67th Southern Neurosurgical Society Annual Meeting  
March 2-5, 2016  
San Antonio, TX

PROGRAM

**Wednesday, March 2**

1:00 – 5:00 pm  Meeting Registration
2:00 – 4:00 pm  Executive Committee Meeting

**Thursday, March 3**

7:00 am – 1:00 pm  Registration
7:00 – 7:30 am  Breakfast with Exhibitors

**Scientific Session I**

*Moderators:  Scott Wait, MD & Kim Albert MD*

7:30 – 7:40 am  Opening Remarks  
*Harry van Loveren, MD*

7:40 – 7:55 am  Minimally Invasive Surgery for ICH: Reflections on the MISTIE and CLEAR IVH Trials  
*Jean Louis Caron, MD*

7:55 – 8:10 am  How Much Glioma Surgery is Enough?  
*Ray Sawaya, MD*

8:10 – 8:25 am  Not All Mets are Created Equal  
*Phillip Tibbs, MD*

8:25 – 8:30  Discussion

8:30 – 8:45 am  Which Strokes are Worth Trying to Reverse?  
*J Mocco, MD*

8:45 – 9:00 am  Aneurysms that Still Need a Good Clipping  
*Art Day, MD*

9:00 – 9:15 am  When is a Carotid Endarterectomy Still a Valid Approach?  
*Wink Fisher, MD*

9:15 – 9:30 am  Sports Related Head Injury: Prevention, Management, Return to Play  
*Al Sills, MD*

9:30 – 9:40 am  Discussion

9:40 – 9:45 am  Introduction of Hudson Lecture  
*Harry van Loveren, MD*

9:45 – 10:15 am  Hudson Lecture: Skull Base Surgery: Why the Owl of Minerva Flies at Dusk  
*Anil Nanda, MD, MPH, FACS*

10:15 – 10:40 am  Break with Exhibitors
Abstract Session I

Moderators: Scott Wait MD, MD & Kristen Riley MD

10:40 – 10:48

**Standard Abstract 1: Augustus McCravey Award Winner**
Predictors of Post-Concussion Syndrome in Collegiate Student-Athletes
Scott L. Zuckerman; Aaron M. Yengo-Kahn; Thomas A. Buckley; Gary S. Solomon; Allen K. Sills; Zack Y. Kerr; Christopher M. Bonfield

10:48 – 10:56

**Standard Abstract 2:**
Nationwide Improvement in Mortality Following Mechanical Thrombectomy for Acute Ischemic Stroke from 2008 to 2013
Jeremiah N. Johnson, MD

10:56 – 11:04

**Standard Abstract 3:**
Deep Vein Thrombosis in Patients with Severe Traumatic Brain Injury
Paola Mendez; Bradley Dengler, MD; Amanda Chavez; Lacey Avila; Ali Seifi

11:04 – 11:12

**Standard Abstract 4:**
Mutant IDH1/2 Suppresses Local and Systemic Thrombosis In Glioma Patients
Laith Khoury; Craig Horbinski, MD, PhD; Steve Schwarze, PhD, MLS(ASCP); Matija Snudrel, MD; Thomas McIntyre, PhD

11:12- 11:20

**Standard Abstract 5:**
Endoscopic Assisted Early Correction of Metopic Craniosynostosis: A 17-year Experience
Michael McGinity, MD; Constance Barone, MD; David Jimenez, MD

11:20 – 11:28

**Standard Abstract 6:**
The Role of BRAF Mutations in the Radiosurgical Management of Intracranial Melanoma Metastasis
Christopher Deibert; Jia-Yi Wang, B.A.; L. Dade Lunsford, MD; Edward Monaco, MD, PhD

11:28 – 11:34

**Standard Abstract 7:**
Resection of Subcortical Lesions Using a Trans-sulcal Parafascicular Minimal Access Approach: Single Center Preliminary Results and Outcomes
Justin T. Dowdy, MD; Marcus L. Stephens, MD; John D. Day, MD

11:34 – 11:42

**Standard Abstract 8:**
Predictive Value of Changes in Intraoperative Neurophysiologic Monitoring During Endovascular Intracranial Aneurysm Embolization
William Ares, MD; Ramesh Grandhi, MD; Nathan T. Zwagerman, MD; Chris Deibert; Jeffrey Balzer, PhD; Partha Thirumala, MD; Andrew Ducruet, MD

11:42 – 11:45

**Rapid Fire Abstract 9:**
Predictors of Nasoseptal Flap (NSF) Use after Endoscopic Transphenoidal Pituitary Mass Resection
Lauren E. Rotman; Devin R. Broadwater, BS; Kimberly P. Kicielinski, MD; T. Brooks Vaughan, MD; Bradford A. Woodworth, MD; Kristen O. Riley, MD
11:45 – 11:48  **Rapid Fire Abstract 10:**  
Implant Compositions for the Unidirectional Delivery of Anticancer Compounds to the Brain  
*Michael McGinity, MD; John Floyd, MD; Watson Na; James McGinity, PhD; Feng Zhang, PhD*

11:48 – 11:51  **Rapid Fire Abstract 11:**  
Analysis of Diffusion Tensor Imaging and BRAF Mutational Status in Pediatric Thalamopeduncular Pilocytic Astrocytomas  
*Ryan P. Lee; Kimberly A. Foster, MD; Brent A. Orr, MD, PhD; Paul Klimo, Jr, MD; David W. Ellison, MD, PhD; Frederick A. Boop, MD*

11:51 – 11:54  **Rapid Fire Abstract 12:**  
Cavernous Sinus Compartments from the Endoscopic Endonasal Approach: Anatomical, Radiological and Surgical Study  
*Nathan T. Zwagerman; Eric Wang, MD; Carl Snyderman, MD MPH; Paul Gardner, MD; Juan Fernandez-Miranda, MD*

11:54 – 11:57  **Rapid Fire Abstract 13:**  
Combined Multimodality Treatment with Hypoxia-activated Prodrug TH-302 and XRT Results in Enhanced Antitumor Efficacy in Preclinical Malignant Meningioma Mouse Model  
*Asif Maknojia, MD; Michael Garcia, LAT; Cavazos David, PhD; Courtney Bosse, MS; Sasha Gruslova, PhD; Nikos Papanikolaou, PhD; Andrew Brenner, MD, PhD; John Floyd, MD*

11:57 – 12:00  **Rapid Fire Abstract 14:**  
The Relationship of Electrophysiologic STN Length as a Predictor of Outcomes in DBS for Parkinson’s Disease  
*Daxa M. Patel, MD; Mahesh Shenai, MD, MSE, MBA; Harrison Walker, MD; Stephanie Guthrie, RN; Barton Guthrie*

12:00 – 12:10  Discussion

12:10 – 12:15 pm  Introduction of Distinguished Practitioner  
*Juan Uribe, MD*

12:15 – 12:30 pm  Distinguished Practitioner  
*Barth Green, MD*

1:00 pm  Golf Tournament

5:30 – 7:00 pm  Welcome Reception
Friday, March 4
7:00 am – 1:00 pm  Meeting Registration
7:00 – 7:30 am  Breakfast with Exhibitors

Scientific Session II
Moderator:  Matthew McGirt, MD

7:30 – 7:50 am  Quality Reporting and Physician Profiling: What You Need to Know
Tony Asher, MD

7:50 – 8:10 am  Bundled Payments and Destination Healthcare: Fad or Future?
John Slotkin, MD

8:10 – 8:25 am  Washington Update
Katie Orrico

8:25 – 8:40 am  2016 RUC and CPT updates
Joe Cheng, MD

8:40 – 9:00 am  Healthcare Reform: The Way Forward Under the ACA
John Wilson, MD

9:00 – 9:05 am  Introduction of the Presidential Address
Anil Nanda, MD, MPH, FACS

9:05 – 9:30 am  Presidential Address
Harry van Loveren, MD

9:30 – 10:00 am  Break with Exhibitors

Abstract Session II
Moderators:  Dr. Michael & Dr. Howington

10:00 – 10:08 am  Standard Abstract #15:
Lumbar Surgery in the Elderly Provides Significant Health Benefit and Value in the U.S. Healthcare system: Patient-reported Outcomes in 4,370 Patients from the N2QOD Registry
Scott L. Parker, MD; Clinton J. Devin, MD; Anthony L. Asher, MD; Matthew J. McGirt, MD

10:08 - 10:16 am  Standard Abstract #16:
Patient Oriented Outcomes in Minimally Invasive and Open Discectomy: Patient Selection, Safety and Satisfaction
Michael P. Catalino, MD, MS; Mark Abumoussa, MS; Andrew Abumoussa, MS; Deb A. Bhowmick, MD

10:16 – 10:24 am  Standard Abstract #17: Basic Science Award Winner
Bilateral Stimulation of the Basolateral Amygdala Decreases Avoidance Behavior in A Rodent Post-Traumatic Stress Disorder Model
Shane A. Hawkesworth, MD; Bradley A. Dengler, MD; Naomi L. Sayre, PhD; David F. Jimenez, MD; Alexander M. Papanastassiou, MD
10:24 – 10:32 am **Standard Abstract #18:**
Intraoperative Blood Pressure Has Quadratic Correlation to Somatosensory Evoked Potential Amplitude Changes
*D. Cory Adamson, MD, PhD; Aladine Elsamadicy, BS; Gail Hayden, EEG/EPT, MBA; Laura Ding, PhD*

10:32 – 10:40 am **Standard Abstract #19:**
Cost Utility of Spinal Cord Stimulation and Conventional Medical Management in Patients with Failed Back Surgery Syndrome
*S. Harrison Farber, BS; Jing L. Han, BS; Siyun Yang; Jichun Xie, PhD; Shivanand P. Lad, MD, PhD*

10:40 – 10:48 am **Standard Abstract #20:**
Sport-related Structural Brain Injury Associated with Arachnoid Cysts: A Systematic Review and Quantitative Analysis
Scott Zuckerman, MD; Colin Prather, BS; Aaron Yengo-Kahn, BS; Gary Solomon, PhD; Allen Sills, MD; Christopher Bonfield, MD

10:48 – 10:56 am **Standard Abstract #21:**
Decentralization of Spine Trauma Care in the United States from 2001 to 2012: Correlations with Patient Outcomes
Christopher M. Holland, MD, PhD; Erica F. Bisson, MD; Meic H. Schmidt, MD; Andrew T. Dailey, MD

10:56 – 11:04 am **Standard Abstract #22:**
Is the Use of Minimally Invasive Fusion Technologies Associated with Improved Outcomes After Elective Lumbar Fusion? Analysis of a Nationwide Prospective Patient Reported Outcomes Registry
Tyler Atkins; Scott L. Parker, MD; Praveen Mummaneni, MD; John Knightly, MD; Deborah Pfortmiller, PhD; Kevin Foley, MD; Anthony L. Asher, MD; Matthew J. McGirt, MD

11:04 – 11:07 am **Rapid Fire Abstract #23:**
The Use of Lumbar Drains in Preventing Spinal Cord Injury Following Thoracoabdominal Aortic Aneurysm Repair: An Updated Systematic Review and Meta-analysis
Nickalus Khan

11:07 – 11:10 am **Rapid Fire Abstract #24:**
What Pre- and Intra-Operative Factors Drive Length of Stay after Elective Cervical Spine Surgery?
Ahilan Sivaganesan; Silky Chotai; Scott L. Parker; Matthew J. McGirt; Clinton J. Devin

11:10 – 11:13 am **Rapid Fire Abstract #25:**
Video Analysis of Helmet-to-Helmet Hits from a Division I NCAA Football Team
John Amburgy; Blake Feltman, B.S.; Patrick Vande Lune; James Johnston, MD; Dean Sicking, PhD
Kumar Vasudevan, MD; Blaire Holbrook, NP; Beverly B. Rogers, MD; Silvia T. Bunting, MD; Jessica D. Jones; Michael S. Sawvel, DO; Chia-Yi Kuan, PhD; Atul Vats, MD; Joshua Chern, MD, PhD; Andrew Reisner, MD

11:16 – 11:19 am Rapid Fire Abstract #27: Determining the Drivers of Cost for Primary Single-level Microdiscectomy for Lumbar Degenerative Disease
Silky Chotai; Ahilan Sivaganesan, MD; Scott L. Parker, MD; Oran Aaronson, MD; Joseph S. Cheng, MD; Matthew J. McGirt, MD; Clinton J. Devin, MD

11:19 – 11:22 am Rapid Fire Abstract #28: A Mathematical Coefficient for Prediction of Indirect Decompression of Lumbar Spinal Stenosis with a Trans-Psoas Approach: Preliminary Findings
Marcus L. Stephens, MD; Angela W. Palmer, MD; Noojan Kazemi, MD

Vellimana AK, Joshi NS, Lalezari R, Chicoine MR, Kim AH

11:25 – 11:35 Discussion

11:35 – 11:40 am Introduction to Ned Downing Lecture
Eric Nottmeier, MD

11:40 – 12:25 pm Ned Downing Lecture
Henry Marsh, CBE, FRCS

12:25 – 12:35 pm Business Meeting

12:45 – 2:15 pm Non-CME Spine Workshop (MIS techniques and advancements)

6:30 – 10:00 pm Family Night
Saturday, March 5

7:00 am – 12:00 pm  Meeting Registration
7:00 – 7:25 am  Breakfast with Exhibitors

Scientific Session III

Moderators:  Eric Nottmeier, MD & Matthew McGirt MD

7:25 – 7:40 am  Targeting Astrocyte Connexin-43 to Treat Spinal Cord Injury: Pre-Clinical Studies in Rodents
Naomi Sayre, PhD

7:40 – 8:00 am  Why and How to Utilize Alignment Parameters in Adult Deformity Surgery
Justin Smith, MD

8:00 – 8:20 am  Pediatric Deformity in the Hands of Neurosurgery: Where We Have Been & Where We Are Going
Elias Dakwar, MD

8:20—8:25 am  Discussion

8:25 – 8:40 am  If and When Minimally Invasive Approaches Offer Value
Clint Devin, MD

8:40 -9:00 am  Why Cervical Arthroplasty Is Here to Stay
Dom Coric, MD

9:00-9:20 am  Today’s Approach to Spinal Oncology Surgery is Not Your Father’s Approach
Dan Sciubba, MD

9:20 -9:25 am  Discussion

9:25 – 9:45 am  Break with Exhibitors

Abstract Session III

Moderators:  Rashid Janjua, MD & Mark Shaya MD

9:45 – 11:40 am  Abstracts & Discussion

9:45 – 9:53 am  Standard Abstract #30:
Comparison of One-Level and Two-Level treatments for Cervical Disc Arthroplasty and Anterior Cervical Discectomy and Fusion
David Cavanaugh, MD; Pierce Nunley, MD; Eubulus Kerr, MD; Andrew Utter, MD; Kelly Frank, MS; Marcus Stone, PhD

9:53 - 10:01 am  Standard Abstract #31:
A Comparison of Geriatric and Non-geriatric Patient Outcomes following Direct Lateral Interbody Fusion
Timothy Y. Wang, BS; Ronnie L. Shammas, BS; Deborah Chi, BS; Isaac Karikari, MD; Oren N. Gottfried, MD; Robert E. Isaacs, MD
10:01 – 10:09 am  
**Standard Abstract #32:**
Comparing Outcomes of Early, Late, and Non-Surgical Treatment of Intraspinal Abscess
*S. Harrison Farber, BS; Kelly Murphy, BS; Ranjith Babu, MD; Jichun Xie, PhD; Shivanand P. Lad, MD, PhD*

10:09 – 10:17 am  
**Standard Abstract #33:**
Long-term Clinical Outcomes following Three- and Four-level Anterior Cervical Discectomy and Fusion
*Rafael De la Garza-Ramos, MD; Thomas Kosztowski, MD; Risheng Xu, MD, PhD; Seba Ramhdmnli, MD; Daniel Scuibba, MD; Jean-Paul Wolinsky, MD; Timothy F. Witham, MD; Ziya Gokaslan, MD; Ali Bydon*

10:17 – 10:25 am  
**Standard Abstract #34:**
Effect of Complications within 90-days on Cost-utility following Lumbar Decompression with and without Fusion for Degenerative Spine Disease
*Scott L. Parker, MD; Silky Chotai, MD; Ahilan Sivaganesan, MD; Clinton J. Devin, MD; Matthew J. McGirt, MD*

10:25 – 10:33 am  
**Standard Abstract #35:**
The Clinical Evaluation of the Multiply Brain Injured Professional (NFL) Athlete
*Domenic P. Esposito, MD; Howard T. Katz, MD*

10:33 – 10:41 am  
**Standard Abstract #36:**
Minimally Invasive Lateral Retropleural Approach for Symptomatic Thoracic Disc Herniation
*Chun-Po Yen, MD; Juan S. Uribe, MD*

10:41 – 10:49 am  
**Standard Abstract #37:**
Predictors of Extended Length of Stay, Discharge to Inpatient Rehab, and Hospital Readmission Following Elective Lumbar Spine Surgery: Introduction of the Carolina-semmes Grading Scale
*Scott L. Parker; Deborah Pfortmiller, PhD; Jeff Sorenson, MD; Kevin Foley, MD; Anthony L. Asher, MD; Matthew J. McGirt, MD*

10:49 – 10:57 am  
**Standard Abstract #38:**
Arthrodesis versus Revision Discectomy for Recurrent Lumbar Disc Herniation: Patient-reported Outcomes in 417 Patients from the N2QOD Registry
*Jonathan Parish, MD; Paul Kim, MD; Kevin Cahill, MD, PhD, MPH; Domagoj Coric, MD; Anthony Asher, MD; Matthew McGirt, MD*

10:57 – 11:00 am  
**Rapid Fire Abstract #39:**
Head-Up Display-Assisted Spine Instrumentation Using a Novel Video Streaming System: A New Use for Wearable Computing in the Operating Room
*Jang W. Yoon, MD, MS; Stephen M. Pirris, MD*

11:00 – 11:03 am  
**Rapid Fire Abstract #40:**
Factors Associated with Non-improvement in Patient-reported Disability at 12-months Post-operatively following Elective Lumbar Surgery for Degenerative Pathology
*Scott L. Parker, MD; Clinton J. Devin, MD; Silky Chotai, MD; Mohamad Bydon, MD; Kristen Archer, PhD; Matthew J. McGirt, MD; Anthony L. Asher, MD*
11:03 – 11:06 am  **Rapid Fire Abstract #41:**
*Thomas Kosztowski, MD; Yuanxuan Xia, MD; Rafael De la Garza-Ramos, MD; Seba Ramhmndani, MD; Rory Goodwin, MD; Benjamin Elder, MD; Risheng Xu, MD,PhD; Daniel Sciubba, MD; Jean-Paul Wolinsky, MD; Timothy F. Witham, MD; Ziya Gokaslan, MD; Ali Bydon, MD*

11:06 – 11:09 am  **Rapid Fire Abstract #42:**
Thoracic Ossification of Ligamentum Flavum
*Seba Ramhmndani, MD; Risheng Xu, MD, PhD; Thomas Kosztowski, MD; Rafael De la Garza-Ramos, MD; Daniel Sciubba, MD; Jean-Paul Wolinsky, MD; Timohty F. Witham, MD; Ziya Gokaslan, MD; Ali Bydon, MD*

11:09 – 11:12 am  **Rapid Fire Abstract #43:**
Use of a Sublaminar Decompression as an Alternative to Traditional Laminectomy in Degenerative Disorders of the Lumbar Spine
*Benjamin D. Elder, MD;PhD; Kranti Peddada, BS; Wataru Ishida, MD; Sheng-fu L. Lo, MD; Akwasi Boah, MD; Timothy F. Witham, MD*

11:12 – 11:15 am  **Rapid Fire Abstract #44:**
Surgical Resection of Intradural Extramedullary Spinal Tumors: Patient Reported Outcomes and Minimum Clinically Important Difference
*Scott L. Zuckerman, MD; Silky Chotai; Clinton J. Devin, MD; Scott L. Parker, MD; David P. Stonko; Joseph B. Wick; Andrew T. Hale; Matthew J. McGirt, MD; Joseph S. Cheng, MD*

11:15 – 11:18 am  **Rapid Fire Abstract #45:**
Expandable TLIF Graft Placement Via an Articulating Delivery Arm Facilitates Improved Anterior Graft Placement and Superior Segmental Lordosis
*Tyler Atkins, MD; Scott Parker, MD; Matthew McGirt, MD*

11:18 – 11:30  Discussion

11:30 – 11:35 am  Introduction to Semmes Lecture
*Matthew McGirt, MD*

11:35–12:25 pm  Semmes Lecture
*Ziya Gokaslan, MD*

12:25 – 12:30 pm  Closing Remarks

6:30 – 10:30 pm  Final Reception & Banquet