yong, MD, Linda M Liu, MD PhD, Neil Martin, MD, Antonio DeSalles, MD, Tania B Kaprealian, MD, Michael Selch, MD, Marvin Berg, UCLA Neurosurgery, Jonsson Comprehensive Cancer Center

045 Endoscopic Endonasal Transphenoidal Treatment of Pituitary Apoplexia: Outcomes in a Series of 20 Patients – Tong Yang, MD PhD (presenter), Vijay K Anand, MD, Theodore H Schwartz, MD, Departments of # Neurosurgery, * Radiology, division of Neuroradiology, & Otolaryngology, $ Neurology and Neuroscience, Weill Cornell Medical College, New York Presbyterian Hospital, New York, New York

Question & Answer Session

3:30 pm – 4:00 pm Break with Exhibitors

4:00 pm – 5:30 pm Proffered Paper Sessions

All oral presentations are 7 minutes in length. All Q&A sessions are 9 minutes.

Proffered Paper Session VI: CSF Leaks, Nasal Septal Flaps, Endoscopic Reconstructions

Moderators: Pete Batra, MD & James Evans, MD

046 Management of Cerebrospinal Fluid Leaks of the Anterior and Lateral Skull Base – Gurston G Nyquist, MD, Marc R Rosen, MD, Mark Friedel, MD (presenter), Gregory J Artz, MD, Thomas O Willcox, MD, Saurabh Singhal, MD, Christopher J Farrell, MD, James J Evans, MD, Thomas Jefferson University Hospital

047 A Report of Endoscopic Transphenoidal Sellar Floor Reconstruction With Resultant Cerebrospinal Fluid Leak Risk and Complication Management – Chris I Sanders Taylor, MD (presenter), Amjad Anaizi, MD, Jennifer Kosty, MD, Lee Zimmer, MD, Phillip Theodosopoulos, MD, University of Cincinnati

048 Successful Prevention of Cerebrospinal Fluid Leakage After Endoscopic Endonasal Transphenoidal Surgery – Young Il Kim (presenter), Sin Soo Jeun, Department of Neurosurgery, Seoul St. Mary’s Hospital, The Catholic University of Korea, Seoul, Korea

Question & Answer Session

049 Bilateral Mucosal and Septal Olfactory Strip (SOS) Preserving “Rescue” Flaps: A Novel Vascular Pedicle Sparing Technique for Endonasal Endoscopic Skull Base Surgery – Aaron R Cutler, MD (presenter), Chester F Griffiths, MD FACS, Huy T Duong, MD, Kian Karimi, MD, Cal Bordo, Carni Barkhoudarian, MD, Ricardo L Carrau, MD, Daniel F Kelly, MD, John Wayne Cancer Institute at St. John’s Health Center

050 Challenges and Surgical Nuances in Reconstruction of Large Planum Sphenoidale Tuberculum Sellar Defects After Endoscopic Endonasal Resection of Parasellar Skull Base Tumors – Jean Anderson Eloy, MD FACS (presenter), Smruti K Patel, BA, Qasim Husain, BS, Pratik A Shukla, MD, Osamah J Choudhry, MD, Rahul Singh, MD, James K Liu, MD, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

051 The Extended Nasoseptal Flap for Skull Base Reconstruction of the Clival Region: An Anatomical and Radiological Study – Maria Peris-Celda, MD PhD (presenter), Carlos D Pinheiro-Neto, MD PhD, Takeshi Funaki, MD, Juan C Fernandez-Miranda, MD, Paul Gardner, MD, Carl H Snyderman, MD, Albert L Rhoton, MD, Department of Neurological Surgery, University of Florida; Department of Neurological Surgery, University of Pittsburgh School of Medicine; Department of Otolaryngology, University of Pittsburgh School of Medicine

Question & Answer Session

052 Use of a Synthetic Biodegradable Fragmentable Foam to Immobilize Vascularized Pedicled Flaps After Multilayered Skull-Base Reconstruction – Ameet Singh, MD, Alan Siu, MD (presenter), Aaron Wessel, BS, Fabio Roberti, MD, Zachary Litvack, MD, George Washington University Medical Center
053 PROSPECTIVE MULTICENTER VALIDATION OF A PATIENT-REPORTED NASAL QUALITY OF LIFE TOOL FOR ENDONASAL SKULL BASE SURGERY: THE ANTERIOR SKULL BASE NASAL INVENTORY-12 – Andrew S Little, MD (presenter), Daniel Kelly, MD, John Milligan, MD, Gail Rousseau, MD, Daniel Prevedello, MD, Ricardo Carrau, MD, Heidi Jahnke, RN BSN, Joey Raviv, Steve Becker, MD, Chester Griffiths, MD, William L White, MD, Peter Nakaji, MD, Barrow Neurological Institute

054 AN ANALYSIS OF 141 CASES OF SKULL BASE ASPERGILLOSION OVER 11 YEARS – Sandeep Mohindra, MD (presenter), Postgraduate Institute of Medical Education and Research, Chandigarh, India

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION VII: Head & Neck Tumors
MODERATORS: Bruce Haughey, MD & Iman Naseri, MD

055 MAGNETIC RESONANCE IMAGING CONFIRMS VASCULARITY OF NASOSEPTAL FLAPS IN THE LATE POST-OPERATIVE PERIOD – Cristine N Klatt-Cromwell, MD (presenter), Deanna M Sasaki-Adams, MD, Matthew C Ewond, MD, Adam M Zanation, MD, University of North Carolina at Chapel Hill

056 SINONASAL CARCINOMAS: NEW EPIDEMIOLOGIC INDICATORS IN STAGING, TREATMENT AND PROGNOSIS – Daniel Gerry, BS (presenter), Eric J Lentsch, MD, Mercer University School of Medicine, Medical University of South Carolina

057 ACUTE VISION LOSS: A POTENTIAL NOVEL INDICATION FOR INTRA-ARTERIAL CHEMOTHERAPY IN THE TREATMENT OF SINONASAL UNDIFFERENTIATED CARCINOMA. (CASE REPORT) – Jeffrey S Pannell, MD (presenter), Vincent Cheung, MD, Kunai M Patel, MD, Alexander A Khalessi, MD MS, The University of California San Diego

QUESTION & ANSWER SESSION

058 ONYX EMBOLIZATION OF CAROTID BODY PARAGANGLIOMAS: AN ADJUNCT TO THE SAFE AND EFFECTIVE SURGICAL RESECTION – Felipe Albuquerque, MD, Cameron McDougall, MD, Robert Spetzler, MD, Andrew Ducruet, MD, Webster Crowley, MD, Yashar Kalani, MD PhD (presenter), Barrow Neurological Institute

059 ADENOID CYSTIC CARCINOMA OF THE NASOPHARYNX – Constance E Teo, MD (presenter), Michael E Kupferman, MD, Ehab Y Hanna, MD, MD Anderson Cancer Center

060 PROGNOSTIC FACTORS AND CLINICAL OUTCOME IN THE TREATMENT OF EXTERNAL AUDITORY CANAL MALIGNANCES – Venkatakathrikeyan Chokkalingam, MD (presenter), Robert Guerring, BS, Fred F Telisi, MD, Adrien A. Eshraghi, UM Miller School of Medicine

QUESTION & ANSWER SESSION

061 INVERTED PAPILLOMA: PROGNOSTIC FACTORS WITH IMPLICATIONS FOR RESECTION MARGINS – Giant C Lin, MD (presenter), Mark A Zacharek, MD, Sarah Akkina, BS, Steven Chinn, MD, Jonathan Mchugh, MD, Thomas Carey, PhD, Mark E Prince, MD, University of Michigan

062 ASSESSMENT OF MUCOCELE FORMATION AFTER ENDOSCOPIC NASOSEPTAL FLAP RECONSTRUCTION OF SKULL BASE DEFECTS – Qasim Husain, BS (presenter), Saurin Sanghvi, BS, Pratik A Shukla, MD, Osamah J Choudhry, MD, James K Liu, MD, Jean A Eloy, MD FACS, University of Medicine and Dentistry of New Jersey – New Jersey Medical School

063 MANAGEMENT OF SINONASAL HEMANGIOPERICYTOMAS: A SYSTEMATIC REVIEW – Muffadal Q Dahodwala, MS, Qasim Husain, BS (presenter), Saurin Sanghvi, BS, Osamah J Choudhry, MD, James K Liu, MD, Jean A Eloy, MD FACS, University of Medicine and Dentistry of New Jersey – New Jersey Medical School

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION VIII: Meningiomas/Radiation Therapy
MODERATORS: Sam Barnett, MD & Robert Malyapa, MD

064 NOVEL ONCOGENIC SMO AND AKT1 MUTATIONS IN MENINGIOMAS – Peleg M Horowitz, MD PhD (presenter), Priscilla K Brastanios, MD, Sandro Santagata, MD, Robert T Jones, BA, Aaron McKenna, Gad Getz, PhD, Keith L Ligon, MD PhD, Emanuele Palescandolo, PhD, Matthew Ducar, Laura MacConaill, Stemmer-Rachamimov Anat, MD, Davi, Brigham and Women’s Hospital, Children’s Hospital Boston, Dana-Farber Cancer Institute, Harvard Medical School, and Broad Institute of MIT and Harvard

065 ROLE OF ADAMTS4 IN MENINGIOMA BONE INVASION – Takafumi Wataya, MD PhD (presenter), Shahrazad Jalali, PhD, Sidney Croul, MD, Gelareh Zadeh, MD PhD FRCP, Toronto Western Hospital, University Health Network

066 PROTOPORPHYRIN-IX FLUORESCENCE IN SKULL BASE MENINGIOMAS’ RESECTION – Tang ManHon, MBBS, Carol Goodman, RCN, Harry Moseley, PhD, Sam Eljamel, MBCh MD FRCSir FRCSEd FRCSN ACB (presenter), The University of Dundee

QUESTION & ANSWER SESSION

067 ENDOSCOPIC ENDONASAL SURGERY FOR SUPRASELLAR MENINGIOMAS – Maria Koutourousiou, MD (presenter), Francisco Vaz Guimaraes Filho, MD, John de Almeida, Shirley Su, MD, Juan Fernandez-Miranda, MD, Eric Wang, MD, Carl Snyderman, MD MBA, Paul Gardner, MD, Center for Cranial Base Surgery University of Pittsburgh Medical Center, Pittsburgh, PA, USA
068 HEARING OUTCOMES AFTER PARTIAL TRANSLABYRINTHINE PETROUS APICECTOMY FOR PETROCLIVAL MENINGIOMAS – John W Wood, MD (presenter), Gyan Channer, MD, Jacques J Morcos, MD FRCSEng FRCSEd, Fred F Telischi, MEE MD, University of Miami Department of Otolaryngology; University of Miami Department of Neurosurgery; Kingston Public Hospital, Kingston, Jamaica

069 EXTENDED? RETROSIGMOID APPROACH FOR CEREBELLO-PONTINE ANGLE TUMOURS WITH MIDDLE FOSSA EXTENSION – Sunil K Gupta, MCh (presenter), PGIMER, Chandigarh, India

QUESTION & ANSWER SESSION

070 GAMMA KNIFE EXTEND™ NON-INVASIVE FRACTIONATED RADIOSURGERY: A NOVEL TECHNIQUE FOR THE TREATMENT OF SKULL BASE LESIONS – Christopher R Spencer, MD MS (presenter), Robert E Drzymala, PhD, Keith M Rich, MD, Michael R Chicoine, MD, Amanda Schoenberger, RT, Joseph R Simpson, MD PhD, Clifford Robinson, MD, Washington University School of Medicine in St. Louis

071 FRACTIONATED CYBERKNIFE RADIOTHERAPY FOR SELLA LESIONS – Samuel L Barnett, MD (presenter), Aaron Plitt, BA, Chuxiong Ding, PhD, Robert Timmerman, MD, University of Texas - Southwestern Medical Center

072 MICRO SURGICAL TREATMENT FOR TRIGEMINAL SCHWANNOMA – Zhen Zhen, MD (presenter), Junting Zhang, MD, Guijun Jia, MD, Liwei Zhang, MD, Yong Cui, MD, Jie Tang, MD, Beijing TianTan Hospital, Capital Medical University, China

QUESTION & ANSWER SESSION

PROFFERED PAPER SESSION IX: Vascular

MODERATORS: Taro Kaibara, MD & Ajith Thomas, MD

073 THE RELEVANCE OF MICRO SURGICAL MANAGEMENT OF NON-BASILAR POSTERIOR CIRCULATION ANEURYSM IN THE CURRENT ERA OF ENDOVASCULAR MANAGEMENT – Ashish Sonig, MD MS MCh (presenter), Ambekar Sudheer, MD MCh, Anil Nanda, MD MPH, LSU health Sciences Center, Shreveport, LA

074 OUTCOME PREDICTION IN BRAINSTEM CAVENOMA – Silky Chotai, MD (presenter), Songtao Qi, MD PhD, Shuxiang Xu, MD PhD, Nanfang hospital of Southern Medical University, China

075 BYPASS AND FLOW REDUCTION FOR UNCLIPPABLE AND UNCOILABLE VERTEBRABASILAR ANEURYSMS – Yashar Kalani, MD PhD (presenter), Joseph Zabramski, MD, Robert Spetzler, MD, Barrow Neurological Institute

QUESTION & ANSWER SESSION

076 ENDOSCOPIC TRANSSPHENOIDAL PITUITARY SURGERY: RESULT, SAFETY AND COST EFFECTIVENESS IN 134 CONSECUTIVE CASES – Yan Michael Li, MD PhD (presenter), Amit Singla, MBBS, Parul Goyal, MD MBA, Walter A Hall, MDMBA, State University of New York Upstate Medical University

077 DISTAL ANTERIOR CEREBRAL ARTERY ANEURYSMS: ADVANTAGES OF BIFRONTAL BASAL ANTERIOR INTERHEMISPHERIC APPROACH OVER UNILATERAL APPROACH – Rajesh Chhabra, MS MCh (presenter), Sunil Gupta, MS MCh, Sandeep Mohindra, MS MCh FRCS, N Khandelwal, MD, Dept of Neurosurgery, PGIMER, Chandigarh

078 CLINICAL CHARACTERISTICS AND LONG TERM OUTCOMES IN RUPTURED POSTERIOR INFERIOR CEREBELLAR ARTERY ANEURYSMS: A COMPARATIVE ANALYSIS – Richard W Williamson, MD (presenter), David Wilson, MD, Adib Abla, MD, Cameron McDougall, MD, Peter Nakaji, MD, Robert Spetzler, MD, Barrow Neurological Institute

QUESTION & ANSWER SESSION

079 THE EFFECT OF GAMMA KNIFE RADIOSURGERY ON THE CAVERNOUS INTERNAL CAROTID ARTERY – Jason P Rahal, MD (presenter), Carl Heilman, MD, John Mignano, MD, Julian Wu, MD, Adel Malek, MD PhD, Tufts Medical Center, Tufts University School of Medicine

080 A PERSISTENT TRIGEMINAL ARTERY COMPLICATING A CRANIOFACIAL RESECTION – Carl Anderson, BS, Wesley Hicks, MD, Vishal Gupta, MD, Adnan Siddiqui, MD PhD, Andrew J Fabiano, MD (presenter), Roswell Park Cancer Institute; SUNY at Buffalo School of Medicine

081 PIPELINE FLOW-DIVERSION TECHNOLOGY FOR THE TREATMENT OF ICA PSEUDOANEURYSMS OF VARYING ETIOLOGY: 3 CASE REPORTS AND REVIEW – Hesham Soliman, MD (presenter), Koji Ebersole, MD, Chris Moran, MD, Paul Camarata, MD, Department of Neurosurgery, Kansas University, Kansas City, Kansas, USA. Department of Radiology, Washington University, St.Louis, Missouri, USA

QUESTION & ANSWER SESSION
PROFFERED PAPER SESSION X: General Session

MODOERATORS: Paul Gardner, MD & Jonathan McJunkin, MD

082 COMBINED MODALITY TREATMENT OF SINONASAL SCC – R Millard, Mr, N O’Shea, Ms (presenter), J Siddiqui, Ms, A Sandison, Dr, P Clarke, Mr, Charing Cross Hospital, London UK

083 GIANT CELL TUMOR OF TEMPORAL BONE: RESECTION AND RECONSTRUCTION OF TMJ – Yiqun Wu, Professor (presenter), Huayi Cheng, Associate Professor, Baohua Fan, Associate Professor, SHANGHAI 9TH PEOPLE’S HOSPITAL, SHANGHAI JIAOTONG UNIVERSITY SCHOOL OF MEDICINE

084 SKULL BASE COMPLICATIONS: LESSONS LEARNED IN THE FIRST FIVE YEARS OF PRACTICE – Bharat Guthikonda, MD, Sudheer Ambekar, MD, Chiazo Amene, MD (presenter), Shihao Zhang, MD, Anil Nanda, MD, LSU HSC Shreveport

QUESTION & ANSWER SESSION

085 COMPUTED TOMOGRAPHY IMAGE-GUIDED ROBOTIC SURGERY: A PRECLINICAL FEASIBILITY STUDY – Grace C Kim, MD (presenter), Kibwei A McKinney, MD, Charles S Ebert, Jr., MD MPH, Adam M Zanation, MD, University of North Carolina Hospitals-Chapel Hill

086 FACIAL NERVE FUNCTION AFTER THE EXTENDED TRANSLABYRINTHINE APPROACH – Mia E Miller, MD (presenter), Bill Mastrodimos, MD, Roberto A Cueva, MD, Kaiser Permanente, San Diego, CA

087 USE OF POSTERIOR FIXATION SUTURES (MYOPEXY) TO EXPAND BINOCULARITY: INDICATIONS AND LIMITATIONS – Steven A Newman, MD (presenter), University of Virginia

QUESTION & ANSWER SESSION

088 THE “EXTRME-MEDIAL” ENDOCOPIC ENDONASAL APPROACH TO THE JUGULAR FORAMEN – Francisco A Vaz Guimaraes Filho, MD MSc (presenter), Victor B Alcocer, MD, Milton M Rastelli Jr, MD, Omar Ramirez, MD, Juan C Fernandez-Miranda, MD, Paul A Gardner, MD, Carl S Snyderman, MD MBA, University of Pittsburgh Medical Center

089 TRANSMASSTOID APPROACH FOR SURGICAL MANAGEMENT OF SUPERIOR SEMICIRCULAR CANAL DEHISCENCE – Andrea Castellucci, MD (presenter), Gianluca Piras, MD, Cristina Brandolini, MD, Giovanni Carlo Modugno, Prof, ENT Section, Department of Specialist Surgical and Anesthesiological Sciences, University of Bologna, Italy

090 AMELOBLASTOMA AT THE SKULL BASE: A SINGLE CENTER EXPERIENCE OVER 25 YEARS – Daniel M Raper, MBBS (presenter), Steven A Newman, MD, University of Virginia

QUESTION & ANSWER SESSION

5:30 pm – 7:00 pm Welcome Reception in Exhibit Hall

SATURDAY, FEBRUARY 16, 2013

6:30 am Breakfast/Registration

7:00 am – 8:00 am BREAKFAST SEMINARS: HOW I DO IT

#5: Endoscopic Approaches to Anterior Lateral Skull Base/ Middle Fossa
MODOERATOR: Elie Rebeiz, MD
PANELISTS: Carl Snyderman, MD & Christopher Rassekh, MD

#6: Sellar & Supra Sellar Tumors
MODOERATOR: Theodore Schwartz, MD
PANELISTS: Daniel Kelly, MD & Edwards Laws, MD

#7: Approach to Cavernous Sinuses
MODOERATOR: Madison Michael, MD
PANELISTS: Carlos David, MD & Harry Van Loveren, MD
The North American Skull Base Society thanks Stryker for its support of this seminar.

#8: Petrous Apex Lesions
• Radiology-Cholesterol Granulomas, Cholesteotomas, Chondrosarcomas & More
• Neurosurgical Approaches
• Neuro-Otologic Approaches
MODOERATOR: Nik Blevins, MD
PANELISTS: Hugh Curtin, MD & Paul Gardner, MD
8:00 am – 9:00 am CONCURRENT SESSIONS

#9: Juvenile Nasopharyngeal Angiofibromas
- Open Approaches
- Endoscopic Approaches
- Radiotherapy
MODERATOR: Richard Wein, MD
PANELISTS: Donald Annino, MD & Ricardo Carrau, MD

#10: Chordomas
- Pathological Differentiation of the Chordoma-Chondrosarcoma Spectrum and their Prognostic Implications
- Radiation Therapies: What is Possible and What is Not?
- Personal Philosophy, Experience and Outcomes with Open Approaches for Patients with Chordoma?
- Has Endoscopic Approaches for Patients with Chordoma Improved Outcomes?
MODERATOR: Michael Gleeson, MD
PANELISTS: Norbert Liesech, MD, Chandranath Sen, MD & Adam Zanation, MD

#11: Proffered Paper Session XI: Innovative Technologies & Approaches
MODERATORS: Ryoyo Akagami, MD & Colin Driscoll, MD
All oral presentations are 7 minutes in length. All Q&A sessions are 9 minutes.

091 COPEPTIN AS A DIAGNOSTIC MARKER IN THE MANAGEMENT OF NEUROSURGICAL PATIENTS WITH DISTURBANCE OF WATER HOMEOSTASIS – Christian Zweifel, MD (presenter), Bettina Winzeler, MD, Nicole Nigro, MD, Birsen Arici, MD, Martina Bally, MD, Claudine Blum, MD, Christopher Kelly, MD, Luigi Mariani, MD PHD, Sven Berkmann, MD, Hans Landolt, MD PHD, Mira Katan, MD, Philipp Schuets, MD P, Neurosurgery Division, Toronto Western Hospital; Departments of Endocrinology and Neurosurgery, University Hospital Basel and Aarau

092 DESIGN OF PHYSICAL SURGICAL SIMULATOR FOR DRILLING IN THE EXPANDED ENDONASAL APPROACH TO SKULL BASE – Bruce L Tai, PhD (presenter), Anthony Wang, MD, Jeffrey Plott, Albert Shih, PhD, Erin McKean, MD, Stephen Sullivan, MD, University of Michigan

093 MINIMALLY INVASIVE OCCIPITO-CERVICAL DECOMPRESSION PRESERVING POSTERIOR MUSCULAR-LIGAMENTOUS TENSION BAND FOR SURGICAL MANAGEMENT OF TYPE I CHIARI MALFORMATION: A PROSPECTIVE CLINICAL AND RADIOLOGICAL STUDY – Roberto Diaz, MD (presenter), Miguel Berbeo, MD MSc, Silvia Tatiana Quintero Oliveros, MD, Jaime Becerra, MD, Juan Carlos Acevedo, MD, Oscar Feo Lee, MD, Oscar Zorro, MD, Rafael Uribe, MD, Laura Diaz, MD, Juan Carlos Perez, MD, Andres De Leon-Benedetti, B, HOSPITAL UNIVERSITARIO SAN IGNACIO

QUESTION & ANSWER SESSION

094 INTRA-TUMORAL ULTRASONIC ASPIRATOR DELIVERY OF H2O2 – A NOVEL APPROACH TO RESECTING HIGHLY VASCULARIZED INTRACRANIAL TUMORS – Tariq T Lamki, MD (presenter), Mario Ammirati, MD MBA, The Ohio State University

095 THE USEFULNESS OF REALISTIC VIRTUAL OPERATION FIELD IN PATINES WITH SKULL BASE DISEASE – Masanori Yoshino, MD (presenter), Taichi Kin, MD PhD, Hirofumi Nakatomi, MD PhD, Hiroshi Oyama, MD PhD, Nobuhito Saito, Departments of Neurosurgery, Graduate School of Medicine, The University of Tokyo

096 THERMONAVIGATION IN THE SURGERY OF PARASAGITTAL MENINGIOMAS USING SEMICONDUCTOR VISION INFRARED THERMOGRAPH (SVIT) – Sergey Chernov, PhD MD (presenter), Vyacheslav Stupak, PhD MD, Jamil Rzaev, PhD MD, Valery Belenky, Federal Center of Neurosurgery, Novosibirsk, Russia;Research Institute of Traumatology and Orthopedics, Department of Neurosurgery, Novosibirsk, Russia;“Health-Service” Ltd., Institute of Semiconductor Physics SB RAS, Novosibirsk, Russia

QUESTION & ANSWER SESSION

#12: Expert Case Review: Unknown Cases Presented to Panel for Opinions & Recommendations
MODERATOR: Daniel Nuss, MD
PANELISTS: William Couldwell, MD, John Leonetti, MD & Anil Nanda, MD

9:00 am – 9:30 am Break with Exhibitors
9:30 am  **Honored Guest Lecture: “Clival Lesions: Imaging Characteristics of Benign vs. Non-Benign”**  
Hugh Curtin, MD, Introduction by Carl Heilman, MD

9:50 am  **Top Abstract #2**  
134 FACTORS ASSOCIATED WITH BIOCHEMICAL REMISSION AFTER OPEN TRANSSPHENOIDAL SURGERY FOR ACROMEGALY – Hai Sun, MD PhD ( presenter), Jessica Brzana, MD, Chris Yedinak, RN, Sakir Gultekin, MD, Johnny Delashaw, MD, Maria Fleseriu, MD, Departments of Neurological Surgery, Medicine and Pathology, and Northwest Pituitary Center, Oregon Health & Science University, Portland, OR, and Department of Neurological Surgery, University of California, Irvine, Orange, CA.

10:00 am  **Comment on Top Abstract #2** – Marvin Bergsneider, MD

10:03 am  **Quality and Performance Measures in an Academic Surgical Practice**  
Randal Weber, MD & Carol Lewis, MD

10:25 am  **Report from the research committee on Registry Development**  
Theodore Schwartz, MD

10:30 am  **Award Presentations (Lifetime Achievement, Top Resident & Medical Student Abstracts)**  
Theodore Schwartz

10:35 am  **Top Abstract #3**  
135 FLLL32 STAT3 INHIBITION IS EFFECTIVE AGAINST CHORDOMA IN VITRO – Anthony C Wang, MD ( presenter), Waleed Abuzeid, MD, Shawn L Hervey-Jumper, MD, David M Altshuler, MS, John H Owen, BS, Thomas E Carey, PhD, Mark E Prince, MD, Erin L McKean, MD MBA, Stephen E Sullivan, MD, University of Michigan

10:45 am  **Comment on Top Abstract #3** – Paul Gardner, MD

10:48 am  **Quality Care in Anterior Skull Base Meningioma Surgery**  
• The Best Quality of Care is by Craniotomy – Harry Van Loveren, MD
• The Best Quality of Care is by the Endoscopic Endonasal Approach – Theodore Schwartz, MD

11:20 am  **Journal Update**  
Dennis Kraus, MD

11:25 am  **Top Abstract #4**  
136 MODIFICATIONS TO THE ENDOSCOPIC APPROACH FOR ANTERIOR SKULL BASE LESIONS IMPROVE POSTOPERATIVE SINONASAL SYMPTOMS – Christopher F Thompson, MD ( presenter), Jeffrey D Suh, MD, Adam S Deconde, MD, Yuan Liu, BA, Marvin Bergsneider, MD, Marilene B Wang, MD, David Geffen School of Medicine at UCLA

11:35 am  **Comment on Top Abstract #4** – Dennis Kraus, MD

11:38 am  **“A Quality Based Approach to Skull Base Surgery”**  
Carl Snyderman, MD

12:00 pm – 1:00 pm  **Lunch on own**

1:00 pm – 2:00 pm  **CONCURRENT SESSIONS**

### #13: The Cavernous Sinus
- Benign Tumors
- Vascular Lesions-Pipeline and Other Embolization Devices
- Malignant Tumors

**MODERATOR:** Kadir Erkmen, MD  
**PANELISTS:** Peter Kan, MD, Ali Krisht, MD & Daniel Prevedello, MD

### #14: Adenoid Cystic Carcinoma & The Science of Perineural Invasion: Are Clear Margins Attainable for Advanced Disease?
- Surgical Management
- Radiation
- Perineural Invasion

**MODERATOR:** Patrick Gullane, MD  
**PANELISTS:** Brian Nussenbaum, MD, Richard Wong, MD & Eugene Yu, MD

### #15: Acoustic Tumors: Managing Facial Paralysis
- Timing of Re-Animation
- Static Slings
- Gold Weights/Tarsorrhaphy
- Facial Re-Animation Techniques & Success Rates
- Electrical and Neurological Testing of Facial Paralysis

**MODERATOR:** Fred Telischi, MD  
**PANELISTS:** Simon Angeli, MD, Ram Ayyar, MD, Greg Branham, MD & Deidre Marshall, MD
#16: CSF Leaks/Meningo-encephaloceles & SCC Dehiscence

- Temporal Bone CSF Leaks
- Meningo-encephaloceles
- Superior Canal Dehiscence

MODERATOR: Daniel Pieper, MD
PANELISTS: Seilesh Babu, MD, Philippe Pasche, MD & Eric Wang, MD

2:00 pm – 3:30 pm  PROFFERED PAPER SESSIONS

**PROFFERED PAPERS XII: Endoscopic Approaches/Anterior Skull Base**

MODERATORS: Philip Theodosopoulos, MD & Allan Vescan, MD

**097 ENDOSCOPIC AND OPEN RESECTION OF SPHENOID SINUS MENINGOENCEPHALOCELES WITH REPAIR OF SKULL BASE DEFECTS** – Kelli L Crabtree, MD (presenter), Nick Rockefeller, Paul J Camarata, MD, Kevin J Sykes, MPH, Larry A Hoover, MD, University of Kansas Medical Center

**098 A COMPARISON OF OPERATIVE EXPOSURE BETWEEN THE LE FORT I OSTEOTOMY AND THE EXCLUSIVE ENDOSCOPIC TRANSNASAL APPROACH FOR MIDDLE AND LOWER CLIVAL LESIONS** – Chris I Sanders Taylor, MD (presenter), P V Theodosopoulos, MD, L Zimmer, MD, J T Keller, PhD, University of Cincinnati

**099 INSTITUTIONAL REVIEW AND IDENTIFICATION OF INDICATIONS FOR ENDOSCOPIC EXPANDED ENDOSANAL VERSUS CRANIOTOMY APPROACH TO ANTERIOR SKULL BASE MENINGIOMAS** – Osama H Khan, MD MSc (presenter), Marko Skrtic, PhD, Damian Holliman, Boris Kriche, MD PhD, Allan Vescan, MD, Fred Gentili, MD, Gelareh Zadeh, MD PhD, 1 - Division of Neurosurgery, University Health Network, Toronto Western Hospital, University of Toronto, Ontario, Toronto, Canada, 2 - Department of Otolaryngology-Head and Neck Surgery, Mount Sinai Hospital, University of Toronto, Ontario, Canada

**QUESTION & ANSWER SESSION**

**100 DIAGNOSTIC AND SURGICAL APPROACH TO ANTERIOR SKULL BASE CSF LEAKS IN A RHINOLOGY PRACTICE** – Edward Hepworth, MD (presenter), Anne K Cosgriff, MD, David Solsberg, MD, Colorado Sinus Institute

**101 NODAL RECURRENCE IN OLFACTORY NEUROBLASTOMA** – R Millard, Mr (presenter), N O’Shea, Ms, H Powell, Mr, S Yalaman, Ms, A Sandison, Dr, P Clarke, Mr, Charing Cross Hospital London, UK

**102 BEYOND THE NASOSEPTAL FLAP: OUTCOMES AND PEARLS WITH SECONDARY VASCULAR FLAPS IN SKULL BASE RECONSTRUCTION** – Mihir R Patel, MD (presenter), Robert Taylor, BS, Trevor G Hackman, MD, Deanna M Sasaki-Adams, MD, Matthew G Ewend, MD, Adam M Zanation, MD, University of North Carolina at Chapel Hill - School of Medicine

**QUESTION & ANSWER SESSION**

**103 QUALITY OF LIFE PRESERVATION AFTER ENDOSCOPIC ENDONASAL EXTENDED TRANSSPENOIDAL RESECTION OF CRANIOPHARYNGIOMAS** – Oszkar Szentirmai, MD (presenter), Matiej Banu, MD, Olga Akselrod, PA, Roheen Raithatha, MD, Stefan Miot, MD, Vijay Anand, MD, Theodore Schwartz, MD, New York Presbyterian/Weill Cornell Medical Center

**104 ROLE OF ENDOSCOPY IN CASES OF SUSPECTED SKULL BASE ASPERGILLOSIS** – Satyawati Mohindra, dr (presenter), Sandeep Mohindra, dr, Ashok K Gupta, professor, Sunil K Gupta, professor, post graduate institute of medical education and research

**105 COMPARISON OF SURGICAL FREEDOM AND AREA OF EXPOSURE IN THREE ENDOSCOPIC TRANSMAXILLARY APPROACHES TO THE ANTEROLATERAL CRANIAL BASE** – Ali M. Elhadi, MD (presenter), George A.C.Mendes, MD, Kaith Almefty, MD, M. Yasher S. Kalani, MD PhD, Peter Nakaji, MD, Alexander Dru, BA, Mark C. Preul, MD, Andrew S. Little, MD, Barrow Neurological Institute

**QUESTION & ANSWER SESSION**

**PROFFERED PAPERS XIII: Head & Neck Tumors & General Topics**

MODERATORS: Christopher Rasrkh, MD & Randal Weber, MD

**106 SYSTEMATIC ANALYSIS OF DIAGNOSTIC MOLECULAR MARKERS FOR INTRACRANIAL CERM CELL TUMORS** – Daniel T Nagasawa, MD (presenter), Michael Sun, BS, Andy Trang, BS, Andrew Yew, MD, Yinn Cher Ooi, MD, R. Aaron Robison, MD, Gabriel Zada, MD, Isaac Yang, MD, University of California Los Angeles, Department of Neurosurgery; University of Southern California, Department of Neurological Surgery

**107 SINONASAL CHONDROSARCOMA: A CASE SERIES AND REVIEW OF THE LITERATURE** – Josh C Meier, MD (presenter), Aaron K Remenschneider, MD, Kyle Chambers, MD, Alice C Lin, MD, Marc W Herr, MD, Stacey T Gray, MD, Derrick T Lin, MD, Massachusetts Eye and Ear Infirmary
108 HER2/NEU AS A NEW THERAPEUTIC TARGET OF SINONASAL UNDIFFERENTIATED CARCINOMA – Yoko Takahashi, PhD (presenter), Diana Bell, MD, Ehab Y Hanna, MD, Jeffrey N Myers, MD PhD, Michael E Kupferman, MD, The University of Texas MD Anderson Cancer Center

QUESTION & ANSWER SESSION

109 SURVIVAL AND RECURRENCE FOR PATIENTS UNDERGOING SURGERY OF SKULL BASE INTRACRANIAL METASTASES – Daniele Rigamonti, Michael Purtell, Jon Weingart, Alessandro Olivi, Cary Gallia, Michael Lim, Henry Brem, Alfredo Quinones-Hinojosa, Kaisorn L Chaichana (presenter), Johns Hopkins School of Medicine

110 THE SAFETY AND FEASIBILITY OF EXTENDED ENDONASAL APPROACHES TO ORBITAL CELLULITIS IN INFANTS AND TODDLERS – Daniel W Fis, MD (presenter), Mark A Vecchioti, MD, Andrew R Scott, MD FACS, Tufts Medical Center

111 3D MICROSURGICAL AND ENDOSCOPIC ANATOMY OF DIFFERENT SURGICAL APPROACHES TO THE INTERPEDUNULAR FOSSA AND DORSUM SELLAE: A CADAVERIC STUDY – Antonella Medda, MD, Alexander I Evins, BS, Philip E Stieg, MD PhD, Antonio Bernardo, MD (presenter), Weill Cornell Medical College

QUESTION & ANSWER SESSION

112 INTEGRATED INTRA-OPERATIVE FLAT-PANEL CT, VASCULAR IMAGING AND NAVIGATION IN SKULL BASE SURGERY: AN INITIAL EXPERIENCE IN THE GENEVA HYBRID OPERATING SUITE – Ivan Cabrilo, MD, Mark Kotowski, MD, Philippe Bijlenga, MD PhD, Ivan Radovanovic, MD PhD (presenter), Karl Schaller, MD, Neurosurgery Division, Geneva University Hospitals

113 LABORATORY INVESTIGATION OF 3-D VERSUS 2-D VISUALIZATION IN ENDOSCOPIC SKULL BASE SURGERY – M Bergsneider, MD (presenter), J Hauptman, MD PhD, A Cutler, MD, M B Wang, MD, UCLA

114 PURELY ENDOSCOPIC VASCULAR DECOMPRESSION FOR TRIGEMINAL NEURALGIA: CLINICAL OUTCOMES AND TECHNICAL NOTE – Pradeep Setty, DO (presenter), St. John Providence Hospital

QUESTION & ANSWER SESSION

PROFERRED PAPERS XIV: Sellar and Parasellar Tumors

MODERATORS: John Jane, Jr., MD & Dan Kelly, MD

115 ACCELLULAR DERMAL ALLOGRAFT FOR THE PREVENTION OF CEREBROSPINAL FLUID LEAK AFTER TRANSSPHENOIDAL APPROACH TO PITUITARY ADENOMAS – Brandon G Caynor, MD, Ronald J Benveniste, MD PhD, Roy Casiano, MD, Seth Lieberman, MD, Jacques J Morcos, MD FRCS Eng FRCS Ed, University of Miami Miller School of Medicine

116 A MINIMAL ACCESS FAR-LATERAL APPROACH TO FORAMEN MAGNUM PATHOLOGY – James Kryzanski, MD (presenter), Carl Heilman, MD, Tufts Medical Center Department of Neurosurgery

117 REPEAT ENDOSCOPIC TRANSSPHENOIDAL SURGERY FOR ACROMEGALY: REMISSION AND COMPLICATIONS – Thomas J Wilson, MD, Erin L McKean, MD, Ariel L Barkan, MD, William F Chandler, MD, Stephen E Sullivan, MD (presenter), University of Michigan

QUESTION & ANSWER SESSION

118 ENDOSCOPIC ENDONASAL SURGERY FOR CRANIOPHARYNGIOMAS: SURGICAL OUTCOME IN 64 PATIENTS – Maria Koutourouziou, MD (presenter), Francisco Vaz Guimaraes Filho, MD, John de Almeida, MD, Shirley Su, MD, Juan Fernandez-Miranda, MD, Eric Wang, MD MBA, Carl Snyderman, MD MBA, Elizabeth Tyler-Kabara, MD PhD, Paul Gardner, MD, Center for Cranial Base Surgery University of Pittsburgh Medical Center, Pittsburgh, PA, USA

119 POSTOPERATIVE MANAGEMENT OF THE HYPOTHALAMIC-PITUITARY-ADRENAL AXIS IN PATIENTS UNDERGOING RESECTION OF SELlar-SUPRASELLAR TUMORS – Adam M Olzewski, BS (presenter), Tyler J Kenning, MD, Chris M Spearman, BS, Saurabh Singhal, BA, Marc R Rosen, MD, James J Evans, MD, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania; Albany Medical Center, Albany, New York

120 ROUTINE MRI ASSESSMENT IMMEDIATELY FOLLOWING TRANSSPHENOIDAL RESECTION OF NON-FUNCTIONAL PITUITARY MACROADENOMAS DOES NOT ALTER THE COURSE OF CLINICAL MANAGEMENT – Christopher J Farrell, MD (presenter), Mary Petrone, BA, Sonia Teufack, MD, Curston Nyquist, MD, Mark Friedel, MD, Tyler J Kenning, MD, Donald D Beahm, MD, Marc R Rosen, James J Evans, MD, Thomas Jefferson University

QUESTION & ANSWER SESSION

121 THE VALUE OF POSTOPERATIVE 3T MR IMAGING FOLLOWING ENDOSCOPIC ENDONASAL SELlar/SUPRASELLAR SURGERY – Douglas L Stofko, DO (presenter), Gregory Moore, MD, Thomas Nickles, MD, Amir R Dehdashti, MD FACS, Department of Neurosurgery and Division of Neuroradiology, Geisinger Medical Center, Danville, Pennsylvania

122 PSEUDOCAPSULAR REMOVAL OF PITUITARY TUMORS LOWERS INCIDENCE OF INTRAOPERATIVE CEREBROSPINAL FLUID LEAK – Sergey Teterov, MD (presenter), Marvin Bergsneider, MD, Department of Neurosurgery, David Geffen School of Medicine, University of California Los Angeles

123 THE USE OF TELEOPERATED CONCENTRIC TUBE ROBOTS FOR TRANSSPHENOIDAL PARASELLAR SURGERY – Kyle Weaver (presenter), Robert Webster, Philip Swaney, Jessica Burgner, Paul Russell, Hunter Gilbert, James Beken, Richard Hendrick, Vanderbilt University

QUESTION & ANSWER SESSION
PROFFERED PAPERS XV: Vestibular Schwannomas  
MODERATORS: Nik Blevins, MD & Carlos David, MD

124 SURGICAL TREATMENT OF SMALL VESTIBULAR SCHWANNOMAS. DOES THIS REMAIN A GOOD OPTION? – Amjad N Anaizi, MD (presenter), Vincent DiNapoli, MD PhD, Myles Pensak, MD, Philip Theodosopoulos, MD, University of Cincinnati

125 VESTIBULAR SCHWANNOMA, THREE DECADES OF EVOLUTION IN MANAGEMENT STRATEGY – Cormac Gavin, MD FRCS (presenter), Robert Bradford, MD FRCS, The Skull Base Service, Brain Tumour Unit, The National Hospital For Neurology

126 QUALITY OF LIFE DIFFERENCES BY TREATMENT GROUPS FOR ACOUSTIC NEUROMA PATIENTS – Eamon J McLaughlin, MD (presenter), Douglas C Bigelow, MD, Michael Y Lee, MD, Michael J Runkenstein, MD, Department of Otorhinolaryngology, University of Pennsylvania Health System

QUESTION & ANSWER SESSION

127 THE INFLUENCE OF PRIMARY SURGICAL RESECTION ON LONG-TERM VESTIBULAR SCHWANNOMA RECURRENT AND PROGRESSION – W C Singleton, MRCS (presenter), R Ricks, MRCS, D L Baldwin, FRCS, R J Nelson, FRCS, Departments of Neurosurgery, and of Otolaryngology, Head & Neck Surgery, North Bristol NHS Trust, Bristol, UK

128 FACTORS AFFECTING DISCHARGE DISPOSITIONS IN NF-2 PATIENTS FOLLOWING SURGERY FOR ACOUSTIC NEUROMA-A UNITED STATES NATIONWIDE INPATIENT DATA SAMPLE STUDY (2005-2009) – Ashish Sonig, MD MS MCh (presenter), Benjamin Brown, MD, Sudheer Ambekar, MD, Anil Nanda, MD MPH, LSU health Sciences Center, Shreveport, LA

129 DOES NATURAL HISTORY OF VESTIBULAR SCHWANNOMAS GOVERN TREATMENT RESPONSE AND COMPLICATIONS TO RADIOSURGERY? – Soroush Larjani, HBSc, Hooman Pebdani, MD, Eric Monsalves, HBSc, Caroline Hayhurst, MD, Boris Krischek, MD, Fred Gentili, MD, Michael Cusimano, MD PhD, Normand Laperriere, MD, Gelareh Zadeh, MD PhD (presenter), University of Toronto, University Health Network

QUESTION & ANSWER SESSION

130 SURGICAL MANAGEMENT OF VESTIBULAR SCHWANNOMAS AFTER FAILED RADIATION – A Zomorodi, MD (presenter), Y Nonaka, MD, A Friedman, MD, J Sampson, MD, T Fukushima, MD, Duke University Medical Center

131 MANAGEMENT OF COMPLICATIONS IN CEREBELLOPONTINE ANGLE SURGERY IN THE SITTING POSITION – Nevo Margakit, MD (presenter), Amir Hadani, md, Yuval Shapira, Tel Aviv Medical Center

132 QUALITY-OF-LIFE COMPARING OBSERVATION, MICRO SURGERY, AND RADIOSURGERY FOR SMALL-TO-MEDIUM SIZED VESTIBULAR SCHWANNOMA USING A VALIDATED DISEASE-SPECIFIC INSTRUMENT – Matthew L Carlson, MD (presenter), Colin L Driscoll, MD, Brian A Neff, MD, Nicole M Tombers, BS, Molly J Sullan, BA, Bruce E Pollock, MD, Michael J Link, MD, Mayo Clinic, Rochester, MN

QUESTION & ANSWER SESSION

3:30 pm – 4:00 pm  
Break with Exhibitors  
Grand Ballroom

4:00 pm – 4:20 pm  
CPT Coding  
Kim Pollack, RN, MBA, CPC  
Doral Ballroom D

4:20 pm – 5:00 pm  
Skull Base Jeopardy  
MC: John Golfinos, MD  
TEAM ONE: Franco DeMonte, MD & Colin Driscoll, MD & Dennis Kraus, MD  
TEAM TWO: Fred Gentili, MD, Allan Vescan, MD & Gelareh Zadeh, MD  
TEAM THREE: Matthew Carlson, MD, Jaime Van Gompel, MD & Mike Link, MD  
Doral Ballroom D

6:30 pm – 10:30 pm  
Social Event: Havana Nights  
Spa Pool  
Come join us by the lovely Doral Spa for this year’s latin themed event. Enjoy dinner and drinks and live music. This year’s social event will include our very own personal cigar roller, salsa dancers, poker, black jack and dominoes gaming tables!

SUNDAY, FEBRUARY 17, 2013

7:30 am  
Breakfast/Registration  
Grand Ballroom

8:00 am – 9:00 am  
BREAKFAST SEMINARS: HOW DO I DO IT  
Doral Ballroom A

#9: Far Lateral Approach  
MODERATOR: Siviero Agazzi, MD  
PANELISTS: Robert Cueva, MD & Chandranath Sen, MD
#10: Jugular Foramen  
MODERATOR: James Kryzanski, MD  
PANELISTS: James Liu, MD & Jon Robertson, MD  

#11: Petroclival Meningiomas  
MODERATOR: Vikram Prabhu, MD  
PANELISTS: Johnny Delashaw, MD & Jacques Morcos, MD  

9:00 am – 10:00 am  CONCURRENT SESSIONS  

#17: NF2  
- Hearing in NF2 Patients – Preservation & Augmentation  
- Chemotherapy for NF2  
- Case Presentations for NF2  
MODERATOR: Fred Barker  
PANELISTS: Fred Barker, MD, Marlen Hanson, MD & John Golfinos, MD  

#18: Benign Tumors of the Anterior Skull Base Optimizing Outcome  
- Microsurgical Transcranial Approaches  
- Endoscopic Techniques  
- Managing the Optic Canal  
MODERATOR: Steven L. Giannotta, MD  
PANELISTS: Nevo Margalit, MD, James Evans, MD & Madison Michael, MD  

#19: Trigeminal Schwannomas  
- Microsurgical Transcranial Approaches  
- Endoscopic Approaches  
- Radiosurgery  
MODERATOR: A. Samy Youssef, MD  
PANELISTS: Mario Ammirati, MD & Vijay K. Anand, MD  

#20: Expert Case Review. Unknown Cases Presented to Panel for Opinions & Recommendations  
MODERATOR: Amir Dehdashti, MD  
PANELISTS: Fred Gentili, MD, Ehab Hanna, MD & Daniel Nuss, MD  

10:00 am – 10:30 am  Break with Exhibitors  

10:30 am – 12:45 pm  PLENARY SESSION  

10:30 am  Quality Care for Anterior Skull Base Malignancy  
Franco Demonte, MD  

10:30 am  The Best Quality Surgery is Achieved Using a Craniotomy  
Ehab Hanna, MD  

10:50 am  The Best Quality Surgery is Using an Endoscopic Only Approach  
Ehab Hanna, MD  

11:10 am  Top Abstract #5  
137 ASSESSMENT OF THE PERFORMANCE OF FROZEN SECTION MARGIN ANALYSIS DURING ESTHESIONEUROBLASTOMA SURGERY – Masaru Ishii, MD PhD (presenter), Justin A Bishop, MD, Cary Gallia, MD PhD, Johns Hopkins University  

11:20 am  Comment on Top Abstract #5  – Michael Link, MD  

11:23 am  Top Abstract #6  
138 TRANSORAL ROBOTIC SURGERY FOR PARAPHARYNGEAL SPACE MASSES: INDICATIONS AND RESULTS  
– Christopher H Rassekh, MD (presenter), Shayanne A Lajud, MD, Courtney B Shires, MD, Laurie A Loevner, MD, Ara A Chalian, MD, Gregory S Weinstein, MD, Bert W O’Malley, Jr MD, University of Pennsylvania Department of Otorhinolaryngology–Head and Neck Surgery  

11:33 am  Comment on Top Abstract #6  – Ehab Hanna, MD  

11:36 am  3D Anatomy Talk  
Juan Carlos Fernandez-Miranda, MD  

12:30 pm  Meeting Adjourned
139 A CASE OF ISOLATED INTRACRANIAL ROSAI DORFMAN DISEASE PRESENTING AS A MIDDLE FOSSA MASS – William R Stetler, Stephen Sullivan (presenter), Erin McKeen, University of Michigan

140 CELEBRATING THE GOLDEN ANNIVERSARY OF ANTERIOR SKULL BASE SURGERY: REFLECTIONS ON THE PAST 50 YEARS AND ITS HISTORICAL EVOLUTION – Smruti K Patel, BA (presenter), Qasim Husain, BS, Resha S Soni, BA, Amit A Patel, MD, Jean Anderson Eloy, MD FACS, James K Liu, MD, Departments of Neurological Surgery and Otolaryngology-Head and Neck Surgery; Center for Skull Base and Pituitary Surgery, Neurological Institute of New Jersey, University of Medicine adn Dentistry of New Jersey, New Jersey Medical School, Newark, NJ

141 SYNCHRONOUS OLFACOTORY NEUROBLASTOMA AND OLFACOTORY GROOVE MENINGIOMA – James A Owusu, MD (presenter), Rammu Tummala, MD, Emiro E Caicedo, MD, University of Minnesota

142 OBRUSTRICTIVE SLEEP APNEA IN PATIENTS UNDERGOING ENDOSCOPICT SURGICAL REPAIR OF CEREBROSPINAL FLUID RHINORRHEA – Citanjali M Fleischman, MD MS (presenter), Adam M Zanation, MD, Emily E Cohn, MSIV, Charles S Ebert, Jr, MD MPH, Brent A Senior, MD, Department of Otolaryngology/Head and Neck Surgery, University of North Carolina Hospitals, Chapel Hill, NC 27514, USA

143 MANAGEMENT OF INVASIVE FUNGAL SINUSITIS WITH INTRACRANIAL INVOLVEMENT – Emily E Cohn, BSPh (presenter), Travis R Newberry, MD , Kenneth D Rodriguez, MD , Deanna M Sasaki-Adams, MD , Adam M Zanation, MD, 1 University of North Carolina School of Medicine, Chapel Hill, NC 27514, USA 2 Department of Otolaryngology/Head and Neck Surgery, 3 Department of Neurosurgery, University of North Carolina Hospitals, Chapel Hill, NC 27514, USA

144 HIV PRESENTING AS INFLAMMATORY PSEUDOTUMOR OF THE SKULL BASE: CASE REPORT AND REVIEW OF THE LITERATURE – Ralph Abi Hahem, MD (presenter), Brian Carnet, BS, Zoukaa B Sargi, MD, University of Miami, Miller school of Medicine, Department of Otolaryngology-Head and Neck Surgery

145 ANTERIOR CRANIAL FOSSA DEFECTS: TECHNICAL ACCOUNT OF REPAIR WITH AN OPEN, NON-BUTTRESSED APPROACH – Chiazo Amene, MD (presenter), Papireddy Bollam, MD, Minervia Nixon, MD, Anil Nanda, MD, Bharat Guthikonda, MD, Department of Neurosurgery, Louisiana State University Health Sciences Center- Shreveport, Louisiana

146 SMALL ROUND BLUE CELL TUMORS WITH ANTERIOR SKULL BASE INVASION – Jason Rudman (presenter), Christopher Fundakowski, MD, Zoukaa Sargi, MD, University of Miami - Miller school of medicine

147 SKULL BASE PLASMACYTOMAS: SURGICAL APPROACH AND REVIEW OF MANAGEMENT – Wajd N Al-Holou, MD (presenter), William R Stetler Jr, MD, Thomas J Wilson, MD, Steven Chinn, MD, Erin L McKeen, MD, Stephen E Sullivan, MD, University of Michigan

148 TRANSNASAL ENDOSCOPIC TECHNIQUE FOR LARGE PEDIATRIC CLIVAL CHORDOMA WITH INTRADURAL EXTENSION – John Capua, DO (presenter), Eric Stiner, MD, Arrowhead Regional Medical Center, Kaiser Permanente Fontana Hospital

149 ENDOSCOPIC ENDONASAL RESECTION OF CLIVAL CHORDOMAS: A CASE SERIES – David R Ormond, MD (presenter), Sarah Wise, MD, Nelson Oyesiku, MD, Alpen Patel, MD, Constantinos G Hadjipanayis, MD, Emory University School of Medicine

150 IS TUMOR SEEDING A RISK FACTOR FOR ENDOSCOPIC ENDONASAL RESECTION OF CLIVAL CHORDOMAS? – Alfred Marc C Iloreta, MD (presenter), Curston C Nyquist, MD, Mark Friedel, MD, Mark R Rosen, MD, Christopher J Farrell, MD, James J Evans, MD, Thomas Jefferson University

151 ENDOSCOPIC REPAIR OF LATERAL SPHENOID SINUS MENINGOENCEPHALOCLE – Constanza J Valdes, MD (presenter), Thanh Ha, MD, Peter-John Wormald, MD FRCS FRACS FCS SA, Stephen Floreani, MBBS FRACS, Denis Sirhan, MD FRCS, Marc A Tewfik, MDCM MSc FRCSC, McGill University. The University of Adelaide

152 ENDOSCOPIC TRANSNASAL APPROACH FOR RESECTION OF A RECURRING ANTERIOR SKULL BASE ANEURYSMAL BONE CYST: A CASE REPORT AND REVIEW OF THE LITERATURE – Sandra Ho, BA (presenter), Tyler Kenning, MD, James Evans, MD, Thomas Jefferson University

153 A NOVEL TECHNIQUE FOR PEDICLED NASOSEPTAL FLAP TAKEDOWN IN REVISION SKULL BASE SURGERY – Javan J Nation, MD (presenter), Mahdi Shkoukani, MD, Murali Guthikonda, MD, Adam Folbe, MD, Wayne State University

154 ONE-PIECE MODIFIED GASKET SEAL TECHNIQUE – Aaron P Wessell, BS (presenter), Ameet Singh, MD, Zachary Litvack, MD MCR, Department of Neurosurgery
FULLY ENDOSCOPIC TRANSSPHENOIDAL SURGERY - INSTITUTIONAL EXPERIENCE AT A SINGLE CENTER IN BOGOTÁ, COLOMBIA – Rafael Uribe, MD (presenter), Oscar Feo, MD, Alfredo Herrera, MD, Juan Carlos Gomez, BS, Andres Vargas, BS, Hospital Universitario San Ignacio, Pontificia Universidad Javeriana

FIELD OF VIEW COMPARISON BETWEEN 2D AND 3D ENDOSCOPY – Jamie J Van Gompel, MD (presenter), Mark H Tabor, MD, A. Samy Youssef, MD, Harry R van Loveren, MD, Siviero Agazzi, MD, University of South Florida

3D ENDOSCOPE-ASSISTED MICROSURGICAL ANATOMY OF A COMBINED SUBTEMPORAL PRESIGMOID TRANSTENTORIAL APPROACH – Alexander I Evins, BS (presenter), Antonio Bernardo, MD, Philip E Stieg, MD PhD, Weill Cornell Medical College

UTILITY OF A ROTATION-SUCTION MICRODEBRIDER FOR TUMOR REMOVAL IN ENDOSCOPIC ENDONASAL SKULL BASE SURGERY: EXPERIENCE IN 32 PATIENTS – Smruti K Patel, BA (presenter), Qasim Husain, BS, Arjuna B Kuperan, MD, Jean Anderson Eloy, MD FACS, James K Liu, MD, Departments of Neurological Surgery and Otolaryngology-Head and Neck Surgery; Center for Skull Base and Pituitary Surgery, Neurological Institute of New Jersey, University of Medicine and Dentistry of New Jersey, New Jersey Medical School, Newark, NJ

ENDONASAL MANAGEMENT OF A PEDIATRIC OCCULT RETROCLIVAL ABSCESSE – Jeffrey C Rastatter, MD (presenter), Stephen R Hoff, MD, Arthur DiPatri, MD, Tord Alden, MD, Ann and Robert H. Lurie Children’s Hospital of Chicago, 225 E. Chicago Ave, Chicago, IL 60611

ENDOSCOPIC TRANSSPHENOIDAL SURGERY VERSUS MEDICAL THERAPY FOR THE TREATMENT OF MICROProlACTINOMA: A COST-EFFECTIVENESS ANALYSIS – Pinakin R Jethwa, MD (presenter), Tapan D Patel, BS, Aaron F Hajart, MS, Jean A Eloy, MD, James K Liu, MD, UMDNJ - New Jersey Medical School

OUTCOME OF TRANSCANALICULAR ENDONASAL DIODE LASER ASSISTED DACRYOCYSTORHINOSTOMY IN PATIENTS OF CHRONIC DACRYOCYSTIS – H C Taneja, MS (presenter), Neha Jain, MS, Lakshmi Vaid, MS, UNIVERSITY COLLEGE OF MEDICAL SCIENCES

ENDOSCOPIC GRADUATED MULTI-ANGLE MULTI-CORRIDOR RESECTION OF JUVENILE NASOPHARYNGEAL ANGIOFIBROMA – James K Liu, MD (presenter), Qasim Husain, BS, Saurin Sanghvi, BS, Muhammed N Khan, BA, Chirag R Patel, MD, Jean Anderson Eloy, MD FACS, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

THE COMPOSITE MUCOSAL CARTILAGINOUS SEPTAL FLAP FOR ENDOSCOPIC SKULL BASE RECONSTRUCTION – Marc A Tewfik, MD MSc FRCSC (presenter), Peter-John Wormald, MD FRCS FRACS, McGill University Health Centre & Adelaide University

PEDICLED MUCOCHONDRA L NASOSEPTAL FLAP FOR RECONSTRUCTION OF ORBITAL FLOOR DEFECT Evelyne Kalyoussef, MD (presenter), Richard F Schmidt, BA, Zain Boghani, BS, Saurin Sanghvi, BS, Jean A Eloy, MD FACS, James K Liu, MD, University of Medicine and Dentistry of New Jersey – New Jersey Medical School

ENDOSCOPY-ASSISTED MICROSURGICAL RESECTION OF A PETROCLIVAL ARTIFICIAL TUMOR MODEL WITH RETROSELLAR EXTENSION USING A RETROSIGMOID APPROACH: A CADAVERIC STUDY AND ANALYSIS OF SUPRATENTORIAL WORKING AREA – Varun Kshettry, MD (presenter), Silky Chotai, MD, Jack Hou, BS, Tariq Lamki, MD, Mario Ammirati, MD MBA, Ohio State University, Cleveland Clinic

RECONSTRUCTIVE CHALLENGES IN THE EXTENDED ENDOSCOPIC TRANSCLIVAL APPROACH – Ameet R Kamat, MD (presenter), Gregg Goldstein, MD, James N Palmer, MD, John YK Lee, MD, Jason C Newman, MD, Nithin D Adappa, MD, University of Pennsylvania

ASSESSMENT OFFRONTAL LOBE SAGGING AFTER ENDOSCOPIC ENDONASAL TRANSCRIBRIFORM RESECTION OF ANTERIOR SKULL BASE TUMORS: IS RIGID STRUCTURAL RECONSTRUCTION OF THE CRANIAL BASE DEFECT NECESSARY? – Jean Anderson Eloy, MD FACS (presenter), Qasim Husain, BS, Smruti K Patel, BA, Pratik A Shukla, MD, Osamah J Choudhry, MD, Rahul Singh, MD, James K Liu, MD, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

PRELIMINARY RELIABILITY AND VALIDITY OF THE SKULL BASE INVENTORY (SBI) QUALITY OF LIFE QUESTIONNAIRE – John R de Almeida, MD MSc (presenter), Allan D Vescan, MD, Carl H Snyderman, MD MBA, Ian J Witterick, MD MSc, University of Toronto, University of Pittsburgh Medical Center

PEDICLED MUCOCHONDRA L NASOSEPTAL FLAP FOR RECONSTRUCTION OF ORBITAL FLOOR DEFECT – Evelyne Kalyoussef, MD (presenter), James K Liu, MD, Jean Anderson Eloy, MD, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

ENDOSCOPIC TRANSPTERYGOID APPROACH FOR SPONTANEOUS MENINGOENCEPHALOCELE OF THE SPHENOID WING WITH LATERAL SPHENOID SINUS EXTENSION – Abdulrazag Ajlan, MD (presenter), Achal Achrol, MD, Ethan Soudry, MD, Peter H Hwang, MD, Griffith Harsh, MD, Stanford University
173 ENDOSCOPIC ENDONASAL ANEURYSM CLIP LICIGATION: AN ANATOMICAL FEASIBILITY STUDY – Oszkár Szentirmai, MD (presenter), Lino Mascharenas, MD, Al Amin Salek, MD, Phil Stieg, MD, Theodore Schwartz, MD, New York Presbyterian/Weill Cornell Medical Center

174 THE ENDOSCOPIC PARAMANDIBULAR WINDOW TO THE INFRATEMPORAL FOSSA: SURGICAL ANATOMY AND EXPANDING CLINICAL INDICATIONS – K Boahene, MD (presenter), S Raza, MD, M Ishii, M Lim, D Reh, G Gallia, A Quinone-Hinojosa, The Johns Hopkins University School of Medicine

175 ROBOTIC NAVIGATION OF THE INFRATEMPORAL FOSSA AND MIDLINE CRANIAL BASE – Kofi Boahene, MD (presenter), Raymond Blanco, Jeremy Richmon, MD, The Johns Hopkins University School of Medicine

176 TRANSORBITAL ENDOSCOPIC APPROACH TO THE LATERAL CAVERNOUS SINUS – Rohan Ramakrishna, MD, Randall Bly, MD (presenter), Manuel Ferreira, MD, Kristen Moe, MD, University of Washington

177 ENDOSCOPE-ASSISTED TRANSMASTOID INFRA-LABYRINTHINE DRAINAGE OF PETROUS APEX CHOLESTEROL GRANULOMA – Alfred Marc C Illoreta, MD (presenter), Anthony G Del Signore, MD, Sujana S Chandrasekhar, MD, Mount Sinai School of Medicine

178 ENDOSCOPIC TREATMENT OF CRANIOORBITAL FRACTURES – Vladimir Krylov, Oleg Levchenko, Ivan Godkov, Alik Kalandari (presenter), N.V. Sklifosovskii Research Institute of Emergency Medical Care

179 MOYA-MOYA DISEASE: ASSESSMENT OF NEUROLOGICAL AND NEUROPSYCHOLOGICAL OUTCOME FOLLOWING REVASCULARIZATION PROCEDURES – Sunil K Gupta, MCh (presenter), Ashish Agarwal, MCh, Manju Mohanty, PGIMER, Chandigarh, India

180 UNUSUAL PRESENTATION OF BILATERAL NEURENTERIC CYSTS IN THE CRANIOVERTEBRAL JUNCTION IN A 10-YEAR-OLD GIRL: CASE ILLUSTRATION AND REVIEW – Smruti K Patel, BA (presenter), Aditya Baisre, MD, James K Liu, MD, Departments of Neurological Surgery and Pathology and Laboratory Medicine; Center for Skull Base and Pituitary Surgery, Neurological Institute of New Jersey, University of Medicine and Dentistry of New Jersey, New Jersey Medical School, Newark, NJ

181 MASSIVE SOLITARY FIBROUS TUMOR (SFT) OF THE INFRATEMPORAL AND PTERYGO-MAXILLARY FOSSA TREATED BY COMBINED ENDOSCOPIC APPROACH – Francois Cloutier, MD (presenter), Genevieve Lapointe, MD FRCSC, Sylvie Nadeau, MD FRCSC, University Laval

182 OUTCOME ANALYSIS OF SURGICAL TREATMENT OF CRANIOVERTEBRAL JUNCTION TUMORS – Yury A Shulev (presenter), Vitaly Stepanenko, Ovanes Akobyan, MD, Alexander V Trashin, MD, City Hospital # 2, North-West State Medical University, Saint-Petersburg, Russia

183 LONG-TERM ANALYSIS OF THE RESULTS OF FREE FAT GRAFT USED FOR RECONSTRUCTION IN SKULL BASE SURGERY – Ovanes Akobyan, MD (presenter), Yury Shulev, MD, City Hospital # 2, North-West State Medical University, Saint-Petersburg, Russia

184 HAIR-PRESERVATION CRANIOTOMY FOR SKULL BASE PROCEDURES – Peter Sylvester, BS, Bruce Haughey, MD, Phil Custer, MD, Jason Diaz, MD, Joel Goebel, MD, Michael Chicoine, MD (presenter), Washington University

185 OPTIMUM CARE: IMPLEMENTATION OF QUALITY ASSURANCE BENCHMARKS FOR PITUITARY SURGERY – Sergei Terterov, MD (presenter), Elena I Fomchenko, PhD, Marvin Bergsneider, MD, Department of Neurosurgery, David Geffen School of Medicine, University of California Los Angeles

186 UNUSUAL CASE OF RECURRENT CAROTID-CAVERNOUS FISTULA AFTER 47 YEARS, TREATED WITH DIRECT CLIP LICIGATION OF THE PETROUS INTERNAL CAROTID ARTERY – Abhishek Agrawal, MD (presenter), Andrew Ferrell, MD, Shahid Nimjee, MD PHD, Tony Smith, Gavan Britz, MD MPH, Departments of Radiology and Surgery, Division of Neurosurgery, Duke University Medical Center, Durham, North Carolina

187 ENDONASAL MANAGEMENT OF OPTIC CANAL STENOSIS DUE TO FIBROUS DYSPLASIA – Jeffrey C Rastatter, MD (presenter), Tord Alden, MD, Ann and Robert H. Lurie Children’s Hospital of Chicago, 225 E. Chicago Ave, Chicago, IL 60611

188 SYPHILITIC GUMMA LESION IN MECKEL’S CAVE AND INFRATEMPORAL FOSSA PRESENTING WITH CRANIAL NERVE DEFICIT – Myreille D’Astous, MD PhD (presenter), Sylvie Nadeau, MD, Genevieve Lapointe, MD, Enfant-Jesus Hospital, Quebec city, Canada; Laval University, Quebec city, Canada

189 NEURONAVIGATION SYSTEM AS A TOOL FOR THE TREATMENT OF SKULL BASE TUMORS - SINGLE BRAZILIAN CENTER RETROSPECTIVE STUDY OF 72 CASES – Cristian Ferrareze Nunes, MD (presenter), Gustavo A Porto Sereno Cabral, MD, Mario A Lapenta, MD, José A Landeiro, MD PhD, Caleao Air Force Hospital
| 190 | OCCULT INCREASED INTRACRANIAL PRESSURE IN SPONTANEOUS CEREBROSPINAL FLUID LEAK – Maria Koutourouisiou, MD (presenter), Esther Vivas, MD, Srinivas Chivukula, Juan Fernandez-Miranda, MD, Eric Wang, MD, Barry Hirsch, MD, Carl Snyderman, MD MBA, Paul Gardner, MD, Center for Cranial Base Surgery University of Pittsburgh Medical Center, Pittsburgh, PA, USA |
| 191 | TEAMWORK IN SKULL BASE SURGERY: AN AVENUE FOR IMPROVEMENT IN PATIENT CARE – Nancy McLaughlin, MD PhD (presenter), Ricardo L Carrau, MD, Daniel F Kelly, MD, Daniel M Prevedello, MD, Amin B Kassam, MD, St-Johns Health Center; |
| 192 | ADVANCED NEUROIMAGING & PREOPERATIVE PLANNING FOR COMPLEX SKULL BASE SURGERY – Cormac Gavin, MD FRCS (presenter), Robert Bradford, MD FRCS, The Skull Base Service, Brain Tumour Unit, The National Hospital For Neurology |
| 193 | ALVEOLAR SINONASAL Rhabdomyosarcoma in Adults: A Case Report – Homere Al Moutran, MD (presenter), Priyam Vyas, BS, Rhonda Sanders, MD, Peter Costantino, MD, Elana Opher, MD, David Hiltzik, MD, New York Head and Neck Institute. Northshore-LIJ Health System. |
| 194 | ASSESSMENT OF INTERLEUKIN-6 AND INTERLEUKIN-10 AS SERUM BIOMARKERS IN A SPONTANEOUS FELINE TUMOR MODEL OF HEAD AND NECK SQUAMOUS CELL CARCINOMA (HNSCC) – Jackie M Wypij, MS DVM DACVIM (presenter), Jocelyn Riehl, DVM, University of Illinois at Urbana-Champaign |
| 195 | MYEOPITHELIOMA OF THE SKULL BASE AND ORBIT: CASE REPORT, IMMUNOHISTOPATHOLOGY AND SURGICAL CONSIDERATIONS – D M Hayward, MD (presenter), E Wild, BS, J M Lee, MD PhD, A E Rosenberg, MD, V C Prabhu, MD, Loyola University Medical Center |
| 196 | PEDICLED FLAP RECONSTRUCTION OF THE LATERAL SKULL BASE – Eric Thorpe (presenter), Richard Borrowdale, John Leonetti, MD, Sam Marzo, MD, Loyola University Medical Center |
| 197 | MULTIFOCAL EXTRAMEDULLARY PLASMACYTOMA INVOLVING THE NASAL CAVITY: A CASE REPORT AND REVIEW OF THE LITERATURE – Joseph Seymour, MD (presenter), Moneer Abdo, BS, Mahdi Shkoukani, MD, Wayne State University |
| 198 | MANAGING LARGE CAROTID BODY TUMOURS- AI IM S EXPERIENCE – Dr Suresh C Sharma, Professor MD (presenter), All India Institute of Medical Sciences, New Delhi, INDIA. |
| 199 | MANAGEMENT OF SINONASAL CHONDROSARCOMA: A SYSTEMATIC REVIEW OF 158 PATIENTS – Mohemmed N Khan, BA (presenter), Qasim Huyain, BS, Zain Boghani, BS, Saurin Sanghvi, BS, James K Liu, MD, Jean A Eloy, MD FACS, University of Medicine and Dentistry of New Jersey – New Jersey Medical School |
| 200 | APPLICATION OF INTRAOPERATIVE INDOCYANINE GREEN VIDEOANGIOGRAPHY DURING SKULL BASE SURGERY – CASE REPORT – Gustavo A Porto Sereno Cabral, MD (presenter), Cristian Ferrareze Nunes, MD, Mario A Lapenta, MD, Jose A Landeiro, MD PhD, Galeao Air Force Hospital |
| 201 | TIME TO ESTHESIONEUROBLASTOMA RECURRENCE: A META ANALYSIS – Vishal H Dhandha, BS (presenter), Adam M Zanation, MD, Department of Otolaryngology/ Head and Neck Surgery, University of North Carolina – Chapel Hill |
| 202 | NONSPECIFIC INFLAMMATORY TUMORS OF THE SKULL BASE: CASE SERIES – David A Stidd, MD MS, Jesse Skoch, MD (presenter), G. Micheal Lemole, MD, Division of Neurosurgery, University of Arizona |
| 203 | MUCOSAL MELANOMA OF THE NASOPHARYNX AND EUSTACHIAN TUBE: CASE REPORT AND REVIEW – Scott A McLean, MD, K. Kelly Gallagher, MD (presenter), University of Michigan |
| 204 | A NEXT GENERATION CADAVERIC MICRONEUROSURGERY SKULL BASE LABORATORY: A NEW MODEL FOR TECHNOLOGICALLY INTEGRATED SURGICAL TRAINING AND INNOVATION – Alexander I Evins, BS (presenter), Philip E Stieg, MD PhD, Antonio Bernardo, MD, Department of Neurological Surgery, Weill Cornell Medical College |
| 205 | INTRAOPERATIVE EXTRACORPOREAL IRRADIATION FOR THE TREATMENT OF THE MENINGIOMA-INFILTRATED CALVARIUM – Edward E Kerr, MD (presenter), Ruben Fragoso, MD PhD, Kiarash Shahlaie, MD PhD, University of California, Davis |
| 206 | MINIMALLY INVASIVE DIRECT TRANSCONDYLAR APPROACH TO THE FORAMEN MAGNUM: SURGICAL ANATOMY AND PRESENTATION OF TWO CLINICAL CASES – Roberto Diaz, MD (presenter), Miguel Berbeo, MD, Silvia Tatiana Quintero Oliveros, MD, Juan Carlos Acevedo, MD, Oscar Feo Lee, MD, Oscar Zorro, MD, Rafael Uribe, MD, Jaime Becerra, MD, Laura Diaz, MD, Juan Carlos Perez, MD, Edgar Ordoñez, BS, Hospital Universitario San Ignacio, Pontificia Universidad Javeriana, Bogotá, Colombia. |
| 207 | INTRADURAL ANTERIOR PETROSECTOMY FOR PETROCLIVAL MENINGIOMAS – Sunil K Gupta, title (presenter), department of neurosurgery, pgimer, Chandigarh, India |
211 ROLE OF PLANUM SPHENOIDALE MENINGIOMA RESECTION IN IMPROVING VISUAL FUNCTION – Andrea P Perera, Andrew F Alalade (presenter), Jonathan R Pollock, Essex Neuroscience Centre, Queens Hospital, Romford, UK

212 RADIATION-INDUCED MENINGIOMA OF THE ORBIT: NATURAL HISTORY, POTENTIAL FOR MALIGNANT TRANSFORMATION AND SURGICAL MANAGEMENT – Dustin M Hayward, MD (presenter), Tarik Ibrahim, MD, David Yoo, MD, Darl Vandevender, MD, Vikram C Prabhu, MD, Loyola University Medical Center Departments of Neurosurgery, Ophthalmology and Plastic Surgery

213 MICRO SURGICAL TREATMENT FOR PRIMARY JUGULAR FORAMEN MENINGIOMAS – Jie Tang, MD (presenter), Junting Zhang, MD, Liwei Zhang, Xinru Xiao, MD, Dabiao Zhou, MD, Beijing TianTan hospital, Beijing, China

214 CHORDOID MENINGIOMA: A CLINICAL, RADIOGRAPHIC AND PATHOLOGIC REVIEW OF 7 CASES – J Lewis, MD (presenter), S Barnett, MD, B Mickey, MD, B Boudreaux, MD, UT Southwestern

215 RECURRENCE RATE AND OUTCOME ANALYSIS OF SKULL BASE MENINGIOMAS AFTER SURGICAL RESECTION – Ovanes Akobyan, MD (presenter), Yury Shulev, MD, Vladimir Shamanin, MD, City Hospital # 2, North-West State Medical University, Saint-Petersburg, Russia

216 CLINICAL AND OPERATIVE DIFFERENCES BETWEEN LATERAL SKULL BASE MENINGIOMAS – John Leonetti, MD, Michael J Loochtan, MD (presenter), Sam Marzo, MD, Douglas Anderson, MD, Vikram Prabhu, MD, Nicolas Katsantonis, MS, Stritch School of Medicine, Loyola University Medical Center

219 ROLE OF MMP16 IN MALIGNANT AND INVASIVE MENINGIOMA – Shahrzad Jalali, PhD (presenter), Takanumi Wataya, MD PHD, Gela Rezadeh, MD PhD, Division of Neurosurgery, Toronto Western Hospital, University of Toronto

220 FROM ABOVE OR BELOW: THE CONTROVERSY AND HISTORICAL EVOLUTION OF TUBERCULUM SELLAE MENINGIOMA RESECTION FROM OPEN TO ENDOSCOPIC SKULL BASE APPROACHES – Resha S Soni, BA (presenter), Smruti K Patel, BA, Qasim Husain, BS, Jean Anderson Eloy, MD FACS, James K Liu, MD, University of Medicine and Dentistry of New Jersey- New Jersey Medical School

221 SURGICAL MANAGEMENT OF PETROLAL LESIONS LAST THREE YEARS EXPERIENCE AT ARMY HOSPITAL (RESEARCH & REFERRAL), NEW DELHI – Maneet Gill (presenter), Hc Pathak, Prakash Singh, Ak Sharma, Manish Sharma, Army Hospital (Research & Referral), New Delhi, India

222 FACIAL REANIMATION ACCORDING TO THE POST-RESECTION DEFECT DURING LATERAL SKULL BASE SURGERY – John P Leonetti, MD, Sahar Nadimi, MD (presenter), Sam J Marzo, MD, Douglas A Anderson, MD, Vikram Prabhu, MD, Alexander Riveron, BS, Loyola University Medical Center

223 CRANIOPHARYNGIOMA: ANALYSIS OF FACTORS THAT AFFECT THE OUTCOME – Sherif Elwatydi, Professor (presenter), King Saud University, College of Medicine

224 PITUITARY INFARCTION ASSOCIATED WITH RATHKE’S CLEFT CYST – Ealmaan Kim, MD PhD (presenter), Division of Skull Base Surgery, Keimyung University School of Medicine, Dongsan Medical Center

225 SPHENOID SINUS MULTIPLE MYELOMA PRESENTING AS CAVERNOUS SINUS SYNDROME – Andrew Tassler, MD, Adesh Tandon, MD (presenter), Nupren Baxi, MD, The Albert Einstein College of Medicine, Montefiore Medical Center

226 RECONSTRUCTION OF SKULL BASE DEFECTS FOLLOWING ENDONASAL TRANSSPHENOIDAL APPROACHES TO THE SELLAR REGION – Bakhtiyar Pashaev, MD (presenter), Dmitry Bochkarev, MD, Valery Danilov, MD, Andrey Alekseev, MD, Gulnar Vagapova, MD, Vladimir Krasnazhen, MD, Departments of Neurosurgery, Inter-regional clinical diagnostic center, Kazan. Kazan Medical state University. Kazan Medical state Academy, Russian Federation.

227 PITUITARY ABSCESSES PRESENTING AS PSEUDO-APoplexy. ABOUT 2 UNUSUAL CASES – Moujahed Labidi, MD (presenter), Akli Zetchi, MD, Genevieve Lapointe, MD FRCSC, CHU de Quebec, Hospital de l’Enfant-Jesus

228 THE ROLE OF IMAGE FUSION NEURONAVIGATION IN REPEATED TRANSSPHENOIDAL MICROSURGERY FOR PITUITARY ADENOMAS – Da Biao Zhou (presenter), Gui Jun Jia, Ming Ni, Wang Jia, Department of Neurosurgery, Beijing TianTan Hospital, Capital Medical University

230 SURGICAL MANAGEMENT OF PRIMARY CAVERNOUS SINUS TUMORS – Maria Koutourousiou, MD (presenter), George Zenonos, MD, Juan Fernandez-Miranda, MD, Eric Wang, MD, Carl Snyderman, MD MBA, Paul Gardner, MD, Center for Cranial Base Surgery University of Pittsburgh Medical Center, Pittsburgh, PA, USA
231 REMOVAL OF THE POSTERIOR WALL OF THE SPHENOID SINUS DURING TRANS-SELLAR SKULL BASE SURGERY: THE MENISCUS SIGN – Courtney B Shires, MD (presenter), Christopher H Rassekh, MD, Robert T Adelson, MD, Sean M Grady, MD, Bert W O’Malley, Jr, MD, University of Pennsylvania, University of Tennessee

232 VISION OUTCOMES FOLLOWING ENDOSCOPIC ENDONASAL SURGERY FOR LESIONS COMPRESSING THE OPTIC APPARATUS – Stefan Mlot, MD (presenter), Oszkar Szentirmai, MD, Roheen Raithatha, MD, Mark Dinkin, MD, John Tsiouris, MD, Vijay Anand, MD, Theodore Schwartz, MD, New York Presbyterian/Weill Cornell Medical Center


234 THE ROLE OF MEDIATORS OF CELL INVASIVENESS, MOTILITY AND MIGRATION IN THE PATHOGENESIS OF CAVERNOUS SINUS AND SPHENOID SINUS BONE INVASION IN PITUITARY ADENOMAS – Eric Monsalves, Ozgur Mete, Sylvia L Asa, Fred Gentili, Allan Vescan, Gelareh Zadeh (presenter), University Health Network, Toronto, Ontario

235 ENDOSCOPIC TRANSSPHENOIDAL SURGERY FOR ACROMEGALY AND CUSHING’S DISEASE: 6 YEAR EXPERIENCE – Oscar Feo Lee, MD, Silvia Tatiana Quintero Oliveros, MD, Roberto Diaz, MD, Miguel Berbeo, MD, Juan Carlos Acevedo, MD, Oscar Zorro, MD, Rafael Uribe, MD (presenter), Jaime Becerra, MD, Laura Diaz, MD, Juan Carlos Perez, MD, Mauricio Avila, BS, Hospital Universitario San Ignacio, Pontificia Universidad Javeriana, Clinica Colombia, Hospital Santa Clara, Bogotá, Colombia.

236 SURPARELLAR MATURE CYSTIC TERATOMA: A CASE REPORT – Fadi B Sweiss, BS, Lauren Dalvin, BS, Raed B Sweiss, DO (presenter), Javed Siddiqi, MD, Arrowhead Regional Medical Center, Northeast Ohio Medical University

237 HYponATREMiA AS A PRESENtiNG SIGN FOR SELLAR MASSes – Nancy McLaughlin, MD PhD (presenter), Cal Bordo, BS, Katie Kelly, AB, Amy Eisenberg, RN NP, Charlene Chaloner, RN, Pejman Cohan, MD, Daniel F Kelly, MD, John Wayne Cancer Institute at St-John’s Health Center

238 LoCALiZATioN oF FoRAmEN ovALE FoR tREAtmENt oF tRigEmiNAL NEuRALgiA: AN ANAtomiCAL PERSPECtivE – Tulika Gupta, MD (presenter), Daisy Sahni, MD, department of anatomy, pgimer, Chandigarh

239 RETROSPECTIVE STUDY OF SKULL BASE FRACTURE: A STUDY OF INCIDENTS, COMPLICATIONS, MANAGEMENT, AND OUTCOME OVERVIEW FROM TRAUMA-ONE-LEVEL INSTITUTE OVER FIVE YEARS – Michael Lemole, MD, Mandana Behbahani, BA (presenter), University of Arizona college of Medicine

240 ANATOMICAL LANDMARKS FOR LOCATING THE SPHENOID OSTIUM: A CADAVERIC STUDY – Tulika Gupta, MD (presenter), Daisy Sahni, PhD, Anjaliagarwal, MD, PGIMER, Chandigarh, India

241 CADAVERIC ANATOMY OF FRONTAL SINUS OUTFLOW PATHWAY – Tulika Gupta, MD (presenter), Anjali Agarwal, MD, Daisy Sahni, PhD, PGIMER, Chandigarh

242 THE “MÜNSTER CORRELATION” IN THE TEMPORAL BONE: SURGICAL RELEVANCE OF AN ANATOMICAL STUDY – Hamid Borghei-Razavi, MD (presenter), Uta Schick, Professor MD PHD, Department of neurosurgery, Clemens Hospital, academic hospital of Münster university, Münster, Germany

243 MICROVASCULAR DECOMPRESSION FOR TRIGEMINAL NEURALGIA: DOES THE TYPE OF VASCULAR CONTACT IMPACT OUTCOME? – Sukhmeet K Sandhu, BA, Casey H Halpern, MD, Chris Y Shi, BS, Venus Vakhshori, BA BS, Keyvan Mirsaedi-Farahani, BS BBA, Marie Kerr, CCRP, John Y Lee, MD (presenter), University of Pennsylvania

244 AN ENDOSCOPIC TRANSTemporAL COMPARED WITH AN ENDONASAL APPROACH TO MECKEL’S CAVE: AN ANATOMICAL STUDY – Jason R Van rompaey, BS (presenter), Anand Suruliraj, MS FRACS, Ricardo Carrau, MD, Benedict Panizza, MBBS, C. Arturo Solares, MD, Georgia Health Sciences University, Augusta GA; The Townsville Hospital, Townsville, QLD Australia; The Ohio State University Medical Center, Columbus, OH; Princess Alexander Hospital, Brisbane, QLD Australia

245 NEURAL INTERCONNECTIONS BETWEEN PORTIO MINOR AND PORTIO MAJOR AT THE PORUS TRIGEMINUS – Martin M Mortazavi, MD (presenter), Christoph J Griessenauer, MD, Jason Cormier, MD, R. Shane Tubbs, PhD, Aaron Cohen-Gadol, MD, University of Alabama at Birmingham, Division of Neurological Surgery. University of Indiana, Department of Neurological Surgery

246 IDENTIFICATION OF A NEW SEGMENT OF THE TROCLEAR NERVE – Martin M Mortazavi, MD (presenter), Christoph J Griessenauer, MD, Jason Cormier, MD, R. Shane Tubbs, PhD, Aaron Cohen-Gadol, MD, University of Alabama at Birmingham, Division of Neurological Surgery. University of Indiana, Department of Neurological Surgery

248 ANATOMIC AND RADIOGRAPHIC STUDY OF ANTERIOR SURGICAL APPROACHES TO THE INFRATEMPORAL FOSSA – Xuewei Xia, MD PhD (presenter), Shaan Raza, MD, Ari Blitz, MD, Alfredo Quinones, MD, Kofi Boaehene, MD, Douglas Reh, MD, Masaru Ishii, MD PhD, Cary Gallia, MD PhD, Johns Hopkins University
**POSTER SESSIONS**

**Posters will be open during all exhibit hours in the Exhibit Hall.**

**249 SUGRICALLY INDUCED SMART SYNDROME: CASE REPORT AND REVIEW OF THE LITERATURE** – Michael Link, MD, William R Copeland, MD, Patrick R Maloney, MD (presenter), Alejandro A Rabinstein, MD, Mayo Clinic Department of Neurosurgery

**250 POST-RADIATION MECKEL’S CAVE METASTASIS TREATED BY STEREOTACTIC RADIOSURGERY** – Andrew J Fabiano, MD (presenter), Carl Anderson, BS, Dheerendra Prasad, MD MCh, Roswell Park Cancer Institute; SUNY at Buffalo School of Medicine

**251 FRAMELESS, REAL-TIME, SURFACE IMAGE GUIDED RADIOSURGERY (SIG-RS): SHORT-TERM SAFETY PROFILE IN THE MANAGEMENT OF BENIGN SKULL BASE LESIONS** – Chiazo Amene, MD (presenter), Teddy Kim, MS, Joshua Lawson, MD, Clark Chen, MD, University of California San Diego Medical Center, San Diego, California

**252 INJURY TO THE TEMPORAL LOBE VIA MEDIAL TRANSORBITAL ENTRY OF A TOOTHBRUSH** – Jesse Skoch, MD (presenter), Tracy L Ansay, MD, Gerald M Lemole, Jr MD, University of Arizona

**253 SURGICAL MANAGEMENT OF TRAUMATIC CEREBROSPINAL FLUID OCULORRHEA** – Matthew Pease (presenter), Yvette Marquez, Alex Tuchman, Alex Markarian, Gabriel Zada, USC Keck School of Medicine

**254 THE ‘TWIN PEAKS’ SIGN: A DISTINCT RADIOLOGICAL SIGN SUGGESTING CAUTION FOR PNEUMOCEPHALUS AND ANTERIOR SKULL BASE FRACTURE IN THE SETTING OF EPISTAXIS AFTER HEAD INJURY** – Andreas K Demetriades (presenter), King’s College Hospital London, UK

**255 ARTERIOVENOUS FISTULA AFTER FACE LIFT TREATED WITH ENDOVASCULAR EMBOLIZATION** – Mayshan Chiassi, MD (presenter), Dennis T Lockney, BS, Mahan Chiassi, MD, Moneeb M Ehtesham, MBBS, Robert J Singer, MD, Vanderbilt University Medical Center, Center Department of Neurosurgery

**256 ENDOSCOPIC ENDONASAL CLIPPING OF INTRACRANIAL ANEURYSMS: TECHNICAL DETAILS AND ANATOMIC BASIS** – Francisco A Vaz Guimaraes Filho, MD MSc (presenter), Matthew J Tormenti, MD, Maria Koutouroussiou, MD, John de Almeida, MD, Shirley Y Su, MD FRACS, Eric Wang, MD, Juan C Fernandez-Miranda, MD, Carl H Snyderman, MD MBA, Paul A Gardner, MD, University of Pittsburgh Medical Center

**257 DURAL CAVERNOUS ANGIOMA OF THE CEREBELLOPONTINE ANGLE: CASE REPORT AND REVIEW OF THE LITERATURE** – Jeffrey T Jacob, MD (presenter), Colin L Driscoll, MD, Caterina Giannini, MD, Michael J Link, MD, Mayo Clinic

**258 MODIFIED TENTORIUM INCISION IN THE EXTENDED SUBTEMPORAL TRANSTENORIAL APPROACH FOR POSTERIOR CIRCULATION ANEURYSMS: TECHNICAL NOTE AND CLINICAL EXPERIENCE** – Nancy McLaughlin, MD PhD (presenter), Neil A Martin, MD, David Geffen School of Medicine at University of California - Los Angeles

**259 UNUSUAL PRESENTATION OF SKULL BASE CAROTID ARTERY ANEURYSM CAUSING MULTIPLE LOWER CRANIAL NERVE PALSYES** – Melanie Malone, MD (presenter), Marc Cohen, MD, Lucian Sulica, MD, David Kutler, MD, Athos Patsalides, MD MPH, Weill Cornell Medical College

**260 THE FIRST DESCRIPTION OF A BASILAR ARTERY ANEURYSM RUPTURE IN 1836** – Andreas K Demetriades (presenter), Takashi Horiguchi, James Goodrich, Takeshi Kawase, King’s College Hospital London, Keio University Tokyo, Albert Einstein College of Medicine New York

**261 SURGICAL MANAGEMENT OF OPHTHALMIC SEGMENT ANEURYSMS: EXPERIENCE AT ARMY HOSPITAL (RESEARCH & REFERRAL), NEW DELHI** – Maneet Gill (presenter), H C Pathak, Prakash Singh, Army Hospital (Research & Referral), New Delhi India

**262 FIBROUS DYSPLASIA OF THE TEMPORAL BONE: IMAGING CHARACTERISTICS AND NEUROTOLOGIC CONSIDERATIONS** – William C Gump, MD (presenter), Arun K Gadre, MD, Kosair Children’s Hospital, Norton Neuroscience Institute

**263 HEARING OUTCOMES AFTER SURGICAL DRAINAGE OF PETROUS APEX CHOLESTEROL GRANULOMA** – Jordan Rihani, MD (presenter), Kyle Allen, MD, Peter Roland, MD, J. Walter Kutz, MD, Brandon Isaacson, MD, UT Southwestern Medical Center

**264 DELAYED OTORRHEA FOLLOWING TRANSLABYRINTHINE CRANIOTOMY APPROACH TO THE CEREBELLOPONTINE ANGLE** – John P Leonetti, MD, Nadieska Caballero, MD (presenter), Jacob Ossoff, BA, Sam Marzo, MD, Douglas Anderson, MD, Loyola University Medical Center

**265 PROTEUS MIRABILIS SKULL BASE OSTEOMYELITIS WITH CANAL CHOLESTEATOMA IN AN IMMUNOCOMPETENT TEENAGER: SURGICAL AND MEDICAL MANAGEMENT** – Stephen R Hoff, MD (presenter), Jeffrey C Rastatter, MD, Northwestern University, Ann and Robert H. Lurie Children’s Hospital of Chicago
266 EVOLUTION OF FACIAL NERVE FUNCTIONAL RECOVERY AFTER REMOVAL OF GIANT VESTIBULAR SCHWANNOMAS
– Alexander V Trashin, MD (presenter), Yury A Shulev, MD, Vladimir L Rychkov, MD, City Hospital # 2, North-West State Medical University, Saint-Petersburg, Russia

267 INTRATEMPORAL TRAUMATIC FACIAL NERVE NEUROMAS IN THE ABSENCE OF TRAUMA – Kyle P Allen, MD MPH (presenter), J. Walter Kutz, MD, Kimmo J Hatanpaa, MD PhD, Yuri Lemesheva, MD, Brandon Isaacson, University of Texas Southwestern Medical Center

268 TRANS-CANAL APPROACH FOR REMOVAL OF DISPLACED PETROUS CAROTID ANEURYSM EMBOLIZATION COIL IN THE MIDDLE EAR – Fred F Telisch, MD, Ronen Nazarian, MD (presenter), Daniel Jethanamest, MD, University of Miami - Department of Otolaryngology Head and Neck Surgery. Miami, Florida.

269 DELAYED WOUND INFECTION ASSOCIATED WITH BONE WAX IN LATERAL SKULL BASE SURGERY – Daniel Jethanamest, MD (presenter), Sachin Gupta, MD, Jacques J Morcos, MD, Fred F Telisch, MEE MD, John G Golfinos, MD, John T Roland, MD, New York University School of Medicine, University of Miami Miller School of Medicine

270 AURICULAR COMPLICATIONS IN LATERAL SKULL BASE NEOPLASMS – Ryan Burgette, MD (presenter), Sam Marzo, MD, Eric Thorpe, MD, John Leonetti, MD, Loyola University Medical Center

271 READABILITY ASSESSMENT OF INTERNET-BASED PATIENT EDUCATION MATERIALS RELATED TO ACOUTIC NEUROMAS – Deepa V Cherla, Saurin Sanghvi, BS (presenter), Osamah J Choudhry, BA, Robert W Jyung, MD, Jean A Eloy, MD FACS, James K Liu, MD, UMDNJ-New Jersey Medical School

272 MIDDLE FOSSA MENINGIOGLIOMA MIMICKING FACIAL NERVE SCHWANNOMA - CASE REPORT – Cristian Ferrareze Nunes, MD (presenter), Gustavo A Porto Sereno Cabral, MD, Mario A Lapenta, MD, José A Landeiro, MD PhD, Caleão Air Force Hospital

273 TEGMEN DEFECT RESULTING IN SPONTANEOUS CEREBROSPINAL FLUID LEAK FOLLOWING TYPMANOSTOMY, WITH TREATMENT BY INTRADURAL MIDDLE CRANIAL FOSSA REPAIR: TWO CASE REPORTS – Michael J Canty, Mr (presenter), Musheer Hussein, Mr, M S Eljamal, Professor, Departments of Neurosurgery and Otorhinolaryngology, Ninewells Hospital and Medical School, Dundee, UK

274 FACIAL NERVE DECOMPRESSION BY MIDDLE FOSSA CRANIOTOMY IN POST-TRAUMATIC PARALYSIS – Simon I Angeli, MD (presenter), University of Miami Department of Otolaryngology

275 MANAGEMENT OF TYPANOJUGULAR PARAGANGLIOMAS: OUR EXPERIENCE IN TREATMENT AND FOLLOW-UP – Gianluca Piras, MD (presenter), Andrea Castelluccci, MD, Maria Chiara Raimondi, MD, Elisabetta Firinu, MD, Alberto Rinaldi-Ceroni, MD PhD, Giovanni Carlo Modugno, MD PhD, Department of Specialistic Surgical and Anesthesiological Sciences, ENT Unit, University of Bologna, Italy

276 TEMPORAL CRANIOTOMY FOR MANAGEMENT OF MIDDLE CRANIAL FOSSA ENCEPHALOCELES WITH CSF LEAKS – Lior Gonen, MD (presenter), Ophir Handzel, MD, Nevo Margalit, MD, Tel Aviv Sourasky Medical Center

277 OUTCOMES OF MIDDLE FOSSA SKULL BASE DEFECTS REPAIRED USING A NOVEL COMBINATION OF MATERIALS – Chiazo Amene, MD (presenter), Cedric Shorter, MD, David Connor, DO, Jai Deep Thakur, MD, Gale Gardner, MD, Anil Nanda, MD, Bharat Guthikonda, MD, Louisiana State University Health Sciences Center- Shreveport, Louisiana

278 CONSTRUCTION OF CRANIAL BASE DEFECTS USING THE MEDPOR TITAN IMPLANT: CRANIoplasty APPLICATIONS IN ACOUTIC NEUROMA SURGERY – Zain Boghani, BS (presenter), Osamah J Choudhry, MD, Richard F Schmidt, BA, Robert W Jyung, MD, James K Liu, MD, University of Medicine and Dentistry of New Jersey, New Jersey Medical School

279 RADIO-ANATOMICAL ANALYSIS OF LANDMARKS FOR EXPOSING THE INTERNAL AUDITORY CANAL FROM THE SUBTEMPORAL APPROACH – Zsolt E Zador, MD MRCS PhD (presenter), Gareth A Roberts, FRCS SN, Department of Neurosurgery, Royal Preston Hospital, Preston, UK

280 SQUAMOUS CELL CARCINOMA ARISING IN A REMNANT OF AN EXTRAPITTED CEREBELLOPONTINE ANGLE EPIDERMOID TUMOR: CASE REPORT AND LITERATURE REVIEW – Seth E Kaplan, MD (presenter), Mara C Modest, BS, Christopher J Farrell, MD, Gregory J Artz, Department of Otolaryngology – Head and Neck Surgery, and Department of Neurosurgery, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania, U.S.A.

281 EXPANDED ENDOSCOPIC MULTIAXIAL ACCESS TO THE MIDLINE CRANIAL BASE AND INFRATEMPORAL FOSSA THROUGH THE MAXILLARY OSTEOPLASTIC WINDOW – S M Raza, MD (presenter), Alfredo Quinones-Hinojosa, MD, Kofi D Boahene, MD, The Johns Hopkins Hospital

282 INFRACOCHLEAR DRAINAGE OF CHOLESTEROL CRANULOMAS WITH DOUBLE BARREL STENTS – Nael Shoman, MD, Ravi Samy, MD, Myles L Pensak, MD, Hwa J Son, MD (presenter), University of Cincinnati
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For general information regarding the meeting please contact Maribeth Balon at 310-424-3326, ext. 125, or maribeth@nasbs.org.

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