

73rd Southern Neurosurgical Society Annual Meeting

February 8–11, 2023 | Marco Island, FL

Wednesday, February 8

2:00–5:00 pm **Executive Council Meeting** Seagrape 3
3:00–5:00 pm **Registration Opens** Banyan Foyer

Thursday, February 9

7:00 am **Registration** Banyan Foyer
Continental Breakfast and Exhibit Viewing Banyan 1 & 2

Session 1: The Future of Neurosurgery: On the Horizon in 15 years Banyan 3
Moderators: JD Day, MD & John A. Wilson, MD

7:30 am Opening Remarks JD Day, MD

7:40 am Spine Mike Wang, MD

8:05 am Tumor Albert Kim, MD, PhD

8:25 am Vascular Adam Arthur, MD

8:45 am Trauma Uzma Samadani MD, PhD

9:05 am Discussion

9:30 am Refreshment Break and Exhibit Viewing Banyan 1 & 2

Session 2: Free Papers & Hudson Lecture Banyan 3
Moderators: Nauman Chaudhry, MD & Elizabeth Liptrap, MD

10:00 am Standard Abstract #1: The Addition of Middle Meningeal Artery Embolization to Burr Hole or Craniotomy for Evacuation of Symptomatic Chronic Subdural Hematoma Improves Outcomes, Preliminary Results of a Prospective Randomized
Luca H. Debs, MD; Diana Toro; Seena Mansouri; Fernando L. Vale, MD; and Scott Y. Rahimi, MDS

10:06 am Standard Abstract #2: Acute Management and Long-term Outcomes of Blunt Cerebrovascular Injury: The Memphis Experience
Mustafa Motiwala, MD; Taylor Orr; Kara Parikh, MD; Lindsey E. Miller; Michael Barats; Jordan T. Roach; Sean Himel, MD; Vincent Nguyen, MD; Kenneth Moore, MD; Violiza Inoa-Acosta, MD; and Nickalus R. Khan, MD

10:12 am Standard Abstract #3: Poor Socioeconomic Status Drives Worsened Outcomes Following Mechanical Thrombectomy for Acute Ischemic Stroke Poor Socioeconomic Status Drives Worsened Outcomes Following Mechanical Thrombectomy for Acute Ischemic Stroke
Anthony Joseph Parisi, MD; Jacqueline Frank; Ann M. Stowe, PhD; Justin F. Fraser, MD; Keith Pennypacker, PhD; and David Dornbos III, MD

10:18 am Standard Abstract #4: Decrease in Cortical Vein Opacification Predicts Outcome After Aneurysmal Subarachnoid Hemorrhage
Brandon Lucke-Wold, MD, PhD

10:24 am **Anil Nanda Award Winner** | Standard Abstract #5: Spinal Catheter Thrombolytic Administration Improves Outcomes in Aneurysmal SAH: Case Series and Systematic Review/meta-analysis
Trevor Hardiqan, MD, PhD; Chi Le, MD; J Mocco, MD, MS; and Jay Howington, MD

- 10:30 am Discussion
- 10:35 am Standard Abstract #6: Prospective, Randomized Study of Lumbar Facet Replacement Vs Lumbar TLIF Fusion For Spondylolisthesis- Two Year Outcomes
Vincent Rossi, MD, MBA; Ahmad Nassar, MD; William Welch, MD; Michael Steinmetz, MD; Michael Steinmetz, MD; Jared Ament, MD; Eli Baron, MD; Jason Huang, MD; Scott Meyer, MD; and Domagoj Coric, MD
- 10:41 am Standard Abstract #7: Microscopic Lumbar Discectomy in The Ambulatory Surgery Center Versus Inpatient Hospital Setting: A One-Year Cost-Utility Analysis
Ummey Hani, MBBS; Steve H. Monk, MD; Deborah Pfortmiller, PhD, MA; Mark D. Smith, MD; Paul K. Kim, MD; Michael A. Bohl, MD; Domagoj Coric, MD; Tim E. Adamson, MD; Christopher M. Holland, MD, PhD; and Matthew J. McGirt, MD
- 10:47 am Standard Abstract #8: Complications in Ambulatory Pediatric Patients with Nonidiopathic Spinal Deformity Undergoing Fusion to the Pelvis Using the S2AI Technique Within 2 Years of Surgery
Richard Menger, MD MPA; Paul Park, MD MPH; Elise Bixby, MD; Gerard Marciano, MD; David Roye, MD; Benjamin Roye, MD MPH; Michael Vitale, MD MPH; and Lawrence Lenke, MD
- 10:53 am Standard Abstract #9: Mental Health Comorbidities in Workers' Compensation Patients and the Effect on Pain, Disability, Quality of Life, and Return to Work after Lumbar Spine Surgery
Steve H. Monk, MD; Ummey Hani, MBBS Gerry Stanley, MD, P-CEO; Trent VanHorn, MD; Debi Pfortmiller, PhD, MA Paul K. Kim, MD; Michael A. Bohl, MD; Christopher M. Holland, MD, PhD and Matthew J. McGirt, MD
- 10:59 am **Augustus McCravey Clinical Science Award Winner** | Standard Abstract #10: Outpatient Minimally Invasive Transforaminal Lumbar Interbody Fusion Performed at A Single Ambulatory Surgery Center - The Semmes-Murphey Clinic Experience
William Mangham, MD; Jeffrey Sorenson, MD and Kevin Foley, MD
- 11:05 am Discussion
- 11:10 am Rapid-Fire Abstract #11: Early Signs of Elevated Intracranial Pressure (icp) on Computed Tomography Correlate with Measured ICP in The Intensive Care Unit and Six-month Outcome Following Moderate to Severe TBI
Brandon Lucke-Wold, MD, PhD
- 11:13 am Rapid-Fire Abstract #12: Multisession Radiosurgery Alone for Treatment of Presumed Cranial Meningiomas: 10-year Outcomes from a Single Institution Protocol
Michael Carrasquilla, MD; Alexander Tai, MD; Monica Pernia Marin, MD; Akrita Bhatnagar, MD, PhD; Simeng Suy, PhD Sean Collins, MD, PhD; Walter Jean, MD and Brian Collins, MD
- 11:16 am Rapid-Fire Abstract #13: Variable Expressivity of Piezo1 in Intracranial Aneurysms and the Potential Link to Pro-inflammatory Macrophage Activation
Brock Yager; Sasha Kondrasov; Sidish Venkataraman, MD; Zhidan Xiang, PhD; and Stacey Wolfe, MD
- 11:19 am Rapid-Fire Abstract #14: Neutrophil Extracellular Traps: A Novel Trigger of Neurological Decline After Aneurysmal Subarachnoid Hemorrhage
Spiros Blackburn; Hussein Zeineddine; Ari Diemel; Peeyush Pandit; Sungha Hong; Huimahn Choi; James Grotta; and Devin McBride
- 11:22 am Rapid-Fire Abstract #15: Resident Learning Curve for a Retrosigmoid Approach: A Performance Feedback Model for Neurosurgical Education
Kara Parikh, MD; Mustafa Motiwala, MD; Barrett Schwartz, MD; Deke Blum, MD; L. Madison Michael, MD; Jeffrey Sorenson, MD; and Nickalus Khan, MD

11:25 am	Rapid-Fire Abstract #16: A Systematic Review of Professionalism in Neurosurgery and the Development of Neurosurgical Professionalism Milestones <i>William Mangham, MD; Kara Parikh; Mustafa Motiwala; Jock Lillard; Jordan Roach; Michael Barats; Nickalus Khan; Madison Michael; and Adam Arthur</i>	
11:28 am	Discussion	
11:35 am	Novel Surgical Management of Adult Tethered Cord	Hector Soriano-Baron, MD
11:45	Bedside Subdural Drainage and Middle Meningeal Embolization - A Potential Game Changer	Jay Howington, MD
11:53	Introduction to the William Henry Hudson Lecture	
11:55 am	Hudson Lecture	Mark Hadley, MD
12:15	Q&A	
12:20	Adjourn	
12:45 pm	Young Surgeon & Mentor Lunch Choosing Between Private and Academic Practice	Seagrape 3 Jonathan L. Wilson, MD Stephen Pirris, MD
5:30–7:00 pm	Welcome Reception	Banyan 1 & 2

Friday, February 10

7:00 am	Continental Breakfast and Exhibit Viewing	Banyan 1 & 2
	<i>Note: Session 3 is planned by the program committee but not counted in CME hours</i>	
Session 3:	Technology in Neurosurgery and Presidential Address	Banyan 3
	<i>Moderators: Carolina Benjamin, MD & Stephen Reintjes, MD</i>	
7:30 am	Neurosurgical Pain Control: Spinal Cord Stimulation	Erika Petersen, MD
7:38 am	Neurosurgical Rehab: Brain Computer Interface	Eric Leuthardt, MD
7:46 am	Neurosurgical Pediatric Innovations	Carolyn Quinsey, MD
7:54 am	Non-CME Tech Update #1 Supported by NICO Subcortical Minimally Invasive Surgery	Gustavo Pradilla, MD
8:02 am	Non-CME Tech Update #2 Virtual Reality in the OR	Michael Ivan, MD
8:10 am	Discussion	
8:20 am	Non-CME Tech Update #3 Supported by Pacira Biosciences Enhanced Recovery and Liposomal Bupivacaine in Regional Spine Blocks	Peter Grossi, MD
8:28 am	Non-CME Tech Update #4 Supported by Gamma TILE Modern Brachytherapy for Brain Tumors	Kimberly Hoang, MD
8:36 am	Non-CME Tech Update #5 Supported by DePuy Synthes Advanced Visualization with TELIGEN	Peter Grossi, MD
8:44 am	Introduction to Presidential Address	
8:50 am	Presidential Address	JD Day, MD
9:20 am	Refreshment Break and Exhibit Viewing	Banyan 1 & 2

Session 4:	Free Papers, Business Meeting, Washington Update, and Downing Lecture	Banyan 3
	<i>Moderators: Nicole Bentley, MD & James Liu, MD</i>	
9:50 am	Panel Discussion: Building and Maintaining a Neurosurgery Practice <i>Panel: M. Babu, MD; J. McCracken; B. Osborn, MD; J. Singer, MD</i>	
9:54	Social Media for Neurosurgery Practice	Mod: J. Singer, MD
10:04	Expanding your Catchment Area to Build Volume	Mod: J McCracken, MD
10:14	Future of Defensive Medicine in Neurosurgery	Mod: M. Babu, MD
10:24	Health and Wellness to Avoid Burnout	Mod: B. Osborn, MD
10:54	Panel Discussion	
11:20 am	Standard Abstract #17: Intra-tumoral Heterogeneity in Glioblastoma <i>Diogo Garcia, MD; Wan-Hsin Lin; Mieu Brooks; Ryan Feathers; Erik Middlebrooks; Kaisorn Chaichana; Panagiotis Anastasiadis; and Alfredo Quinones-Hinojosa</i>	
11:26 am	Standard Abstract #18: Development of A Murine Laser Interstitial Thermal Therapy System and Studying the Post-ablation Immune Changes in the Tumor Microenvironment in a Preclinical Glioma Model <i>Sandra C. Yan, MD; Matthew Frain, MSc; Nagheme Thomas, MSc; Alexandra Calinescu, MD, PhD; Ghaidaa Ebrahim; Kyle McGrath, BS; Macaulay Tomdio; Didier Rajon, PhD; Duane Mitchell, MD, PhD; Frank Bova, PhD; and Maryam Rahman, MD, MS, FAANS</i>	
11:32 am	Standard Abstract #19: A Dual Center Study on the Clinical Characteristics and Outcomes of Grade 3 Meningiomas Defined by WHO 2021 Guidelines <i>Collin W. English, BS; Sangami Pugazenthi, BA; William Leidig; Kyle Geehan, BS; Abdul B. Khan, MD; Ron Gadot, BS; Akash J. Patel, MD; and Albert H. Kim, MD, PhD</i>	
11:38 am	Augustus McCravey Basic Science Award Winner Standard Abstract #20: Defining the Brain Metastasis Immune Landscape <i>Stenia Accilien, MD; Emilie Darrigues, PhD; Duah Alkam, PhD; Stephanie Byrum, PhD; Jun Ying, PhD; Christopher Wardell, PhD; and Analiz Rodriguez, PhD</i>	
11:44 am	Discussion	
11:48 am	Rapid-Fire Abstract #21: Lessons Learned from Telemedicine in Spine Surgery <i>Zachary Porter, MD and T.G. Pait, MD</i>	
11:51 am	Rapid-Fire Abstract #22: Trends in Laser Interstitial Thermal Therapy (LITT): How Race and Socioeconomic Factors Impact Access <i>Danielle Terrell, MD, MPH; Sandeep Kandregula, MBBS; Joshia Caskey, BS; and W. Christopher Newman, MD</i>	
11:54 am	Rapid-Fire Abstract #23: Clinical Outcomes of Patients with Refractory Trigeminal Neuralgia: Case Series of Patients with Failed Radiation or Surgical Therapy <i>Yasaman Alam, MD; Travis Atchley, MD; and Winfield Fisher, MD</i>	
11:57 am	Discussion	
12:00 pm	Business Meeting	
12:05 pm	Washington Update	M. Babu, MD
12:15 pm	Introduction to the Downing Lecture	
12:25 pm	Downing Lecture	Gaurav Gupta
12:55 pm	Q&A	
1:00 pm	Adjourn	

1:30 pm	Shuttle to Golf Tournament	Hotel Lobby
2:00–6:00 pm	Golf Tournament - <i>Pre-registration Required</i>	Hammock Bay Golf Club
6:30–9:30 pm	Family Night Beach Bash	Lanai Beach

Saturday, February 11

7:00 am	Continental Breakfast and Exhibit Viewing	Banyan 1 & 2
Session 5:	Neurosurgeons as Inventors and Entrepreneurs <i>Moderators: Carolyn S. Quinsey, MD & John A. Wilson, MD</i>	Banyan 3
7:30 am	Panel Discussion: Neurosurgeons as Inventors and Entrepreneurs Panel <i>Panel: Charles Branch, MD; Rob Isaacs, MD; Eric Leuthardt, MD; Uzma Samadani, MD, PhD</i>	
	7:30 Basics of Patents for Neurosurgeons	Mod: C. Branch, MD
	7:44 Translating Research Findings into Innovations	Mod: U. Samadani, MD, PhD
	7:58 Medical Devices and FDA Approval	Mod: E. Leuthardt, MD
	8:12 The Neurosurgeon as CEO	Mod: R. Isaacs, MD
	8:26 Panel Discussion	
9:00 am	Introduction to Distinguished Practitioner Lecture	
9:10 am	Distinguished Practitioner Lecture	Winfield Fisher, MD
9:40am	Refreshment Break and Exhibit Viewing <i>Last chance to solve the exhibitor raffle puzzle! Turn in your completed puzzle for your gift card prize and to enter the grand prize raffle.</i>	Banyan 1 & 2
Session 6 :	Free Papers & Semmes Lecture <i>Moderators : Kimberly Hoang, MD & Kendrick Johnson, MD</i>	Banyan 3
10:10 am	Standard Abstract #24: Neutrophils: Novel Contributors to Estrogen-dependent Intracranial Aneurysm Rupture Via Neutrophil Extracellular Traps <u><i>Brandon Lucke-Wold, MD, PhD</i></u>	
10:16 am	Standard Abstract #25: Desi-ms For Intraoperative Near-real Time Diagnosis of Brain Tumors and Margin Assessment in Idh-mut Gliomas <u><i>Diogo Garcia, MD; Hannah Brown; Erik Middlebrooks; Nicolas Morato; Mark Jentoft; Kaisorn Chaichana; Graham Cooks; and Alfredo Quinones-Hinojosa</i></u>	
10:22 am	Standard Abstract #26: Comparison of 23.4% Sodium Chloride And 3% Sodium Chloride in Rates of Sodium Correction in Cerebral Edema <u><i>Ebonye Green, APRN, FNCS</i></u>	
10:28 am	Standard Abstract #27: Relative Cost of Suboccipital Craniectomy for Chiari Malformation with and without Duraplasty <i>Campbell Liles, MD; Michael J. Feldman, MD; Jessica McDonald; Michael Longo, MD; Michelle Stone, MPA; Robert Dambrino, MD; Stephen Gannon, CCRP; John C. Wellons III, MD; and Christopher Bonfield, MD</i>	
10:34 am	Discussion	
10:39 am	Standard Abstract #28: Anterior Cervical Discectomy and Fusion in the Ambulatory Surgery Center Versus Inpatient Setting: A One-year Cost-utility Analysis <u><i>Ummei Hani, MBBS; Steve H. Monk, MD; Deborah Pfortmiller, PhD, MA; Mark Smith, MD; Paul K. Kim, MD; Michael A. Bohl, MD; Domagoj Coric, MD; Tim E. Adamson, MD; Christopher M. Holland, MD, PhD; and Matthew J. McGirt, MD</i></u>	

- 10:45 am Standard Abstract #29: Minimally Invasive Transforaminal Lumbar Interbody Fusion in the Ambulatory Surgery Center Versus Inpatient Setting: A One-Year Cost-Utility Analysis
Steve H. Monk, MD; Ummey Hani, MBBS; Rebecca J. DeCarlo, MD; Deborah Pfortmiller, PhD, MA; Tim E. Adamson, MD; Michael A. Bohl, MD; Byron C. Branch, MD; Paul K. Kim, MD; Mark D. Smith, MD; Christopher M. Holland, MD, PhD; and Matthew J. McGirt, MD
- 10:51 am Standard Abstract #30: Value of Endoscopy in Transcranial Skull Base Pathologies to Uncover Blind Spots: Technical Nuances
Daniel D. Cales, MD; Luke Harris; Danner Butler; William Broadfoot; Danielle N. Chason; Ursula Hummel; Olivier Darbin; and Jai Deep Thakur, MD
- 10:57 am Standard Abstract #31: Integration of Connectomics into Surgical Planning for Oncofunctional Optimization
Stenia Accilien, MD; Analiz Rodriguez, MD, PhD; and John D. Day, MD
- 11:03 am Discussion
- 11:08 am Rapid-Fire Abstract #32: Clinical Outcomes of Hybrid Cervical Total Disc Arthroplasty Combined with Anterior Cervical Discectomy and Fusion
Jason Garber, MD, FAANS, FACS
- 11:11 am Rapid-Fire Abstract #33: Characteristics of Patients Who Return to Work After Undergoing Surgery for Cervical Spondylotic Myelopathy: A Quality Outcomes Database Study
Stephen M. Bergin, MD, PhD; Giorgos D. Michalopoulos, MD; Christopher I. Shaffrey, MD; Oren G. Gottfried, MD; Eli Johnson, MD; Erica F. Bisson, MD; Michael Y. Wang, MD; John J. Knightly, MD; Michael S. Virk, MD; Luis M. Tumialan, MD; Jay D. Turner, MD, PhD; Cheerag Upadhyaya, MD, MS; Mark E. Shaffrey, MD; Paul Park, MD; Kevin T. Foley, MD; Domagoj Coric, MD; Jonathan R. Slotkin; Eric A. Potts; Dean Chou; Kai-Ming G. Fu, MD PhD; Regis W. Haid; Anthony L. Asher, MD; Mohamad Bydon; Praveen V. Mummaneni, MD, MBA; and Khoi Than, MD
- 11:14 am Rapid-Fire Abstract #34: Risk Factors for Adjacent Segment Disease in Short Segment Lumbar Interbody Fusion
Gabriel Flores-Milan, MD; Cesar Carballo Cuello, MD; and Puya Alikhani, MD
- 11:17 am Rapid-Fire Abstract #35: Surgical Outcomes of Long-segment Spinal Fusion in Osteoporotic Patients Undergoing Treatment with Teriparatide
Lucas Steele, BS; Ryan C. Cassidy, MD; Madhumathi Rao, MD; and Rouzbeh Motiei-Langroudi, MD
- 11:20 am Discussion
- 11:24 am Rapid-Fire Abstract #36: Patient Satisfaction and Cost Savings Analysis of the Telemedicine Program Within a Neuro-oncology Department
Arkady Bilenkin; Richard Kang; Rachel Prorok; Junmin Whiting; Krupal B. Patel, MD; Andre Beer-Furlan, MD, PhD Cristina Naso, M. Ed.; Andrea Rogers, ARNP Xavier Baez-Castro Edwin Peguero, MD Sepideh Mokhtari, MD Nam Tran, MD, PhD Arnold Etame, MD, PhD Yolanda Pina, MD Philippe E. Spiess, MD; Peter Forsyth, MD Michael A. Vogelbaum, MD, PhD and James K.C. Liu, MD
- 11:27 am Rapid-Fire Abstract #37: Can Cerebrospinal Fluid (CSF) Laboratory Values Predict Permanent CSF Diversion Following Posterior Fossa Tumor Resection?
Zachary Bernstein, BS; Zvipo Mutsa. Chisango, BA; Sai Mannam, BS; Ali Alawieh, MD PhD; David Bray, MD; and Kimberly Hoang, MD
- 11:30 am Rapid-Fire Abstract #38: Effect of Intra-operative Hypertension on Surgical Outcomes of Microvascular Decompression Surgery for Trigeminal Neuralgia
Bhavika Gupta, MD; Romel Corecha Santos, MD; Raphael Bastianon Santiago, MD; Rocco Dabecco, DO; Michal Obrzut, MD; Badih Adada, MD; and Hamid Borghei-Razavi, MD

11:33 am	Rapid-Fire Abstract #39: Open Versus Percutaneous Stabilization of Thoracolumbar Fractures: An Analysis of Safety, Facility Utilization, And Rates of Revision Surgery <i>Ummey Hani, MBBS; David Peters, MD; Tripp Owens, BS; Deborah Pfortmiller, PhD, MA; Michael Bohl, MD; Matthew McGirt, MD; Christopher Holland, MD, PhD; and Paul Kim, MD</i>	
11:36 am	Rapid-Fire Abstract #40: Adipose-derived Mesenchymal Stem Cells During Deep Brain Stimulation for Epilepsy: Insights from a Preclinical Study <i>Andres Ramos-Fresnedo, MD; Carlos Perez-Vega, MD; Ralph Perkerson; Meeia Parsons; Astrid Quintero; Abba C. Zubair, MD, PhD; Takahisa Kanekiyo, PhD; William Tatum, DO; Alfredo Quinones-Hinojosa, MD; Erik H. Middlebrooks, MD; and Sanjeet S. Grewal, MD</i>	
11:39 am	Discussion	
11:45 am	Introduction to Semmes Lecture	Donald Smith, MD
11:50 am	Semmes Lecture	Fernando Vale, MD
12:20 pm	Raffle Drawing & Adjourn	
6:30–9:30 pm	Kids’ Night - Pre-registration Required	Seagrape 2/Tiki Tribe
6:30–7:00 pm	Final Banquet Reception	Banyan Foyer
7:00–10:00 pm	Final Banquet Dinner	Banyan 3