

**71st Southern Neurosurgical Society Annual Meeting
February 26-29, 2020
PROGRAM**

WEDNESDAY, FEBRUARY 26th-----

12:00 pm-5:00 pm	NEW non-CME Cadaveric Lab for Residents & Fellows (Hosted at Barrow Neurological Institute)
1:00 pm-5:00 pm	Meeting Registration Opens
2:00 pm-4:00 pm	Executive Council Meeting

THURSDAY, FEBRUARY 27th-----

7:00 am-1:00 pm	Meeting Registration
7:00 am-7:30 am	Breakfast with Exhibitors

Scientific Session I

Moderators: TBD

7:30 am-7:40 am	Opening Remarks (with Pigeonhole Live Q & A) <i>Dennis J. Rivet, MD</i>	
7:40 am-8:05 am	Targeting Resistant Cells in Glioblastoma <i>Sunit Das, MD</i>	
8:05 am-8:30 am	Initial Experience with Direct Access Embolizations <i>Min S. Park, MD</i>	
8:30 am-8:55 am	Deliberate Practice in Neurosurgical Residency Training <i>Carolyn Quinsey, MD</i>	
8:55 am-9:20 am	Resilience Empowered by Duty <i>James Ecklund, MD</i>	
9:20 am-9:30 am	Discussion	
9:30 am-10:00 am	Break with Exhibitors	Exhibit Hall

Scientific Session II

Moderators: TBD

10:00 am-11:30 am	Abstracts & Discussion (with Pigeonhole Live Q & A)	
10:00 am-10:06 am	Standard Abstract #1: Learner Perceptions, Educational Value, and Cost Associated with the Use of Biomimetic Simulation Compared to Cadaveric Models for Anatomical and Procedural Learning <i>William Clifton; Aaron Damon; Karim ReFaey, MD; Alfredo Quinones-Hinojosa, MD; Eric Nottmeier, MD; and Mark Pichelmann, MD</i>	
10:06 am-10:12 am	Standard Abstract #2: Preoperative Acetazolamide Challenge in Pediatric Chiari 1 Malformation <i>Vincent Rossi, MD</i>	

- 10:12 am-10:18 am Standard Abstract #3: An Investigational Study of a Novel Parathyroid Hormone-based Bone Graft Substitute for Interbody Spinal Fusion Using an In-vivo Ovine Model: Emphasis on Osseointegration and Neurohistopathologic Response
Kyle Mueller, MD; James Klunk, DO; Kenneth Mullinix, MS; and Bryan Cunningham, PhD
- 10:18 am-10:24 am Standard Abstract #4: National Trends in the Surgical Management of Lung Cancer Metastasis to the Spine from 2005- 2015 Using the National Inpatient Sample Database
Aqib Zehri, MD; Keyan Peterson, MBA; Carol Kittel; Katriel Lee; Jonathon Wilson, MD; and Wesley Hsu, MD
- 10:24 am-10:29 am Discussion
- 10:29 am-10:35 am Standard Abstract #5: Predictive Factors Associated with Cranioplasty Complications
Ana Patel, BA; Chesney Oravec, MD; Christopher Runyan, MD, PhD; Daniel Couture, MD
- 10:35 am-10:41 am Standard Abstract #6: Poliovirus Oncolytic Activity in Medulloblastoma is Mediated by Oxidative Stress
Eric Thompson, MD and Wafa Hassen
- 10:41 am-10:47 am Standard Abstract #7: Ten Years of Vascular Injuries Associated with Gunshot Wounds to the Head: A Single Institution Experience
Fakhry M. Dawoud, BS; Michael J. Feldman, MD; Ranbir Ahluwalia; Daniel Wolfson; Steven Roth, MD; Patrick Kelly, MD, MSCI; Rohan Chitale, MD; and Aaron M. Yengo-Kahn, MD
- 10:47 am-10:53 am Standard Abstract #8: Safety and Efficacy of Flow Diversion for Posterior Inferior Cerebellar Artery Aneurysms
Jonathan M. Parish, MD; David R. Peters, MD; Prasad Kanuparthi; Meg Smith; William R. Stetler and Joe D. Bernard, MD
- 10:53 am-10:59 am Discussion
- 10:59 am-11:02 am Rapid Fire Abstract #9: Predictors of Failed Radiographic Outcomes Following Posterior Fusion Surgery in Degenerative Cervical Spine Disease
Nida Fatima, MD and John Shin, MD
- 11:02 am-11:05 am Rapid Fire Abstract #10: Physician Influence on Parental Decision to Allow Child Participation in Sports
Natalie Hibshman, BA; Aaron Yengo-Kahn, MD; Alyssa Wiseman, MA, MS Patrick Kelly, MD; Chevis Shannon, MBA, MPH, DrPH; and Christopher Bonfield, MD
- 11:05 am-11:08 am Rapid Fire Abstract #11: Deep Brain Stimulation of the Globus Pallidus Externus: An Exploratory Human Study of a Novel Target to Treat Insomnia in Parkinson's Disease
Sanjeet Grewal, MD; Erik Middlebrooks; Pablo Castillo; Ryan Uitti; and Robert E. Wharen
- 11:08 am-11:11 am Rapid Fire Abstract #12: Outcome of Non-operative Management of Cervical Spinal Cord Injury Without Radiological Evidence of Trauma (sciworet)
Joseph A. Adedigba, B.A.; Adetunji A. Oremakinde, MD, MSc, FWACS; Adefolahan O. Malomo, MD, MHSc, FWACS; Temitayo M. Shokunbi, MD, MSc, FRCSC, FWACS; Brendan Huang; and Augustine A. Adeolu, MD, FWACS
- 11:11 am-11:19 am Discussion

- 11:19 am-11:22 am Rapid Fire Abstract #13: Functional Activation Patterns Produced by Deep Brain Stimulation of the Anterior Nucleus of the Thalamus in Humans
Sanjeet Grewal, MD; Erik Middlebrooks; William O. Tatum; Lela Okromelidze; and Robert E. Wharen
- 11:22 am-11:25 am Rapid Fire Abstract #14: Experience Matters: Natural Language Processing Reveals that as a Surgeon Practices Longer His Notes Become Increasingly Predictive of Outcome After Meningioma Resection
Whitney E. Muhlestein, MD; Meredith A. Monsour, BS; Dallin S. Akagi, BS; Reid C. Thompson, MD; and Lola B. Chambless, MD
- 11:25 am-11:28 am Rapid Fire Abstract #15: Changing the Zone Of Uncertainty to the Zone of Certainty: A Case Series of Caudal Zona Incerta Deep Brain Stimulation
Thomas (Tripp) K. Hines, III, MD; Dhanunjaya R. Ginjupally, MBBS, MS, MCh; Christopher Samaan, BS; George Quintero, PhD; Ashley W. Guiliani, DNP, APRN; Julie A. Gurwell, PhD, PA-C; Zain Guduru, MD; Greg A. Gerhardt, PhD; and Craig van Horne, MD, PhD
- 11:28 am-11:31 am Rapid Fire Abstract #16: Dual Layer Titanium Mesh Placement for Temporal Fossa and Temporalis Muscle Reconstruction After Intraosseous Meningioma Resection
Marcus Stephens, MD and Thomas W. Morris, MD
- 11:31 am-11:40 am Discussion
- 11:40 am-11:45 am Introduction to Ned Downing Lecture
TBD
- 11:45 am-12:20 pm **Ned Downing Lecture**
David Grann
- 12:30 pm-1:30 pm Resident Lunch:
How to Evaluate a Neurosurgery Practice Opportunity
Nancy Cusick, Rosman Search, Inc.
- 5:30 pm-7:00 pm Welcome Reception in Exhibit Hall

FRIDAY, FEBRUARY 28th-----

7:00 am-1:00 pm Meeting Registration
7:00 am-7:30 am Breakfast with Exhibitors

Scientific Session III

Moderators: TBD

7:30 am-7:35 am Opening Remarks (with Pigeonhole Live Q & A)
Dennis J. Rivet, MD

7:35 am-8:00 am Privacy and Cybersecurity in Neuromodulation Systems: Cautions of Technology in the Digital Data Age
Erika Petersen, MD

8:00 am-8:25 am Train Like an Athlete: Mental and Physical Conditioning for Today's Neurosurgeon
Chris Neal, MD

8:25 am-8:50 am OR as a Laboratory – Therapeutic Development in Gliomas
Michael Vogelbaum, MD, PhD

8:50 am-9:15 am Salvage Treatment for Progressive Moyamoya Disease
John Wanebo, MD

9:15 am-9:20 am Discussion

9:20 am-9:25 am Introduction to Presidential Address
TBD

9:25 am-9:55 am **Presidential Address**
Eric Sherburn, MD

9:55 am-10:25 am Break with Exhibitors Exhibit Hall

Scientific Session IV

Moderators: TBD

10:25 am-10:31 am Standard Abstract #17: Development of Advanced Cervical Deformity Frailty Index for Preoperative Risk Stratification
Nida Fatima, MD and John Shin, MD

10:31 am-10:37 am Standard Abstract #18: The One Health Consortium: Design of a Phase I Clinical Trial to Evaluate M032, A Genetically Engineered HSV-1 Expressing IL-12, In Combination With A Checkpoint Inhibitor in Canine Patients with Sporadic High Grade Gliomas
M. R. Chambers, DVM, MD; R. T. Bentley, BVSc; David Crossman, PhD; Jeremy B. Foote, DVM, PhD; J. W. Koehler, DVM, PhD; James M. Markert, MD, MPH; Nidal B. Omar, MD; Simon R. Platt, BVMS; D M. Self, BS; Andy Shores, DVM, MS, PhD; Don Sorjonen, DVM, MS; Alicia M. Waters, MD; Amy B. Yanke, DVM, MS; and G. Y. Gillespie, PhD

10:37 am-10:43 am Standard Abstract #19: Nutritional Status as a 30-d Predictor of Complications and Mortality Following Posterior Cervical Fusion
Nida Fatima, MD and John Shin, MD

- 10:43 am-10:49 am Standard Abstract #20: Prophylactic Closed-incisional Negative Pressure Therapy in Spine Surgery: A Multicenter, Observational Study
Kyle Mueller, MD; Matthew D'Antuono, BS; Nirali Patel, MD; Gnel Pivazyan, MD; Edward Aulisi, MD; Karen Evans, MD; and Nathan Nair, MD
- 10:49 am-10:54 am Discussion
- 10:54 am-11:00 am Standard Abstract #21: Integrated Interbody Fusion in Multi-level Cervical Constructs in Clinical Practice
Jason Garber, MD
- 11:00 am-11:06 am Standard Abstract #22: Industry Payments in Neurosurgery: A 5-year Analysis of the CMS Open Payments Database
Mustafa Motiwala, MD; Jock Lillard, MD; Michael Herr, PhD; Sonia Ajmera, BA; Hassan Saad, MD; Andrew Schultz, MS; Brittany Fraser, MD; David Wallace, BS; Sebastian Norrdahl, MS; Olutomi Akinduro, BS; Chesney Oravec, MD; Raymond Xu, BS; Brian Jimenez, MS; Melissa Justo, BS; Jennings Hardee, BS; Yusuf Yunis, MD; Busra Gungor, BS; Joseph Whittaker, BS; and Paul Klimo, MD, MPH
- 11:06 am-11:12 am Standard Abstract #23: Neighborhood Socioeconomic Status and Mechanical Thrombectomy Outcomes
Sanjana Salwi, BA; Pious Patel, BA; Matthew Fusco, MD; Michael Froehler, MD; Eva Mistry, MD; Akshitkumar Mistry, MD; and Rohan Chitale, MD
- 11:12 am-11:18 am Standard Abstract #24: Microsurgical Drezotomy in Spastic Cerebral Palsy: An Option Worth a Shot
Nishant Goyal, MCh; Shobha Arora; and Poorvi Kulsheshta
- 11:18 am-11:24 am Discussion
- 11:24 am-11:27 am Rapid Fire Abstract #25: Cervical Disc Arthroplasty or Anterior Cervical Discectomy and Fusion for Degenerative Disc Diseases? A Comparison Analysis from National Spine Registry
Inamullah Khan; Kristin R. Archer, DPT, PhD; Jacquelyn Pennings, PhD; Ahilan Sivaganesan, MD; Mohamad Bydon, MD; Anthony L. Asher, MD; and Clinton J. Devin, MD
- 11:27 am-11:30 am Rapid Fire Abstract #26: Reducing Transforaminal Lumbar Interbody Fusion Hospitalization Cost Due to Improved Efficiency And Safety
John Pelozo, MD; Michael A. Millgram, MD; Nahshon Rand, MD; Richard D. Guyer, MD; Jean-Charles Le Huec, MD, PHD; and Ely Ashkenazi, MD
- 11:30 am-11:33 am Rapid Fire Abstract #27: Predictors of Recurrence After Anterior Communicating Artery Aneurysms Treatment
Heejong Ki, MD and Yongsam Shin, MD
- 11:33 am-11:37 am Rapid Fire Abstract #28: Pituitary Metastatic Composite Tumors: A Case Report and Review of the Literature
Matthew Helton, MD; Muhammad Abu-Rmaileh, BS; Murat Gokden, MD; Alissa Kanaan, MD; and Analiz Rodriguez, MD
- 11:37 am-11:43 am Discussion

11:43 am-11:46 am	Rapid Fire Abstract #29: National Variation in Cost of Endovascular Treatment for Unruptured Aneurysms <i>Matthews Lan, MS; Pious Patel, BA; Campbell Liles, MD; Stephen Gannon, CCRP; Chevis Shannon, DrPH, MBA, MPH, MERC; and Rohan Chitale, MD</i>	
11:46 am-11:49 am	Rapid Fire Abstract #30: Demographic Differences in Patients With Transthyretin (ATTR) Deposition Presenting With Spinal Stenosis <i>Keith Mathew George, BA; Richard Dowd, MD; Jayde Nail, MD; Ron Riesenburger, MD; and James Kryzanski, MD</i>	
11:49 am-11:52 am	Rapid Fire Abstract #31: Biomechanical Analysis of Occipitocervical Stabilization Techniques: An In-vitro Human Cadaveric Study <i>Kyle Mueller, MD; Bryan Cunningham, PhD; Kenneth Mullinex, MS; and Faheem Sandhu, MD, PhD</i>	
11:52 am-11:55 am	Rapid Fire Abstract #32: New Decompression Device Facilitating a Smaller Procedure in Anterior Cervical Corpectomy and Fusion: Case Series <i>Michael A. Millgram, MD; Richard D. Guyer, MD; Ran Harel, MD; Ely Ashkenazi, MD</i>	
11:55 am-12:00 pm	Discussion	
12:00 am-12:05 pm	Business Meeting	
12:05 pm-12:10 pm	Introduction to the Hudson Lecture <i>TBD</i>	
12:10 pm-12:50 pm	Hudson Lecture: The Future of Neurosurgical Education <i>Robert Harbaugh, MD</i>	
1:00 pm-5:30 pm	Golf Tournament	
6:00 pm-10:00 pm	Family Night	Jokake Inn at the Phoenician

SATURDAY, FEBRUARY 29th-----

7:00 am-1:00 pm Meeting Registration
7:00 am-7:30 am Breakfast with Exhibitors

Scientific Session V

Moderators: TBD

7:30 am-7:40 am Opening Remarks

7:40 am-8:05 am Translational Research in Cerebrovascular Disease: Homing in on New Therapeutic Targets
Chad Washington, MD

8:05 am -8:30 am Meningioma: An Evolving Disease
Ian Dunn, MD, PhD

8:30 am-8:55 am A Tribute to the Late Professor Donald Simpson, A Southern Neurosurgeon (Southern Hemisphere, That Is), and Author of The “Simpson Grading” For Extent of Meningioma Resection
Michael Chicoine, MD

8:55 am-9:00 am Discussion

9:00 am-9:10 am Introduction to Distinguished Practitioner Lecture
Michael Chicoine, MD

9:10 am-9:40 am **Distinguished Practitioner Lecture**
Ralph G. Dacey, Jr., MD

9:40 am-10:10 am Refreshment Break with Exhibitors

Scientific Session VI

Moderators: TBD

10:10 am-10:16 am Standard Abstract #33: Investigation and Feasibility of Combined 3D Printed Thermoplastic Filament and Polymeric Foam to Simulate the Corticocancellous Interface of Human Vertebrae
William Clifton, MD; Aaron Damon, BS; Alexander Vlasak, MD; Karim ReFaey, MD; Mark Pichelmann, MD; and Eric Nottmeier, MD

10:16 am-10:22 am Standard Abstract #34: Stimulation of the Nucleus Basalis of Meynert Induces Neurogenesis and Improved Learning in Demented Rats: Preliminary Results
Jamie Toms, MD; Deepak Kumbhare, PhD; Adel Azghadi; Sindu Karnum; George Weistroffer; Nicholas McComb; Sofia Goyonaga; and Kathryn Holloway, MD

10:22 am-10:28 am Standard Abstract #35: Impact of Opioid Prescribing Guidelines on Postoperative Narcotic Prescriptions Following Elective Spine Surgery
William Krauss, MD; Elizabeth B. Habermann, PhD, MPH; Anshit Goyal, MBBS; Mohammed Ali. Alvi, MBBS; Daniel Ubl; Daniel Whipple, MS; Amy E. Glasgow, MHA; Halena M. Gazelka, MD; Matthew T. Neal, MD; Bernard Bendok, MD; Selby Chen, MD; Alfredo Quinones-Hinojosa, MD; Mohamad Bydon, MD

- 10:28 am-10:34 am Standard Abstract #36: Chiari Health Index for Pediatrics (chip) Instrument Effective in Measuring Postoperative Quality of Life in Chiari I Malformation
Georgina E. Sellyn, MA; Alan R. Tang, BA; Shilin Zhao, PhD; Rachel Pellegrino, MS; Stephen R. Gannon, BS; Bradley S. Guidry, BS; Travis R. Ladner, MD; John C. Wellons, MD, MSPH; and Chevis N. Shannon, DrPH, MBA, MPH
- 10:34 am-10:39 am Discussion
- 10:39 am-10:45 am Standard Abstract #37: Cranial Asymmetry and Positional Plagiocephaly: Demographic Associations
Jarrett Foster, BS; Ranbir Ahluwalia, BS; Madeleine M. Sherburn, BA; Katherine Kelly, BS; Chelsea Kiely; Alyssa L. Wisemen, MA, MS; Stephen Gannon, CRP; Chevis N. Shannon, DrPH, MBA; and Christopher Bonfield, MD
- 10:45 am-10:51 am Standard Abstract #38: An Evaluation of Blood Gases in Blood Specimens Immediately Proximal and Distal to Occlusive Thrombi in Patients Undergoing Mechanical Thrombectomy
Robert Christopher Spears, MD; Keith Pennypacker, PhD; Jacqueline Frank; Benton Maglinger; Amanda Trout, PhD; Jill Roberts, PhD; Ann Stowe, PhD; Stephen Grupke, MD; and Justin F. Fraser, MD
- 10:51 am-10:57 am Standard Abstract #39: An Assessment of the Efficacy of a Multimodal, Narcotic Reducing, Postoperative Pain Control Regimen in a Series of Patients Undergoing Endoscopic Transsphenoidal Resection of Pituitary Adenomas With a Focus on Associated Analgesic Cost
Lauren Rotman, MD; Borna E. Tabibian, MD and Kristen O. Riley, MD
- 10:57 am-11:03 am Standard Abstract #40: Seven-year Follow-up of Radiographic and Clinical Adjacent Segment Pathology After Cervical Total Disc Replacement or Anterior Cervical Discectomy and Fusion
David Cavanaugh, MD; Pierce Nunley, MD; Eubulus Kerr, MD; Andrew Utter, MD; Peter Campbell, MD; Rishi Wadhwa, MD; Kelly Frank; and Marcus Stone, PhD
- 11:03 am – 11:09 am Standard Abstract #41: Rates of Dysphagia and Peri-operative Complications in Patients Undergoing Four and Five Level ACDF Surgery
S. Harrison Farber, MD; David Mauler, BS; Mark Pacult, MD; Corey T. Walker, MD; Jay D. Turner, MD, PhD; Juan Uribe, MD; Steve Chang, MD; and Kumar Kakarla, MD
- 11:09 am – 11:14 am Discussion
- 11:14 am-11:17 am Rapid Fire Abstract #42: Precise Identification of Patients for Decompressive Hemicraniectomy After Ischemic Stroke: A Decision-tree Mortality Model
Pious D. Patel, BA; Chevis N. Shannon, MBA MPH DrPH; Matthew R. Fusco, MD; and Rohan V. Chitale, MD
- 11:17 am-11:20 am Rapid Fire Abstract #43: The Utility of Prolonged Prophylactic Systemic Antibiotics (ppsa) For Subfascial Drains After Posterior Spinal Surgery For Degenerative Disease
Gnel Pivazyan, MD

11:20 am-11:23 am	Rapid Fire Abstract #44: Variation in Opioid Prescribing Patterns and Impact on Refill Prescriptions Following Elective Lumbar Spine Surgery <i>Anshit Goyal, MBBS; Stephanie Payne; Lindsey Sangaralingham, MPH; Mohammed Ali. Alvi, MBBS; Halena M. Gazelka, MD; Elizabeth B. Habermann, PhD, MPH; Benjamin D. Elder, MD, PhD; Robert J. Spinner, MD; Matthew T. Neal, MD; Bernard R. Bendok, MD; Selby G. Chen, MD; Alfredo Quinones-Hinojosa, MD; <u>Mohamad Bydon, MD</u></i>
11:23 am-11:26 am	Rapid Fire Abstract #45: Innovation, Royalties, and Introduction of the Patent H-index Within US Academic Neurosurgery <i><u>Mustafa Motiwala, MD</u>; Rahul Kumar, MS; Sonia Ajmera, BA; Jock Lillard, MD; Hassan Saad, MD; Andrew Schultz, MS; Brittany Fraser, MD; David Wallace, BS; Sebastian Norrdahl, MS; Olutomi Akinduro, BS; Chesney Oravec, MD; Raymond Xu, BS; Brian Jimenez, MS; Melissa Justo, BS; Jennings Hardee, BS; Yusuf Yunis, MD; and Paul Klimo, MD, MPH</i>
11:26 am-11:31 am	Discussion
11:31 am-11:34 am	Rapid Fire Abstract #46: Alternative Incision for Decompressive Hemicraniectomy <i><u>Ehsan Dowlati, MS, MD</u>; Armin Mortazavi, BS; Gregory Keating, BS; and Jeffrey Mai, MD, PhD</i>
11:34 am-11:37 am	Rapid Fire Abstract #47: Analysis of Factors and Conditions Influencing Military Neurosurgery Recruitment <i>Richard Menger, MD, MPA; <u>Devon C. LeFever, MD</u>; J. Will Robbins; Benjamin Mundell; and Randy Bell</i>
11:37 am-11:40 am	Rapid Fire Abstract #48: Time Is Brain: Evaluation of Prehospital Emergency Medical Service Response Times for Suspected Stroke in Florida <i><u>Johan L. Heemskerk, MD, MSc.</u>; Ricardo Domingo, MD; Tito G. Vivas-Buitrago, MD; Alfredo Quinones-Hinojosa, MD; Rabih G. Tawk, MD; David Freeman, MD; and Kingsley O. Abode-Iyamah, MD</i>
11:40 am-11:43 am	Rapid Fire Abstract #49: Murphey's Teat: History and Insight into an Enigmatic Cerebrovascular Eponym <i><u>Daniel Heiferman, MD</u>; Daphne Li, MD; Joseph C. Serrone, MD; Matthew R. Reynolds, MD, PhD; Anand V. Germanwala, MD; Clarence B. Watridge, MD; and Adam S. Arthur, MD</i>
11:43 am-11:48 am	Discussion
11:48 am-11:50 am	Introduction to the Semmes Lecture <i>TBD</i>
11:50 am-12:30 pm	Semmes Lecture: TBI Management and the VCU Legacy <i>Alex Valadka, MD</i>
12:30 pm-12:35 pm	Closing Remarks & Raffle Drawing <i>Jay Howington, MD – Incoming SNS President</i>
6:30 pm-7:00 pm	Final Banquet Reception
7:00 pm-10:00 pm	Final Banquet