April 30 – May 4, 2016
Chicago, Illinois

AANS Annual Scientific Meeting

Neurosurgery Leading the Way | 84th AANS Annual Scientific Meeting

#AANS2016

Quick Planner

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www.aans.org/MeetingApp

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VISIT OUR BOOTH #4807

The Mount Sinai Hospital is ranked in the top fifteen by U.S. News & World Report in Neurology & Neurosurgery, 2015-16. Our world-class specialists are committed to the discovery of new treatments for neurological conditions and hold faculty appointments at Icahn School of Medicine at Mount Sinai, ranked among the nation’s top 20 medical schools by U.S. News & World Report.

- Cerebrovascular Center
- Neuro-Oncology Program
- Center for Neuromodulation – Movement Disorders, Neuropsychiatric Disorders, Pain
- Epilepsy Program
- Skull Base Program
- Pituitary and Neuroendocrine Disorders
- Pediatric Neurosurgery
- Spine and Spinal Cord Disorders
- Neurotrauma
- Neurocritical Care
- General Neurosurgery Services

1-800-MD-SINAI • mountsinai.org/neurosrg
Friday, April 29

5-7 p.m. AANS Registration
Registration-Level 3 Center Lobby

Saturday, April 30

6:30 a.m.-5 p.m. Speaker Ready Room
W181 C

6:30 a.m.-5:30 p.m. AANS Registration
Registration-Level 3
Center Lobby

8 a.m.-5 p.m. All-day Practical Clinics
(001-003)

8 a.m.-5 p.m. International Symposium
W180

8 a.m.-12 p.m. Morning Practical Clinics
(004-008)

1-4 p.m. Neurosurgeon-scientist
Career Development Course
Mayfair; Sheraton Grand Chicago

1-5 p.m. Afternoon Practical Clinics
(009-016)

1-5 p.m. Leadership Development
Course – Mid-career
Michigan A; Sheraton
Grand Chicago

1-5 p.m. Leadership Development
Course – Senior Resident
Michigan B; Sheraton
Grand Chicago

Sunday, May 1

6:30 a.m.-5 p.m. Speaker Ready Room
W181 C

6:30 a.m.-6:30 p.m. AANS Registration
Registration-Level 3
Center Lobby
7:30 a.m.-4:30 p.m.  All-day Practical Clinics (017-019)
7:30 a.m.-4:30 p.m.  International Symposium W180
7:30 a.m.-4:30 p.m.  Advanced Practice Providers Plenary Session W175 C
7:30 a.m.-4:30 p.m.  SNS Chief Resident Course Sheraton Ballroom Salon III; Sheraton Grand Chicago
7:30-11:30 a.m.  Morning Practical Clinics (020-026)
12:30-4:30 p.m.  Afternoon Practical Clinics (027-033)
1-4:30 p.m.  Young Neurosurgeons Research Forum W470 A
  · Osler Lecture Duke S. Samson, MD, FAANS
5-6:30 p.m.  AANS Opening Ceremonies Skyline Ballroom, W375 ABC
  · Historical Vignette on Chicago Sports
  · Gen. Peter W. Chiarelli (Ret.)
  · Sanjay K. Gupta, MD, FAANS
  · Walter Koroshetz, MD
  · Geoffrey Ling, MD, PhD, Col. (Ret.)
  · Russell R. Lonser, MD, FAANS
  · Jeff Miller
  · Mike Singletary
7-9 p.m.  AANS Opening Reception Soldier Field

Monday, May 2

6:30 a.m.-4 p.m.  AANS Registration
  Registration-Level 3 Center Lobby
6:30 a.m.-5 p.m.  Speaker Ready Room W181 C
7-9 a.m. Breakfast Seminars (101-125)

9 a.m.-4:15 p.m. AANS Exhibit Hall
Hall F1

9-9:45 a.m. Morning Beverage Break in the AANS Exhibit Hall
Hall F1

9:35-9:45 a.m. Historical Vignette on Chicago Neurosurgery
Skyline Ballroom, W375 ABC

9:45 a.m.-1 p.m. Plenary Session I
Skyline Ballroom, W375 ABC
- Hunt-Wilson Lecture
  Gen. Peter W. Chiarelli (Ret.)
- Richard C. Schneider Lecture
  Alim L. Benabid, MD, PhD, IFAANS
- AANS Presidential Address
  H. Hunt Batjer, MD, FAANS

1-2 p.m. Lunch in the AANS Exhibit Hall
Hall F1

1:10-2 p.m. Neurosurgery “In Press”: Latest Results of Clinical Trials in Neurosurgery and Allied Fields
W178 B

1:10-1:55 p.m. Lunch-and-learn Seminars
Non-CME Events

1:15-2:45 p.m. Advanced Practice Providers Luncheon
Jackson Park AB; Hyatt Regency McCormick Place

2-3:30 p.m. Operative Nuances I: Tackling Challenging Cases 3D Video Presentation
Skyline Ballroom, W375 E

2-5:30 p.m. Scientific Sessions I-VII
- Scientific Session I: Tumor
  W183 B
- Scientific Session II: Spine
  W184 ABCD
Week At-A-Glance

- Scientific Session III: Stereotactic and Functional Surgery
  W185 CD
- Scientific Session IV: Pediatrics
  W185 AB
- Scientific Session V: Cerebrovascular
  W183 C
- Scientific Session VI: Neurotrauma and Critical Care
  W183 A
- Scientific Session VII: AANS/CSNS Socioeconomic
  W187 B

3:30-4 p.m.  Afternoon Beverage Break in the AANS Exhibit Hall
Hall F1

5:30-6:30 p.m.  Joint Annual Business Meeting of the American Association of Neurological Surgeons and the American Association of Neurosurgeons
W180

6:30-8:30 p.m.  Dinner Symposium: Cutting Edge Stereotactic Radiosurgery
Sepia

6:30-9:30 p.m.  Annual AANS Section on the History of Neurological Surgery Dinner
Michigan Room; University Club of Chicago

8-9:30 p.m.  AANS International Reception
Preston Bradley Hall; Chicago Cultural Center
Tuesday, May 3

6:30 a.m.-4 p.m.  AANS Registration
  Registration-Level 3
  Center Lobby

6:30 a.m.-5 p.m.  Speaker Ready Room
  W181 C

7-9 a.m.  Breakfast Seminars
  (201-225)

9 a.m.-4:15 p.m.  AANS Exhibit Hall
  Hall F1

9-9:45 a.m.  Morning Beverage Break in the AANS Exhibit Hall
  Hall F1

9:37-9:45 a.m.  Historical Vignette on Chicago Architecture
  Skyline Ballroom, W375 ABC

9:45 a.m.-1 p.m.  Plenary Session II
  Skyline Ballroom, W375 ABC
  · Theodore Kurze Lecture
    Thomas J. Nasca, MD
  · Cushing Orator
    Invited Guest

1-2 p.m.  Lunch in the AANS Exhibit Hall
  Hall F1

1:10-1:55 p.m.  Lunch-and-learn Seminars
  Non-CME Events

1:15-2:45 p.m.  Young Neurosurgeons Luncheon
  Jackson Park ABC; Hyatt Regency McCormick Place

2-3:30 p.m.  Operative Nuances II: Complication Avoidance 3D Video Presentation
  Skyline Ballroom, W375 E

2-5:30 p.m.  Section Sessions
  · AANS/CNS Cerebrovascular Section
    W183 A
Wednesday, May 4

6:30 a.m.-3:30 p.m.  AANS Registration
Registration Level 3
Center Lobby

2-5:30 p.m.  Advancements in Neurotrauma Care
W185 CD

3:30-4 p.m.  Afternoon Beverage Break in the AANS Exhibit Hall
Hall F1

6-8 p.m.  Dinner Symposium: The FDA: Investigational Device Exemptions, Regulatory Process and Moving Medical Devices to Patients
Harry Caray’s Italian Steakhouse

6:30-8:30 p.m.  Dinner Symposium: Practical Management Topics in Spine and Cranial Trauma
River Roast
6:30 a.m.-5 p.m.  Speaker Room  W181 C
7-9 a.m.  Breaksfast Seminars (301-322)
7-8:30 a.m.  AANS/CNS Section on Women in Neurosurgery (WINS) Breakfast  Michigan AB; Sheraton Grand Chicago
9 a.m.-2:15 p.m.  AANS Exhibit Hall  Hall F1
9-9:45 a.m.  Morning Beverage Break in the AANS Exhibit Hall  Hall F1
9:45 a.m.-1 p.m.  Plenary Session III  Skyline Ballroom, W375 ABC  
  · Louise Eisenhardt Lecture  Maria Siemionow, MD, PhD  
  · Rhoton Family Lecture  José Francisco Salgado, PhD  
  · Van Wagenen Lecture  Geoffrey Ling, MD, PhD, Col. (Ret.)
1-2 p.m.  Lunch in the AANS Exhibit Hall  Hall F1
2-5 p.m.  Section Sessions  
  · AANS/CNS Section on Disorders of the Spine and Peripheral Nerves — Spine Section Session  W184 ABCD  
  · AANS/CNS Section on Pediatric Neurological Surgery  W183 A  
  · AANS/CNS Section on Pain  W185 AB  
  · AANS/CNS Section on Tumors II  W183 B  
  · AANS Section on the History of Neurological Surgery  W185 CD
Tell Us Who Your Mentor Is and Pick Up a Copy of
The Rhoton Collection
2016/2017 Wall Calendar

Visit NREF at Booth #4642, in the AANS Resource Center

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**JULY**

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**www.nref.org/donate**
Saturday, April 30

Speakers listed are those who accepted the invitation to speak by March 22, 2016.

8 a.m.-5 p.m.
All-day Practical Clinics

001 Introduction to Cerebrovascular Neurosurgery for Residents
*Location: W183 A*
A. Arthur; B. Bendok; M. Binning; K. Cockroft; J. Howington; A. Khalessi; E. Levy; W. Mack IV; J. Mocco; C. Ogilvy; H. Riina; R. Turner IV; E. Veznedaroglu; H. Woo

*Supported by Codman Neuro, a Johnson & Johnson Company, Penumbra, Medtronic and Stryker Neurovascular.*

002 Nuances of MIS and Open Techniques for Adult Spinal Deformity Surgery
*Location: W184 ABCD*
P. Angevine; S. Dhall; K. Fu; A. Kanter; T. Koski; F. La Marca; P. Mummaneni; J. O'Toole; J. Smith; J. Uribe; E. Woodard

003 You Are Never Too Old for Surgery: Spine Management in an Aging Population
*Location: W175 C*
N. Brooks; B. Buehring; D. Hoh; J. Holtz; A. Krishnaney; L. Prado; S. Rajpal; M. Shamji; M. Steinmetz; A. Strayer; G. Trost; E. Tsai

8 a.m.-5 p.m.
International Symposium
*Location: W180*

*Stereotactic and Functional Session*
Moderators: A. Machado; N. Pouratian

8-8:26 a.m.
*Introduction*
A. Machado; N. Pouratian

www.aans.org/AANS2016
Saturday, April 30

8:28-9:03 a.m.
Neuromodulation for Seizure Management
A. Cukiert

9:05-9:40 a.m.
Deep Brain Stimulation In Young Children: Technical Challenge and Outcome
F. Al Otaibi

9:41-10:11 a.m.
Beverage Break

10:12-10:37 a.m.
DBS for Tourette Syndrome
O. Vilela Filho

10:38-11:03 a.m.
Epilepsy and Mapping
J. Schramm

11:04-11:29 a.m.
Central and Peripheral Ablation for the Management of Spasticity
A. Francisco

11:30 a.m.-12 p.m.
Stereotactic & Functional Panel/Case Discussions

12-1 p.m.
Lunch Break
**Concessions will be available to purchase on Level 2.**

Pediatric Session
Moderators: B. O’Neill; C. Rozzelle

1-1:20 p.m.
Introduction
C. Rozzelle; B. O’Neill

1:22-1:42 p.m.
Craniopharyngioma
G. Zuccaro
1:44-2:04 p.m.
The Antisecretory Factor (AF) and ICP Management
M. Al Olama

2:06-2:26 p.m.
Pilomyxoid Astrocytoma in Pediatric Patients: An Overview and Update
A. Al Anizi

2:28-2:48 p.m.
Endoscopic Removal of Third Ventricular Tumors
S. Cavalheiro

2:50-3:20 p.m.
Beverage Break

3:21-3:41 p.m.
Pediatric Neurosurgery
H. Matushita

3:43-4:03 p.m.
Long Term Outcome of Hydrocephalus
A. Ammar

4:05-4:25 p.m.
Folic Acid and Myelomeningocele
A. Caceres Chacon

4:27-5 p.m.
Pediatric Panel/Case Discussions

8 a.m.-12 p.m.
Morning Practical Clinics

004 Deep Brain Stimulation: Update and New Directions

Location: W183 B
A. Abosch; E. Air; C. Halpern; P. House; M. Kaplitt; B. Kopell; P. Larson; N. Pouratian; S. Sheth; J. Sweet; D. Whiting
005 Integrating Pain Management into Your Neurosurgical Practice  
*Location: W183 C*  
S. Falowski; A. Machado; J. Miller; J. Pope; J. Sweet; A. Viswanathan  
*Supported by an educational grant from Boston Scientific Neuromodulation, Medtronic, Inc. and St. Jude Medical.*

006 Update on Tumors for the General Neurosurgeon I: Adult Gliomas and Metastases  
*Location: W470 A*  
M. Berger; S. Chang; P. Fecci; S. Kalkanis; G. Samandouras; N. Sanai; J. Sheehan; A. Sloan; J. Weinberg

007 Negotiating Strategies in Neurosurgery  
*Location: W471 A*  
E. H. Dyer; M. S. Grady; L. M. Michael II; T. Payner; J. Slotkin

008 Goodman Oral Board Review  
*Location: W471 B*  
J. Harrop; R. Komotar; T. Leipzig; A. Levi; R. Spinner

9:45-10:45 a.m.  
**Beverage Break**  
*Location: Outside W178 A, W184 D and W470 B*

12-1 p.m.  
**Practical Clinic Lunch**  
*Location: W185 ABCD*  
For medical attendees participating in an All-day Practical Clinic or in a morning AND afternoon Practical Clinic only. Concessions will be available to purchase.
Afternoon Sessions

1-4 p.m.  
Neurosurgeon-scientist Career Development Course  
Location: Mayfair; Sheraton Grand Chicago  
S. Amin-Hanjani; S. Korn; D. Limbrick Jr.; G. Zipfel

1-5 p.m.  
Leadership Development Course – Mid-career  
Location: Michigan B; Sheraton Grand Chicago  
A. Abosch; H. Batjer; J. Bean; M. Berger;  
W. Couldwell; R. Harbaugh; R. Lonser; F. Meyer;  
D. Quest; J. Robertson; J. Rutka; C. Shaffrey; A. Valadka

1-5 p.m.  
Leadership Development Course – Senior Resident  
Location: Michigan A; Sheraton Grand Chicago  
F. Barker; E. Benzel; E. Bisson; F. Boop; J. Cheng;  
C. Heilman; R. Hurlbert; A. Quinones-Hinojosa;  
G. Rao; A. Scarrow; N. Selden; K. Tomei

1-5 p.m.  
Afternoon Practical Clinics

009 RHOTON LECTURE SERIES:  
3D Anatomy and Approaches to the Posterior Fossa and Posterior Skull Base  
Location: W178 A  
A. Cohen-Gadol; E. de Oliveira; J. Fernandez-Miranda;  
P. Gardner; P. Rubino; J. Sorenson

010 Alternatives to Transpedicular Approaches to Achieving Arthrodesis  
Location: W183 B  
E. Benzel; C. Branch Jr.; B. Frankel; N. Malhotra;  
A. Ozturk; M. Steinmetz; J. Voyadzis

011 Comprehensive Interventional Facial Pain Management  
Location: W183 C  
D. Kondziolka; J. Miller; R. Sekula Jr.; A. Viswanathan  
Supported by an educational grant from Cosman Medical.
012 Cranio-cervical and C1C2 Stabilization Techniques, Surgical Approaches
*Location: W186 ABC*
R. Anderson; D. Brockmeyer; A. Dailey; H. Deutsch; A. Falavigna; W. Gluf; M. Kaiser; N. Perin; C. Sansur; J. Uribe

013 Update on Tumors for the General Neurosurgeon II: Skull Base, Pediatric and Spine Tumors
*Location: W470 A*
M. Aghi; F. De Monte; I. Dunn; Z. Gokaslan; M. Link; I. Pollack; J. Raizer; T. Schwartz

014 Neurotrauma and Neurocritical Care for the Practicing Neurosurgeon: MOC Review and Update
*Location: W470 B*
P. Ball; W. Coplin; P. Hutchinson; J. Medow; D. Okonkwo; P. Raksin; A. Valadka; P. Villanueva

015 Practical and Technical Aspects of Transsphenoidal Surgery
*Location: W471 A*
G. Barkhoudarian; D. Baskin; A. Cohen-Gadol; J. Jane Jr.; A. Little; J. Liu; I. McCutcheon; T. Schwartz; J. Sheehan

016 Peripheral Nerve Injuries, Entrapments and Tumors: Examination and Evaluation
*Location: W471 B*
A. Hanna; K. Harbaugh; M. Hebert-Blouin; L. Jacques; R. Midha; V. Prabhu; R. Spinner; L. Yang; E. Zager

2:30-3:30 p.m.
**Beverage Break**
*Location: Outside W178 A, W184 D and W470 B*
Sunday, May 1

7:30 a.m.-4:30 p.m.
All-Day Practical Clinics

017 Current Treatments and Controversies in Traumatic Brain Injury
Location: W183 A
K. Gibbons; G. Hawryluk; J. Jallo; R. Kitagawa; J. Medow; D. Okonkwo; J. Slotkin; M. Stippler; S. Timmons; J. Zacko
Supported by an educational grant from Codman Neuro, a Johnson & Johnson Company.

018 Stereotactic and Functional Neurosurgery - Hands-on Workshop
Location: W187 ABC
A. Abosch; R. Gross; K. Holloway; W. Kasoff; D. Lobel; D. Curry; A. Machado; J. Miller; J. Neimat; S. Ojemann; F. Ponce; A. Viswanathan

019 CPT Coding Update with ICD-10 for Neurosurgeons: Coding Concepts by Case Example
Location: W470 B
P. Angevine; M. Caron; J. Cheng; A. Desai; R. Johnson II; S. Meyer; K. Pollock; J. Ratliff; D. Refai; C. Schirmer; L. Tumialan

7:30 a.m.-4:30 p.m.
International Symposium
Location: W180

7:30-7:35 a.m.
Introduction
J. Morcos; A. Nanda; M. Wang

Spine Session
Moderators: E. Benzel; P. Mummaneni; M. Wang

7:36-7:51 a.m.
Failed Back Syndrome
C. Yampolsky
Sunday, May 1

7:52-8:07 a.m.  
Dynamic Stabilization, Pearls and Pitfalls - Experience in Latin America  
B. Fernandez

8:08-8:23 a.m.  
Lumbar Spinal Stenosis  
M. Masini

8:24-8:39 a.m.  
Far Lateral Disc: Surgical Classification  
R. Burgos

8:40-8:55 a.m.  
Minimal Invasive Extraforaminal Lumbar Interbody Fusion  
A. Falavigna

8:56-9:11 a.m.  
Endoscopic Approaches in Lumbar Degenerative Diseases  
E. Osorio Fonseca

9:12-9:27 a.m.  
Anterior C1/2 Transarticular Screw Fixation  
A. Raco

9:28-9:43 a.m.  
Enhancing Patient Care: Introducing a Telepresence Robot to the Neurosurgery Ward, an Australian Experience  
M. McDonald

9:44-9:59 a.m.  
Beverage Break

9:59-10:23 a.m.  
Spine Panel/Case Discussions  
Tumor Session  
Moderators: L. Liau; A. Nanda; L. Sekhar

10:24-10:39 a.m.  
Is Aggressive Resection Beneficial in Malignant Gliomas?  
J. Rotta
10:40-10:55 a.m.
Management of Craniopharyngiomas
A. El Khamlichi

10:56-11:11 a.m.
Brain Metastases: Radiosurgery or Microsurgery? The Evidence
M. Izurieta-Ulloa

11:12-11:27 a.m.
Acoustic Neuromas: Surgical Techniques and Results
P. Ajler

11:28-11:43 a.m.
Non-Acoustic Schwannomas: Surgical Techniques and Results
R. Ramina

11:44-11:59 a.m.
Anterior Skull Base Lesions: Surgical Philosophy and Techniques
G. Guinto-Balanzar

12-12:15 p.m.
Endonasal Endoscopic Approaches: When do they Replace Open Approaches?
J. Landeiro

12:16-12:31 p.m.
Glomus Tumors: Secrets to Lowering Surgical Morbidity
L. Borba

12:32-1:17 p.m.
Lunch Break
Concessions will be available to purchase on Level 2.

1:18-1:41 p.m.
Tumor Panel/Case Discussions
Sunday, May 1

Cerebrovascular Session
Moderators: R. Heros; G. Lanzino; J. Morcos

1:42-1:57 p.m.
AVM Surgery: What Have I Learned in 4 Decades?
E. de Oliveira

1:58-2:13 p.m.
Bypass Surgery for Ischemia: Status in 2016
P. Vajkoczy

2:14-2:29 p.m.
Cranial Dural AV Fistulae: When to Operate, When to Embolize, When to Observe
L. Regli

2:30-2:45 p.m.
Microvascular Decompression: Techniques and Results
R. Revuelta Gutierrez

2:46-3:01 p.m.
Critique of ARUBA AVM Study
S. Amin-Hanjani

3:02-3:17 p.m.
Surgery for Paraclinoid Aneurysms in the Era of Flow Diverters
P. Rubino

3:18-3:33 p.m.
Complications in Aneurysm Surgery
F. Papalini

3:34-3:49 p.m.
Role of Aneurysm Clipping in Uruguay
E. Spagnuolo

3:50-4:04 p.m.
Beverage Break

4:04-4:30 p.m.
Cerebrovascular Panel / Case Discussions
7:30 a.m.-4:30 p.m.
Advanced Practice Providers
Plenary Session

Location: W175 C

Moderators: M. Langlois; C. Matthews

7:30-7:44 a.m.
AANS Board of Directors – Welcome/APPs in Neurosurgery
H. Batjer; F. Boop

7:45-8:44 a.m.
Update on Spine Trauma and Spinal Cord Injury
A. Levi

8:45-9:20 a.m.
ICD-10 and the Neurosurgical APP
K. Pollock

9:21-9:30 a.m.
516 Transitional Care Services: A Quality and Safety Process Improvement Program in Neurosurgery
F. Robertson

9:31-9:40 a.m.
517 Neurological Surgery Physician Assistant Fellowship Program
T. Origitano

9:41-9:46 a.m.
Question and Answer Session

9:47-10:01 a.m.
Beverage Break

10:02-11 a.m.
Cerebral Aneurysms and AVMs – Diagnosis and Treatment Options
A. Patel

11:01-11:59 a.m.
Endovascular Stroke Care – The Evolving Landscape
T. Leslie-Mazwi
Sunday, May 1

12:12-12:59 p.m.
Lunch Break

Concessions will be available to purchase on Level 2.

1-1:49 p.m.
Pain and Pain Management
S. Skukalek

1:50-2:39 p.m.
The Power of the Mind in Health and Healing
M. Rashidi

2:40-2:54 p.m.
Beverage Break

2:55 p.m.-3:54 p.m.
Update on Severe Traumatic Brain Injury
J. Ullman

3:55-4:04 p.m.
518 Prospective Outcomes Evaluation of a Novel Zero-Profile Device for Three- and Four-Level Anterior Cervical Discectomies and Fusion
E. Paschel

4:05-4:14 p.m.
519 Telemedicine in Neurosurgery: Welcome to the Future
M. Beare

4:15-4:30 p.m.
Question and Answer Session

7:30 a.m.-4:30 p.m.
SNS Chief Resident Course

Location: Sheraton Ballroom Salon III; Sheraton Grand Chicago
J. Bean; D. Benzil; R. Byrne; A. Cohen-Gadol; W. Couldwell; J. Golfinos; M. Link; J. Liu; J. Ratliff; J. Rosman; M. Shah; E. Smith; A. Stroink; R. Wohns

Supported by Carl Zeiss Meditec, Inc.
7:30-11:30 a.m.

Morning Practical Clinics

020 Basics of Spinal Stabilization - Advanced Practice Providers/Medical Students Residents
Location: W176 ABC
V. Chang; K. Das; V. Hillard; L. Holly; S. Khairi; N. Patel; N. Theodore

Supported by an educational grant from DePuy Synthes, companies of Johnson & Johnson.

021 Applications of Video and 3D Technology in Neurosurgery
Location: W178 A
J. Fernandez-Miranda; A. Grande; J. Liu; J. Sorenson

022 Nuts and Bolts of Posterior Fossa Surgery: How I Do It
Location: Skyline Ballroom, W375 E
W. Couldwell; M. Link; L. M. Michael II; B. Misra; A. Nanda; D. Prevedello; V. Seifert

023 Microsurgical Management of Intracranial Aneurysms: Site-specific Surgical Anatomy, Operation Intervention and Complication Management
Location: W474 AB
R. Dacey; A. Day; S. Giannotta; R. Replogle; B. Welch

024 Endoscopic Lumbar Spinal Surgery: Cadaveric Hands-on Course
Location: W183 C
C. Hofstetter; H. Jho; D. Laich; A. Telfeian; M. Wang; P. Witt

025 Pediatric Endoscopic Craniosynostosis Repair
Location: W184 ABCD
T. Hankinson; D. Jimenez; M. Proctor; M. Smyth

026 Update on the Management of Spine and Spinal Cord Injury
Location: W471 A
B. Aarabi; M. Fehlings; J. Harrop; D. Hoh; W. B. Jacobs; A. Levi; R. Reddy
9:15-10:15 a.m.  
**Beverage Break**  
*Location: Outside W178 A, W184 D, W470 B and Skyline Ballroom, 375 E*

11:30 a.m.-12:30 p.m.  
**Practical Clinic Lunch**  
*Location: W185 ABCD*  
For medical attendees participating in an all-day Practical Clinic or in a morning AND afternoon Practical Clinic only. Concessions will be available for purchase on level 2.

12:30-4:30 p.m.  
**Afternoon Practical Clinics**

**027 Update on Spinal Radiosurgery**  
*Location: W175 AB*  
L. Angelov; M. Bilsky; S. Chang; P. Gerszten; J. Sheehan; J. Weaver; K. Yao

**028 Brain Mapping and Awake Mapping Techniques**  
*Location: W176 ABC*  
N. Barbaro; G. Barnett; M. Berger; H. Duffau; K. Fountas; J. Gonzalez-Martinez; G. Grant; G. McKhann II; Z. Ram; F. Vale

**029 RHOTON LECTURE SERIES: 3D Anatomy and Approaches to the Supratentorial Area and Anterior Skull Base**  
*Location: W178 A*  
M. Baskaya; E. de Oliveira; J. Fernandez-Miranda; P. Rubino; J. Sorenson; U. Ture

**030 How to Tackle Difficult Cranial Cases: A Step-by-step 3D Case-based Presentation**  
*Location: Skyline Ballroom, W375 E*  
M. Lawton; B.G. Thompson Jr.; H. van Loveren
Sunday, May 1

031 State-of-the-Art: Cranial Endoscopy
Location: W183 B
A. Cohen; I. Dunn; J. Engh; J. A. Grotenhuis; D. Guillaume; C. Heilman; T. Herrada-Pineda; R. Rehder; H. Schroeder; T. Vogel

032 Thoraco-Lumbo Sacral Alignment: Indications, Techniques, and Case Discussions
Location: W186 ABC
D. Chou; D. Coric; R. Haid Jr.; P. Mummaneni; P. Park; C. Shaffrey; J. Smith; J. Uribe; M. Wang

033 Neurosurgical Care of Athletes - Concussion, Spine, Peripheral Nerve and Return to Play
Location: W471 A
J. Bailes; A. Sills; G. Solomon; R. Spinner; N. Theodore; A. Valadka

Please Note: All abstracts are published as submitted by their authors. The AANS is unable to make any change to the abstracts.

1-4:30 p.m.
Young Neurosurgeons Research Forum

Location: W470 A
M. Ivan; D. Samson; K. Tomei; S. Wolfe

1-1:02 p.m.
Introduction of Osler Lecture
K. Tomei

1:03-1:30 p.m.
Osler Lecture
We’re Not Treating the Measles Here: Neurosurgeons, Morbidity and Mortality
D. Samson
1:31-1:40 p.m.  
NREF Medical Student Summer Research Fellowship Award  
500 Targeting Tauopathy by Limiting Neurotrauma Related Axonal Damage  
B. Lucke Wold

1:41-1:50 p.m.  
501 Inspired by Harvey Cushing: The Illinois Neuropsychiatric Institute  
D. Birk

1:51-2 p.m.  
502 Blood-brain Barrier Disruption and Endothelial Cell Gene Expression after Experimental Subarachnoid Hemorrhage  
M. Tso

2:01-2:10 p.m.  
503 Rapid intraoperative molecular characterization of glioma  
G. Shankar

2:11-2:20 p.m.  
504 Quality of Life Outcomes Following Surgical Management of Coexistent Parkinson’s disease and Cervical Spondylotic Myelopathy  
J. Miller

2:21-2:30 p.m.  
505 The History of Therapeutic Hypothermia and its Use in Neurosurgery  
M. Bohl

2:31-2:40 p.m.  
506 A Systematic Review of Conduits used for Peripheral Nerve Regeneration  
T. Ramineni

2:41-2:50 p.m.  
507 Mid-Term Follow-up in a North American Cohort with Moyamoya Disease  
J. Caplan

*Based on self-reported data
2:51-3 p.m.
508 Glioma-infiltrating iAPCs mediate T cell recruitment to and activation in the tumor microenvironment
J. Antonios

3:11-3:20 p.m.
509 Use of Vancomycin Powder for Surgical Prophylaxis Following Craniotomy
A. Ho

3:21-3:30 p.m.
510 Replacing hand-injections with power-injections during neuroendovascular procedures reduces radiation dosage by 3-fold to physicians/trainees
J. Liew

3:31-3:40 p.m.
511 Acid Ceramidase Inhibitors: A De Novo Drug Target and a New Class of Drug Capable of Killing Glioblastoma Cancer Stem Cells With High Efficiency
N. Doan

3:41-3:50 p.m.
512 Tetanus-Diphtheria Recall Responses and Chemokine CCL3 Delivery Enhance Migration and Efficacy of Dendritic Cell Vaccines
K. Batich

3:51-4 p.m.
513 Across the spectrum of total lumbar disk replacement: 12 yrs experience in Calgary
M. Yang

4:01-4:10 p.m.
514 Reoperation and Readmission after Clipping of Unruptured Intracranial Aneurysms: A National Surgical Quality Improvement Program Analysis
H. Dasenbrock
Sunday, May 1

4:11-4:20 p.m.  
515 Effects of Physical Exercise Following Ischemic Stroke: Too Early is Not a Good Thing  
H. Khan

4:21-4:30 p.m.  
Presentation of Quest Award Winners  
Introduced By: K. Tomei

2-3 p.m.  
Beverage Break  
*Location: Outside W178 A, W184 D, W470 B and Skyline Ballroom, 375 E*

5-6:30 p.m.  
**AANS Opening Ceremonies**  
*Location: Skyline Ballroom, W375 ABC*  
Moderator: S. Gupta

5-5:06 p.m.  
**Welcome**  
H. Batjer

5:07-5:11 p.m.  
**Historical Vignette on Chicago Sports**

5:12-5:14 p.m.  
**Introduction of Panelists**

5:15-6:30 p.m.  
**Panel Discussion**  
Moderator: S. Gupta  
Panelists: P. Chiarelli; W. Koroshetz; G. Ling; R. Lonser; J. Miller; M. Singletary
7-9 p.m.
AANS Opening Reception

Location: Soldier Field; 1410 Museum Campus Dr, Chicago, IL

Bussing will be provided from McCormick Place West Convention Center and all official AANS Hotels from 6:30-9:30 p.m.

Ticket Required: $250

One ticket is included in attendee, spouse and guest registrations.
Monday, May 2

7-9 a.m.

Breakfast Seminars

Ticket Required: $100

Breakfast will be available in the room of the session for Breakfast Seminar attendees.

101 How to Write and Publish a Successful Neurosurgical Manuscript
Location: W183 B
E. Benzel; A. Nanda; M. N. Pamir; J. Rutka

102 Chiari Malformations: Diagnosis, Treatments and Failures
Location: W471 A
U. Batzdorf; D. Brockmeyer; G. Guinto-Balanzar; M. Iantosca; D. Limbrick Jr.; K. Muraszko

103 Update on Lumbar Stenosis
Location: W187 B
M. Hadley; R. Isaacs; J. O'Toole; D. Sciubba; C. Thome

104 Intracranial Endoscopy
Location: W185 AB
A. Cohen; J. Drake; J. Engh; D. Jimenez; H. Schroeder

105 Management of Acute Spinal Cord Injury
Location: W183 C
R. Anderson; M. Fehlings; G. Hawryluk; E. Tsai; J. Zacko

106 Pituitary Tumors
Location: W470 A
M. Aghi; W. Couldwell; N. Oyesiku; D. Prevedello

107 New Innovations in Epilepsy Surgery
Location: W176 C
P. D. Adelson; N. Barbaro; R. Gross; M. Smyth

108 Endovascular vs. Microsurgical Techniques for the Optimal Treatment of Intracranial Aneurysms
Location: W175 C
R. Armonda; A. Arthur; C. M. Cawley; D. Hasan; J. Morcos; F. Papalini
109 Cavernous Malformation: Current Controversies in Management  
*Location: W175 A*
M. Gunel; M. Lawton; R. M. Scott; R. Spetzler; G. Steinberg

110 Minimally Invasive Spinal Neurosurgery: Indications, Techniques and Complications  
*Location: W470 B*
C. Branch Jr.; R. Fessler; K. Foley; W. Taylor; L. Tumialan

111 How I Do It: Acoustic Tumors  
*Location: W176 A*
F. Barker II; M. Link; L. D. Lunsford; R. Ramina; M. Schwartz

112 Controversies in the Management of Intracerebral Hematomas  
*Location: W185 CD*
E. S. Connolly Jr.; N. Martin; A. Mendelow; R. Thompson

113 Wilder Penfield and the Mapping of Mid century Neurosurgery: Neurosurgery Becomes Truly Modern  
*Location: W177*
S. Greenblatt; M. Preul; C. Sloffer

114 Contemporary Management for Adult Hydrocephalus  
*Location: W179 B*
M. Johnson; P. Klinge; M. Luciano; G. McKhann II; J. White

115 Management of Spinal Axis Trauma  
*Location: W186 C*
S. Casha; S. Dhall; S. Lew; D. Lu; C. Sansur; G. Trost

116 Attaining a Solid Fusion: Evidence Review and Suggestions for Success  
*Location: W187 C*
M. Abdulhak; J. Cheng; A. Levi; N. Theodore
117 Getting the Most out of Your Residency  
Location: W178 B  
L. Chin; A. Ganju; M. Howard III; N. Selden; B. G. Thompson Jr.

118 Functional Mapping of the Cerebral Cortex: Advantages and Limitations  
Location: W180  
R. Byrne; E. Chang; I. Germano; T. Kumabe; D. Silbergeld

119 Malignant Brain Tumors: State-of-the-art Treatment  
Location: W187 A  
G. Dunn; P. Fecci; L. Liau; J. Piepmeier; C. Watts; G. Woodworth

120 Cerebral Venous System: Surgical Considerations  
Location: W471 B  
O. Al-Mefty; A. Asthagiri; T. Klic; C. Sen; J. Sorenson

121 Becoming an Exceptional Advanced Practice Provider in Neurosurgery - Pearls from Your Peers  
Location: W186 A  
I. Kureshi; M. Langlois; C. Matthews; D. Melzack

122 Update on Rx of Nerve Tumors/MPNST/Peripheral Nerve Spinal Tumors  
Location: W175 B  
K. Harbaugh; M. Kliot; R. Midha; R. Spinner

123 Humanitarian Neurosurgery  
Location: W183 A  
M. Bagan; R. Dempsey; D. Ellegala; P. Nakaji; J. Rock

124 Measuring Outcomes and Safety in Neurosurgery  
Location: W178 A  
A. Boulos; M. Bydon; P. Camarata; J. Slotkin
Monday, May 2

125 Management of Cranial Incidental Imaging Findings
*Location: W179 A*
S. Amin-Hanjani; M. Berger; S. Haines; S. Kuroda; C. Maher

**9 a.m.-4:15 p.m.**
*AANS Exhibit Hall*
*Location: Hall F1*

**9-9:45 a.m.**
*Beverage Break in the AANS Exhibit Hall*
*Location: Hall F1*

**9:35-9:45 a.m.**
*Historical Vignette on Chicago Neurosurgery*
*Location: Skyline Ballroom, W375 ABC*

**9:45 a.m.-1 p.m.**
*Plenary Session I*
*Location: Skyline Ballroom, W375 ABC*
Moderators: R. Haid Jr.; R. Harbaugh

9:45-9:48 a.m.
*Welcome*
H. Batjer

9:49-9:51 a.m.
*Introduction to the Schneider Lecture*
A. Abosch

9:52-10:20 a.m.
*Richard C. Schneider Lecture*
Functional Neurosurgery: Electrons, Photons, Exoskeletons
A. Benabid

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Monday, May 2

10:21-10:26 a.m.
JNS Update
J. Rutka

10:27-10:37 a.m.
Columbia Charity Softball Award
600 Immune responses and clinical outcome after glioma-associated antigen vaccination in children with recurrent low-grade gliomas
I. Pollack

10:38-10:39 a.m.
Assessment of the Trial Design/Level of Evidence
M. Glantz

10:40-10:42 a.m.
Discussant
G. Grant

10:43-10:53 a.m.
601 “Awake” MIS TLIF without general anesthesia: Initial clinical and radiographic results with one-year follow up
M. Wang

10:54-10:55 a.m.
Assessment of the Trial Design/Level of Evidence
M. Glantz

10:56-10:58 a.m.
Discussant
K. Foley

10:59-11:09 a.m.
602 Stability of latency and topology in functional networks of the human neocortex
K. Zaghloul

11:10-11:11 a.m.
Assessment of the Trial Design/Level of Evidence
M. Glantz

11:12-11:14 a.m.
Discussant
N. Tandon
11:15-11:25 a.m.
603 Rehemorrhage and Recurrence Rates of Small ACOM Aneurysms post Embolization
N. Moore

11:26-11:27 a.m.
Assessment of the Trial Design/Level of Evidence
M. Glantz

11:28-11:30 a.m.
Discussant
A. Arthur

11:31-11:33 a.m.
Introduction to the Hunt-Wilson Lecture
R. Ellenbogen

11:34 a.m.-12:12 p.m.
Hunt-Wilson Lecture
Adjusting the Incentive System through Collaboration
P. Chiarelli

12:13-12:14 p.m.
Introduction of AANS Cushing Award for Technical Excellence and Innovation in Neurosurgery
H. Batjer

12:14-12:15 p.m.
AANS Cushing Award for Technical Excellence and Innovation in Neurosurgery
L. D. Lunsford

12:16-12:17 p.m.
Introduction of the Distinguished Service Award
H. Batjer

12:18-12:19 p.m.
Distinguished Service Award
B. Lopez Felix

12:20-12:23 p.m.
Tribute to Albert L. Rhoton Jr., MD, FAANS(L)

12:24-12:28 p.m.
Introduction to the Presidential Address
D. Quest
Monday, May 2

12:29-1 p.m.
AANS Presidential Address
Leading the Way
H. Batjer

1-2 p.m.
Lunch in the AANS Exhibit Hall
Location: Hall F1

1:10-1:55 p.m.
Lunch-and-learn Seminars
Non-CME Events

Global Spinal Alignment I: Lateral, Anterior, Posterior
Location: W470 B
R. Haid Jr.; C. Shaffrey; J. Uribe
Presented by NuVasive, Inc.

Leveraging Imaging Technology to Advance Cranial and Spinal Neurosurgery
Location: W179 B
R. Turner IV
Presented by Siemens Healthcare

Fluorescence Guided Surgery: A Review on Current and Future Technologies
Location: W179 A
Presented by Carl Zeiss Meditec, Inc.

In-depth Look at a Revolutionary Technology Navigated Transcranial Magnetic Stimulation (nTMS): Impact on Clinical Neurosurgery Practice and Outcomes
Location: W178 A
S. Krieg; B. Meyer; T. Picht; P. Tarapore
Presented by Nexstim

How Expandable Technology Has Changed My Practice
Location: W471 A
K. Abbed; F. LaMarca
Presented by Globus Medical, Inc.
The Value of Navigation in Minimally Invasive Neurosurgery
Location: W470 A
J. Mobasser
Presented by Medtronic

1:10-2 p.m.
Neurosurgery “In Press”: Latest Results of Clinical Trials in Neurosurgery and Allied Fields
Location: W178 B
A. Abosch; S. Amin-Hanjani; F. Barker II; D. Cahill; Z. Ghogawala; U. Samadani

1:15-2:45 p.m.
Advanced Practice Provider Luncheon
Location: CC10, Jackson Park AB; Hyatt Regency McCormick Place
Advances of Neurologic Music Therapy for Patients with Brain Injuries
B. Harris; M. Langlois; C. Matthews
Ticket Required: $25

2-3:30 p.m.
3D Session
Location: Skyline Ballroom, W375 E
Operative Nuances I: Tackling Challenging Cases 3D Video Presentation
F. Boop; A. Cohen-Gadol; W. Couldwell; J. Fernandez-Miranda; P. Gardner
Monday, May 2

2-5:30 p.m.

Scientific Session I: Tumor

Location: W183 B
Moderators: B.Nahed; G. Zada

2-2:29 p.m.
Ronald L. Bittner Lecture
Heterogeneity Through Space and Time Drive the Clinical Behaviors of Childhood Posterior Fossa Tumors
M. Taylor

2:30-2:39 p.m.
National Brain Tumor Society Mahaley Award
604 ReACT: A Randomized Phase II Study of Rindopepimut (CDX-I10) plus Bevacizumab in Relapsed Glioblastoma
J. Sampson

2:40-2:49 p.m.
Leksell Radiosurgery Award
605 Cognitive Decline with Whole Brain Radiotherapy after Radiosurgery for Metastases
A. Asher

2:50-2:59 p.m.
Young Neurosurgeons Abstract Award
606 Activated Wnt signaling for the therapeutic targeting of treatment-refractory medulloblastoma stem cells
B. Manoranjan

3-3:09 p.m.
607 Intravenous Toca 511 Delivery Leads to Viral DNA in Resected High Grade Glioma (HGG)
S. Kalkanis
3:10-3:19 p.m.
**Brainlab Community Neurosurgery Award**
608 Clinical profiles of 132 cases of intracranial germ cell tumors of the iGCT Consortium
H. Takami

3:20-3:29 p.m.
609 Toca 511 Followed by Toca FC in Subjects with Recurrent High Grade Glioma (HGG)
M. Aghi

3:30-4 p.m.
**Beverage Break in the AANS Exhibit Hall**
*Location: Hall F1*

4:01-4:10 p.m.
610 Single cell analysis of long non-coding RNAs in the developing human neocortex and brain tumors
D. Lim

4:11-4:20 p.m.
611 Cortical plasticity of motor-eloquent areas measured by navigated transcranial magnetic stimulation in glioma patients
S. Krieg

4:21-4:30 p.m.
612 Biological subtypes and survival outcomes in breast cancer patients with brain metastases: a 406 patients clinical series
D. Bastos

4:31-4:40 p.m.
613 Galectin-3 mediates glioma-induced immunosuppression through expansion of regulatory T cells
L. Ampie

4:41-4:50 p.m.
614 Delayed Clearance of Neural Stem Cells Enhances Migration to Glioma Xenografts After Intranasal Delivery
D. Spencer
4:51-5 p.m.
615 Re-evaluation of the relevance of Simpson grading system and recurrence-free survival after surgery for World Health Organization grade I meningiomas
A. Nanda

5:01-5:10 p.m.
616 An extent of resection threshold for seizure freedom in low grade glioma patients
D. Xu

5:11-5:20 p.m.
617 Use of an anti-viral drug, Ribavirin, as an anti-glioblastoma therapeutic
F. Volpin

5:21-5:30 p.m.
618 Systematical analysis of the value of 5-ALA induced fluorescence in brain metastases: experience in 98 patients
G. Widhalm

2-5:30 p.m.
Scientific Session II: Spine

Location: W184 ABCD
Moderators: D. K. Hamilton; C. Sansur
Supported by an educational grant from DePuy Synthes, companies of Johnson & Johnson.

2:2-2:09 p.m.
619 Development of a Preoperative Predictive Model for Intra- or Peri-operative Major Complications with High Accuracy Validated with 558 ASD Patients
C. Ames

2:10-2:19 p.m.
620 Predictive Value of Intraoperative Neurophysiological Monitoring in Patients with Normal and Abnormal Baseline Recordings during Spine Surgery
G. Gandhoke
2:20-2:29 p.m.  
Stewart B. Dunsker, MD Award  
621 Manual Muscle Test at C5 palsy onset predicts the likelihood of and time to C5 palsy resolution  
M. Bydon

2:30-2:39 p.m.  
622 A Multicenter Prospective Randomized Controlled Clinical Trial to Evaluate the Effectiveness and Safety of a Standalone Percutaneous Interspinous Spacer Versus Decompressive Surgery in Degenerative Lumbar Spinal Stenosis with Neurogenic Intermittent Claud  
B. Meyer

2:40-2:49 p.m.  
623 Clinical Outcomes Following Surgical Management of Coexistent Parkinson’s Disease and Cervical Spondylotic Myelopathy  
J. Miller

2:50-2:59 p.m.  
624 Risk factors for 30-day re-operation and 90-day readmission: Analysis from the National Neurosurgery Quality and Outcomes Database Lumbar Spine Registry  
T. Vogel

3-3:09 p.m.  
625 Survival and Clinical Outcomes in Patients with Metastatic Epidural Spinal Cord Compression: Results from the AOSpine Prospective Multi-Centre Study of 142 patients  
M. Fehlings

3:10-3:19 p.m.  
626 Impact of Functional Status of Patient on Satisfaction with Surgery 12-months after Elective Spine Surgery for Lumbar Degenerative Disease  
S. Chotai
Monday, May 2

3:20-3:29 p.m.
627 Understanding effect of minimally invasive fusion technologies on outcomes after elective lumbar fusion: Analysis of N2QOD registry
S. Parker

3:30-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:30 p.m.
Sonntag Lecture
The World is Not Flat - Neither Is Your Spine
C. Branch Jr.

4:31-4:40 p.m.
628 Postoperative Anterior Cervical Infection: A Multi-institutional Retrospective Database Review of the Incidence and Management
G. Ghobrial

4:41-4:50 p.m.
629 Spinal Fusion for Scheuermann’s Kyphosis in Adolescents: An Analysis of the Kids’ Inpatient Database
K. Rumalla

4:51-5 p.m.
630 Predictors of Quality of Life Outcomes Following Kyphoplasty and Vertebroplasty
J. Jones

5:01-5:10 p.m.
631 Comparison of early and late complications after minimally invasive and hybrid adult spinal deformity surgery
A. Kanter

5:11-5:20 p.m.
632 Predictive Model for Return to Work after Elective Surgery for Lumbar Degenerative Disease: An Analysis from National Neurosurgery Quality Outcomes Database Registry
S. Chotai
5:21-5:30 p.m.
633 Diffusion tensor imaging in a large series of CSM patients correlates with long-term functional outcome.
H. Soliman

2-5:30 p.m.

Scientific Session III: Stereotactic and Functional Surgery

Location: W185 CD
Moderators: J. Pilitsis; F. Ponce

2-2:09 p.m.
634 Combining Biological Therapy with Deep Brain Stimulation for the Treatment of Parkinson’s Disease
C. van Horne

2:10-2:19 p.m.
635 Cortical-basal ganglia loop interactions during movement revealed through intracranial recordings in Parkinson’s disease subjects
A. Alhourani

2:20-2:29 p.m.
Philip L. Gildenberg, MD Resident Award
636 Producing Artificial Sensation through Cortical Stimulation in Humans
D. Kramer

2:30-2:39 p.m.
637 Multimodal use of MEG in epilepsy surgery: slow waves, spikes, and functional connectivity
J. Ralston

2:40-2:49 p.m.
638 GABA-A Receptor α1 and α3 Subunit Density and Cellular Localization in the Human Parkinsonian Brain
J. Diamond
2:50-2:59 p.m.
639 A Method for Connectivity Guided Targeting of the Subcallosal Cingulate Region
E. Tsolaki

3-3:09 p.m.
640 Creation of a Novel Ultrahigh-Resolution 3-D Atlas of the Basal Ganglia and Thalamus for Neurosurgery
A. Sadikot

3:10-3:19 p.m.
641 Hippocampal functional connectivity disruption in Mesial Temporal Lobe Epilepsy captured using Magnetoencephalography
A. Alhourani

3:20-3:29 p.m.
642 Lactate Dehydrogenase Marks a Metabolic Switch in Epileptic Neurons
R. Murayi

3:30 p.m.-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:10 p.m.
643 Mapping Synaptic Pathology and Aberrant Mesoscale Connectivity in Human Epileptic Hippocampus
R. Richardson

4:11-4:20 p.m.
644 Evidence for Interregional Oscillatory Phase Relationships Mediating Seizure Dynamics: Towards Novel Anti-epileptic Stimulation Therapies
T. Wozny

4:21-4:30 p.m.
645 Volumetric Trends Associated with MRI-Guided Laser Induced Thermal Therapy (LITT) in Mesial Temporal Sclerosis
A. Carminucci

Monday, May 2

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4:31-4:40 p.m.
646 Modeling Healthcare Expenditures associated with Implantable Neurostimulation for Headache Disorders
S. Farber

4:41-4:50 p.m.
647 Electromagnetic tracking of severe tremor motion kinetics
S. Oliveria

4:51-5 p.m.
648 Tractography-defined VIM nucleus: comparison of deterministic and probabilistic methods
F. Sammartino

5:01-5:10 p.m.
649 Melodic Music Enhances Synchronization of Neuronal Firing Patterns in the Subthalamic Nucleus During Awake DBS Surgery in a Patient with Parkinson’s Disease
R. Achey

5:11-5:20 p.m.
650 Interstitial directional high intensity ultrasound in a 6-hydroxydopamine lesioned rodent model of Parkinson’s disease
L. Gee

5:21-5:30 p.m.
651 The iSys1® Roboter Reduces Entry and Target Point Errors in Navigation-Guided Frameless Stereotactic Implantation of Depth Electrodes in Patients with Therapy-Refractory Epilepsy
C. Dorfer
2-5:30 p.m.

**Scientific Session IV: Pediatrics**

*Location: W185 AB*

*Moderators: R. Bollo; D. Gonda; J. Johnston Jr.; E. Thompson; D. Wrubel*

2-2:03 p.m.

652 Long Term Hemorrhagic Risk in Pediatric Arteriovenous Malformation (AVM) Patients
W. Yang

2:04-2:07 p.m.

653 Verbal and Visual Memory Functioning In Children with Chiari Type I
M. Lacy

2:08-2:11 p.m.

Question and Answer Session

2:12-2:15 p.m.

654 Differential contributions of syrinx size and tonsil position to presence and magnitude of scoliosis in Chiari I malformation
J. Strahle

2:16-2:19 p.m.

655 Comparison of Posterior Fossa Volumes and Clinical Outcomes After Chiari I Decompression
S. Khalsa

2:20-2:23 p.m.

Question and Answer Session

2:24-2:27 p.m.

656 Long-term Reliability of Neuroendoscopic Aqueductoplasty in Idiopathic Aqueductal Stenosis related Hydrocephalus
S. Marx

2:28-2:31 p.m.

657 The Thoracolumbar Injury Classification and Severity Score in Children: A Validity Study
R. Dawkins

2:32-2:35 p.m.

Question and Answer Session
2:36-2:38 p.m.
Announcement of the Schulman and Hydrocephalus Awards
S. Gaskill

2:39-2:42 p.m.
Introduction of Matson Lecture
S. Gaskill

2:43-3:29 p.m.
Donald D. Matson Lecture
Stem Cell Therapy for Pediatric Disorders
C. Borlongan

3:30-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:04 p.m.
658 Stereotactic Laser Ablation in the Management of Lesional Frontal Lobe Epilepsy in Children
M. Lee

4:05-4:08 p.m.
659 Altered glial precursor cell (GPC) specification leads to neonatal hydrocephalus in a Bardet-Biedel Syndrome (Bbs1) knockout mouse model.
S. Shah

4:09-4:12 p.m.
Question and Answer Session

4:13-4:16 p.m.
660 The Effect of the Xiao Procedure on Bladder Volume and Quality of Life: Results of a RCT
G. Tuite Jr.

4:17-4:20 p.m.
661 In Vitro Analysis of Tenascin-C Expression in Pediatric Brainstem Glioma
A. Saratsis
Monday, May 2

4:21-4:24 p.m.
Question and Answer Session

4:25-5 p.m.
End of Career Talk
R. M. Scott

5:01-5:11 p.m.
Face-off: Cost-effectiveness of Baclofen Pump vs. Selective Dorsal Rhizotomy: The Case for Baclofen Pump
P. Aldana

5:12-5:22 p.m.
Face-off: Cost-effectiveness of Baclofen Pump vs. Selective Dorsal Rhizotomy: The Case for Selective Dorsal Rhizotomy
S. Lam

5:23-5:30 p.m.
Question and Answer Session

2-5:30 p.m.
Scientific Session V: Cerebrovascular

Location: W183 C
Moderators: R. W. Crowley; S. Tjoumakaris

2-2:09 p.m.
662 Intra-arterial Chemotherapy for Retinoblastoma: Safety, Efficacy, Technical Nuances, and Lessons Learnt from 450 Consecutive Cases
P. Jabbour

2:10-2:19 p.m.
663 Location-based algorithmic approach for surgical treatment of complex middle cerebral artery aneurysms
A. Meybodi

2:20-2:29 p.m.
664 Pituitary dysfunction after aneurysmal subarachnoid hemorrhage: A systematic review and meta-analysis
A. Can
2:30-2:39 p.m.
665 Thrombotic complications during aneurysm coiling: Use and indications of Abciximab
R. Martinez-Perez

2:40-2:49 p.m.
666 Long Term Outcome of Moyamoya Patients Post Revascularization Surgery
M. Teo

2:50-2:51 p.m.
Introduction of Yasargil Lecture
S. Lavine

2:52-3:19 p.m.
Yasargil Lecture
Disappearance of the Learning Curve for Vascular Neurosurgery
S. Giannotta

3:20-3:29 p.m.
667 Clipping of Previously Coiled Cerebral Aneurysms: Efficacy, Safety and Predictors in a Cohort of 111 Patients
P. Jabbour

3:30-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:10 p.m.
668 A Prospective Pilot Study of Intraparenchymal & Intravenous Cerebral Pressure Assessment During Venous Sinus Stenting
R. Starke

4:11-4:20 p.m.
669 Balloon Test Occlusion of the ICA: Venous Phase Delay Does Not Predict SPECT Result
S. Sur
4:21-4:30 p.m.
670 Clinical Factors Affecting Cognitive Function after Carotid Revascularization: A Multivariate Analysis
N. Akioka

4:31-5 p.m.
Debate: Interpretation of BRAT results
R. Spetzler; A. Molyneux

5:01-5:10 p.m.
671 Complications in Endovascular Neurosurgery: Critical Analysis and Classification
V. Ravindra

5:11-5:20 p.m.
672 Cavernous Sinus Dural Arteriovenous Fistulas: The Role of Stereotactic Radiosurgery
S. Chen

5:21-5:30 p.m.
673 Impact of Surgeon Experience and Timing of Intervention Among 454 Consecutively Treated Brainstem Cavernous Malformations
H. Zaidi

2-5:30 p.m.

Scientific Session VI: Neurotrauma

Location: W183 A
Moderators: K. Beauchamp; U. Samadani

Supported by an educational grant from Codman Neuro, a Johnson & Johnson Company.

2-2:19 p.m.
674 Surgery within the Context of Global Health: The World Health Organization’s Critical Role
W. Johnson
2:20-2:29 p.m.
**Depuy Synthes Spinal Cord Injury Award**
675 Cx43 function blocking antibody improves outcome and reduces secondary expansion in traumatic spinal cord injury (SCI).
A. Maknojia

2:30-2:39 p.m.
**Depuy Synthes Resident Craniofacial Award**
676 Timing of Cranioplasty: A 10 Year Single Center Analysis of 754 patients
R. Morton

2:40-2:49 p.m.
677 Anterior Surgery of hard and soft Cervical disc
M. Mohamed

2:50-2:59 p.m.
678 Treatment with N-acetyl-seryl-aspartyl-lysyl-proline Improves Functional Recovery in Rats after Traumatic Brain Injury
A. Mahmood

3-3:09 p.m.
679 Potential Use of an Artificial Spinal Cord in the Treatment of Spinal Cord Injury
A. Mazhari

3:10-3:19 p.m.
680 Intramedullary lesion length on MRI is a predictor of outcome in cervical spinal cord injury
B. Aarabi

3:20-3:29 p.m.
681 Concussion symptomatology, symptom resolution time, and return to play time in youth, high school, and college American football athletes
S. Zuckerman

3:30-4 p.m.
**Beverage Break in the AANS Exhibit Hall**
*Location: Hall F1*
Monday, May 2

4:01-4:10 p.m.
682 Early Venous Thromboembolism Chemoprophylaxis in Combat Related Penetrating Brain Injury
R. M. Meyer IV

4:11-4:20 p.m.
683 CSF HMGB1 Level as a Potential Predictive and Prognostic Biomarker for Neurosurgery Patients with Ventricular Drain
N. Mehan

4:21-4:30 p.m.
684 Serum Procalcitonin Level and Infection in Neurosurgical Intensive Care Unit (NICU) Patients
L. Rotman

4:31-4:40 p.m.
685 Propensity Score Analysis of the Impact of Decompressive Craniectomy on Outcomes Following Traumatic Brain Injury
V. Rajajee

4:41-4:50 p.m.
686 Blood alcohol level does not affect coagulopathy measured via thromboelastography in the setting of traumatic intracranial hemorrhage
A. Rao

4:51-5 p.m.
687 The Negative Impact of Anemia on Outcome from Traumatic Brain Injury
S. Martin

5:01-5:30 p.m.
BU CTE Study
TBA
2-5:30 p.m.
**Scientific Session VII: Socioeconomic**

*Location: W187 B*

*Moderators: M. Babu; B. Nahed*

2-2:28 p.m.  
**Neurosurgical Education: Making Omelets without Breaking Eggs**  
M. Babu

2:29-2:57 p.m.  
**Socioeconomic Status, Health Outcomes and Measurement: Getting It Right**  
K. Blake

2:58-3:08 p.m.  
**Byron Cone Pevehouse Young Neurosurgeons Award**  
688 Does the Open Payments Database Provide Sunshine on Neurosurgery?  
M. Babu

3:09-3:19 p.m.  
**Journal Of Neuro-Oncology Award**  
689 FROM BENCH TO BEDSIDE: NIH FUNDING FOR NEUROSURGEONS FROM 1991-2015  
A. Jahangiri

3:20-3:30 p.m.  
**Robert Florin Resident Award**  
690 Association Between Baseline Affective Disorders and 30-Day Readmission Rates in Patients Undergoing Elective Spine Surgery  
O. Adogwa

3:30-4 p.m.  
**Beverage Break in the AANS Exhibit Hall**

*Location: Hall F1*
Monday, May 2

4:41-4:51 p.m.
691 Remote, Continuous Monitoring of Patient Mobility after Discharge: A Marker for 30-Day Readmission
T. Robison

4:11-4:21 p.m.
692 The Impact of Inter-Facility Transfers on Patient Outcomes for Surgically Managed Aneurysmal Subarachnoid Hemorrhage
B. McCutcheon

4:22-4:32 p.m.
693 Hospital Acquired Infection Reduction Using a Multidisciplinary, Data-Driven Approach
J. Knightly

4:33-4:43 p.m.
694 The Impact of Commercial Health Plan Prior Authorization Programs on the Utilization of Services for Low Back Pain
P. Park

4:44-4:54 p.m.
695 Effect of 90-day Complications on Cost-utility following Lumbar Decompression with and without Fusion for Degenerative Spine Disease
S. Parker

4:55-5:05 p.m.
696 Influence of Insurance Status on Survival of Adults with Glioblastoma Multiforme (GBM): A Population Based Study
X. Rong

5:06-5:16 p.m.
697 An Assessment of Data and Methodology of Online “Surgeon Scorecards”
L. Xu

5:17-5:27 p.m.
698 The Predictive Performance of the American College of Surgeons Universal Risk Calculator in Neurosurgical Patients
S. Vaziri
6:30-8:30 p.m.  
**Dinner Symposia**  
*Location: Sepia – 123 North Jefferson Street*

**SE129: Cutting Edge Stereotactic Radiosurgery**  
Ticket Required: $195  
M. Bilsky; S. Chao; S. Kalkanis; J. Markert Jr.; J. Sheehan  
Bussing will be provided from the Sheraton Grand Chicago Convention Entrance at 6:15 p.m.  
*Supported by an educational grant from Varian Medical Systems.*

6:30-9:30 p.m.  
**Annual AANS Section on the History of Neurological Surgery Dinner**  
*Location: University Club of Chicago’s Michigan Room – 76 East Monroe Street*

**Setti S. Rengachary, MD, Memorial Lecture**  
The Great Chicago Fire and the Myth of Mrs. O’Leary’s Cow  
R. Bales  
Ticket Required: $150  
No transportation provided

8-9:30 p.m.  
**AANS International Reception**  
*Location: Chicago Cultural Center’s Preston Bradley Hall – 78 East Washington Street*

All Attendees/Guests Must Reserve a Ticket in Advance.  
Ticket Required: Complimentary for International Attendees - $25 for U.S. or Canadian Attendees  
Bussing will be provided from Sheraton Grand Chicago Convention entrance from 7:45-9:45 p.m.
Tuesday, May 3

7-9 a.m.

**Breakfast Seminars**

Ticket Required: $100

Breakfast will be available in the room of the session for Breakfast Seminar attendees.

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201 **ABNS Board Preparation: What You Must Know**  
*Location: W178 A*  
J. Bruce; A. Cohen; R. Ellenbogen; D. Kondziolka

202 **Return-to-play After Sports Injury I: Concussion**  
*Location: W183 C*  
M. Krieger; M. Levy; M. Proctor; A. Sills

203 **Spasticity Management**  
*Location: W176 C*  
T. Bragg; P. Graupman; M. Healy; M Partington

204 **Surgical Treatment of Parkinson’s Disease**  
*Location: W186 A*  
R. Goodman; P. House J. Pilitsis

205 **Shoulder vs. Spine: Differentiating Shoulder and Cervical Spine Pathology**  
*Location: W185 AB*  
N. Brooks; R. Burgos; J. Burke; M. Smith; B. Subach; T. Witham

206 **If I Could Do That Case Over Again: Discussion of Complications of Spine Surgery**  
*Location: W179 B*  
P. Arnold; M. Kaiser; I. Kalfas; M. Masini; S. Neckrysh

207 **Intramedullary Spinal Cord Tumors**  
*Location: W470 B*  
L. Borges; G. Jallo; R. Lonser; P. McCormick
208 Management of Vasospasm
Location: W185 CD
R. Du; A. Dumont; B. Hoh; P. Le Roux; R. L. Macdonald; L. Quintana

209 Advanced Lateral Transpsoas MIS Techniques: Expanding LLIF Indications
Location: W187 A
A. Kanter; J. Liu; J. O’Toole; C. Prusmack; J. Uribe

210 Business of Neurosurgery II: Growth and Management of Neurosurgical Practices
Location: W178 B
C. Mazzola; T. Payner; C. Van Der Veer; C. Watridge

211 Neurosurgical Management of Intractable Pain
Location: W186 C
A. Raslan; K. Slavin; C. Yampolsky

212 Stem Cell Therapeutics in Neurosurgery
Location: W183 B
J. Boockvar; N. Boulis; B. Carter; A. Parr; N. Selden; G. Steinberg

213 Controversies in Cerebrovascular and Endovascular Neurosurgery
Location: W175 A
K. Cockroft; M. Lawton; E. Levy; E. Spagnuolo; E. Veznedaroglu

214 Beginning Your Academic Career: Answers to Your Questions
Location: W470 A
M. Baskaya; R. Dempsey; T. Hankinson; J. Leonard; C. Loftus; S. Robinson

215 The Spectrum of Adjuvant Therapy for Brain Tumors
Location: W175 C
R. Jensen; F. Lang Jr.; J. Markert Jr.; J. Sampson
216 Suprasellar and Juxtasellar Tumors: Complications and Avoidance  
*Location: W179 A*  
P. Ajler; K. Aziz; A. Dehdashti; P. Theodosopoulos; H. van Loveren

217 Management of Adult Scoliosis  
*Location: W471 B*  
P. Angevine; T. Koski; F. La Marca; C. Shaffrey; J. Uribe

218 New and Evolving Technologies for Minimally Invasive Lumbar Disc Surgery  
*Location: W187 B*  
C. Branch Jr.; D. Chou; J. Mobasser; P. Park; M. Wang

219 Cerebral Trauma: State-of-the-art Treatment  
*Location: W183 A*  
J. Medow; A. Rubiano; A. Valadka

220 Tumor-related Epilepsy  
*Location: W471 A*  
M. Berger; E. Chang; H. Duffau; J. Politsky; J. Schramm

221 Lumbar Spine Fusion Indications and Complications  
*Location: W180*  
B. Amin; J. Cheng; A. Dailey; J. O'Shea; T. Perilla Cepeda

222 Selecting Anterior Approaches for Cerebrovascular Surgery: From Eyebrow to OZ - Pros and Cons of Minimally Invasive Keyhole Approaches for Cerebrovascular Surgery  
*Location: W187 C*  
E. de Oliveira; J. Delashaw Jr.; P. Nakaji; L. Sekhar; R. Turner IV

223 Management of Pediatric Epilepsy  
*Location: W175 B*  
S. Bhatia; J. Blount; D. Curry; A. G. Fieggen
224 The Evolving Role of Molecular Classification in Treatment Planning for Childhood Brain Tumors

Location: W176 B
L. Goumnerova; J. Greenfield; I. Pollack; P. Storm; M. Taylor; J. Wisoff

225 Emerging Indications in Neuromodulation Surgery

Location: W176 A
K. Foote; R. Gross; A. Machado; J. Neimat; D. Roberts

9 a.m.-4:15 p.m.
AANS Exhibit Hall
Location: Hall F1

9-9:45 a.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

9:37-9:45 a.m.
Historical Vignette on Chicago Architecture

Location: Skyline Ballroom, W375 ABC

The following items will not be allowed in Plenary Session II and must be checked at Luggage Check near AANS Registration.

- Large bags including large tote bags, suitcases, roller bags, briefcases, laptop bags, backpacks and event bags
- Umbrellas
- Selfie sticks
- Weapons of any kind, including knives
- Pepper spray
- Air horns or noisemakers
9:45 a.m. - 1 p.m.

Plenary Session II

*Location: Skyline Ballroom W375 ABC*

*Moderators: A. Abosch; H. Batjer*

9:45-9:48 a.m.
**Introduction to the Kurze Lecture**
H. Batjer

9:49-10:29 a.m.
**Theodore Kurze Lecture**
The Journey from Process to Outcomes: Yesterday, Today, and Tomorrow
T. Nasca

10:30-10:36 a.m.
**Late Breaking Abstract Presentation**
746 Long Term Clinical and Radiographic Outcomes of an Artificial Cervical Disc Replacement at Two Levels: Results from a Level I Prospective Randomized Clinical Trial
T. Lanman

10:37-10:43
**Late Breaking Abstract Presentation**
747 Restoration of Reaching and Grasping in a Person with Chronic Tetraplegia through Brain-Controlled Muscle Stimulation
J. Miller

10:44-10:52 a.m.
700 SAFETY, TOLERABILITY, PHARMACOKINETICS AND EFFICACY OF INTRAVENTRICULAR SUSTAINED RELEASE NIMODIPINE (EG-1962) FOR SUBARACHNOID HEMORRHAGE
R. L. Macdonald

10:53-10:54 a.m.
**Assessment of the Trial Design/Level of Evidence**
F. Barker II

10:55-10:57 a.m.
**Discussant**
R. Tamargo
10:58-11 a.m.
Introduction of the International Lifetime Recognition Award
C. Loftus

11:01-11:03 a.m.
International Lifetime Recognition Award
E. Spagnuolo

11:04-11:14 a.m.
AANS Featured Speaker: International Lifetime Recognition Award Winner
E. Spagnuolo

11:15-11:23 a.m.
Stryker Neuro-Oncology Award
701 CMV-targeted Dendritic Cell Vaccines Increase Survival for Randomized Patients with Glioblastoma in Successive Trials
K. Batich

11:24-11:25 a.m.
Assessment of the Trial Design/Level of Evidence
F. Barker II

11:26-11:28 a.m.
Discussant
I. Parney

11:29-11:32 a.m.
SNS Update
R. Harbaugh

11:33-11:41 a.m.
Sanford J. Larson, MD, PHD, FAANS(L), Award
702 Incidence of Position Related Neuropraxia in 4489 Consecutive Patients Undergoing Spine Surgery. Role of SSEP Monitoring?
G. Gandhoke

11:42-11:43 a.m.
Assessment of the Trial Design/Level of Evidence - Slide
F. Barker II
11:44-11:46 a.m.  
**Discussant**  
A. Levi

11:47-11:50 a.m.  
**CNS Update**  
R. Lonser

11:51-11:53 a.m.  
**Introduction of the Cushing Medalist**  
H. Batjer

11:54-11:56 a.m.  
**Cushing Medalist**  
R. Dacey

11:57-11:59 a.m.  
**Introduction of the Cushing Orator**  
H. Batjer

12 – 1 p.m.  
**Cushing Orator**  
Invited Guest

1-2 p.m.  
**Lunch in the AANS Exhibit Hall**  
*Location: Hall F1*

1:10-1:55 p.m.  
**Lunch-and-learn Seminars**  

*Non-CME Events*

- Global Spinal Alignment II: Preoperative Planning and Intraoperative Assessment - The Methods to Achieve the Best Results  
  *Location: W178 A*  
  R. Haid Jr.; D. Okonkwo; C. Shaffrey  
  *Presented by NuVasive, Inc.*

- Novel, Expandable Spinal Restoration Technologies  
  *Location: W179 B*  
  S. Kunwar  
  *Presented by Benvenue Medical*
A New Treatment Option in Normal Pressure Hydrocephalus  
*Location: W180*  
M. Luciano  
*Presented by Codman Neuro, DePuy Synthes*

Expanding the Care Continuum with Access to Full-Body MRI  
*Location: W179 A*  
*Presented by Medtronic*

INVEST in ICH: A Randomized Controlled Trial for the Treatment of ICH with the Apollo™ System  
*Location: W178 B*  
R. Ryan; A. Spiotta  
*Presented by Penumbra, Inc.*

1:15-2:45 p.m.  
**Young Neurosurgeons Luncheon**  
*Location: Jackson Park ABC; Hyatt Regency McCormick Place*  
Ticket Required: $10  
Reflections on Resident Mentoring  
R. Heros  
*Supported by Arbor Pharmaceuticals, LLC.*

2-3:30 p.m.  
**3D Session**  
*Location: Skyline Ballroom, W375 E*  
Operative Nuances II: Complication Avoidance  
3D Video Presentation  
A. Cohen-Gadol; W. Couldwell; P. Gardner; M. Lawton; C. Maher; R. Spetzler
2-5:30 p.m.
AANS/CNS Cerebrovascular Section

Location: W183 A
Moderators: A. Carlson; R. James

2-2:05 p.m.
Introduction to the Donaghy Lecture
S. Lavine

2:06-2:35 p.m.
Raymond M. Donaghy Lecture
W. Couldwell

2:36-2:41 p.m.
Depuy Synthes Cerebrovascular Section
Resident/Fellow Award
735 Subarachnoid Hemorrhage Acutely
Induces Spreading Depolarizations and Cortical Infarction
B. Krueger

2:42-2:47 p.m.
AANS International Travel Scholarship
736 Intraventricular Transplantation of Autologous Bone Marrow Mesenchymal Stem Cell in Hemorrhagic Stroke
A. Fauzi

2:48-2:53 p.m.
737 Evolution of Treatment and a Detailed Analysis of Obliteration, Recurrence, and Clinical Outcomes in an Endovascular Library of 260 Dural Arteriovenous Fistulas
B. Gross

2:54-2:59 p.m.
738 Multistaged Volumetric Management of Large Arteriovenous Malformations
H. Kano

3-3:05 p.m.
739 The long-term outcome of 331 patients with moyamoya disease in a single center of China
Z. Jizong
3:06-3:16 p.m.  
Question and Answer Session

3:17-3:29 p.m.  
Technological innovations for Open Vascular Neurosurgery  
D. Langer

3:30-4 p.m.  
Beverage Break in the AANS Exhibit Hall  
Location: Hall F1

4:01-4:15 p.m.  
Evidence Based Medicine in Vascular Neurosurgery  
R. Harbaugh

4:16-4:21 p.m.  
740 Aneurysms with Persistent Filling after Failed Treatment with the Pipeline Embolization Device  
S. Tjoumakaris

4:22-4:27 p.m.  
741 Long-term persistent aneurysm patency after treatment with the pipeline embolization device  
V. Srinivasan

4:28-4:33 p.m.  
742 Patency of the Posterior Communicating Artery Following Treatment with the Pipeline Embolization Device  
P. Jabbour

4:34-4:39 p.m.  
743 Intracranial Hemorrhage After Glue Embolization of Cerebral Arteriovenous Malformations: A Systematic Review and Meta-Analysis  
H. Dasenbrock
Tuesday, May 3

4:40-4:45 p.m.
Louise Eisenhardt Traveling Scholarship
744 Changes in Pulsatility and Resistance Indices of Cerebral Arteriovenous Malformation Feeder Arteries after Embolization and Surgery
S. Shakur

4:46-4:58 p.m.
Question and Answer Session

4:59-5:30 p.m.
Business Meeting

2-5:30 p.m.

AANS/CNS Section On Disorders of the Spine and Peripheral Nerves – Peripheral Nerves Section Session

Location: W185 AB

Moderators: H. Gilmer; L. Jacques; E. Rizk; R. Spinner; L. Yang

2-2:02 p.m.
Introduction to the Kline Lecture
M. Hebert-Blouin

2:03-2:48 p.m.
Kline Lecture
All Roads Lead to Peripheral Nerve
R. Spinner

2:49-3:04 p.m.
New Techniques and Pearls: Imaging Lecture
M. Kliot

3:05-3:10 p.m.
Imaging Commentary
A. Filler

3:11-3:26 p.m.
New Techniques and Pearls: Tumor Lecture
A. Belzberg
3:27-3:32 p.m.
Tumor Commentary
R. Midha

3:33-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:16 p.m.
New Techniques and Pearls: Treatment of Peripheral Nerve Pain Lecture
K. Slavin

4:17-4:22 p.m.
Pain Commentary
L. Jacques

4:23-4:43 p.m.
Report from 2015 Kline Research Awardee
Z. Ali

4:44-4:52 p.m.
703 Orthoxenograft Rodent Model for Evaluation of Malignant Peripheral Nerve Sheath Tumors and Preliminary Results of Tumor Response to IL-13 Conjugated Liposomal Doxorubicin
R. Payne

4:53-5:01 p.m.
704 Deep Temporal Nerve Transfer for Facial Reanimation - A Cadaveric Dissection Study
W. Sivakumar

5:02-5:10 p.m.
705 Ultrasound Evaluation of Traumatic Peripheral Nerve Injuries
M. Kliot

5:11-5:19 p.m.
706 The Anconeus Epitrochlearis Muscle may Protect against Development of Cubital Tunnel Syndrome
T. Wilson
Tuesday, May 3

5:20-5:28 p.m.
707 Intraoperative Imaging in Traumatic Peripheral Nerve Lesions: Correlating Histologic Cross-Sections with High Resolution Ultrasound
S. Burks

2-5:30 p.m.
AANS/CNS Section on Stereotactic and Functional Surgery
Location: W183 C
Moderators: A. Abosch; K. Lee

2-2:03 p.m.
Introduction: Revolutionizing Neuroprosthetics
A. Abosch

2:04-2:19 p.m.
Transform DBS
E. Eskandar

2:20-2:35 p.m.
Untangling Brain Circuits in Mental Illness
E. Chang

2:36-2:51 p.m.
Intracortical Neuroprosthetics
J. Henderson

2:52-3:02 p.m.
Neurosurgical Face-off: Surgical Therapy for the Epilepsies Into the Future: Resection
D. Spencer

3:03-3:13 p.m.
Neurosurgical Face-off: Neurosurgical Face-off: Surgical Therapy for the Epilepsies Into the Future: Ablation
R. Gross

3:14-3:29 p.m.
Restoring Active Memory
A. Sharan
3:30-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:10 p.m.
708 An International, Randomized, Controlled Trial of Focused Ultrasound Thalamo to my for Essential Tremor
W. Elias

4:11-4:20 p.m.
709 Design and development of a novel, fast, extensive intraoperative registration technique of optical machine vision to pre-operative imaging for cranial and spinal neurosurgical procedures: clinical feasibility and comparison with existing neuronavigation
R. Jakubovic

4:21-4:30 p.m.
710 Cortical Networks High Frequency EEG Activity Patterns in Patients Undergoing Epilepsy Surgery
F. Hamzei-Sichani

4:31-4:40 p.m.
711 Circuit specific optogenetic neuromodulation for Parkinson’s disease
N. Patel

4:41-4:50 p.m.
712 Interhemispheric parietal connectivity is associated with improved functional recovery following MCA stroke in the cynomolgus macaque
D. Cook

4:51-5 p.m.
713 Gamma Knife radiosurgical capsulotomy for obsessive compulsive disorder
S. Peker
Tuesday, May 3

5:01-5:10 p.m.
714 Expression Levels of Cortical Genes are Associated with Seizure Outcome Following Temporal Lobectomy
J. Skoch

5:11-5:20 p.m.
715 Deep Brain Stimulation Targeting the Zona Incerta Modulates Eye Movements in Humans
O. Bangash

5:21-5:30 p.m.
716 The Effects of Mechanical and Thermal Stimuli on Local Field Potentials in Parkinson’s Disease Patients
J. Pilitsis

2-5:30 p.m.
AANS/CNS Section on Neurotrauma and Critical Care

Location: W184 ABCD

Moderators: O. Harris; S. Hoffer

Supported by an educational grant from Codman Neuro, a Johnson & Johnson Company.

2-2:04 p.m.
Introduction to the J. Douglas Miller Lecture
D. Okonkwo

2:05-2:34 p.m.
J. Douglas Miller Lecture
The Eye in TBI
J. Ghajar

2:35-2:38 p.m.
2016-17 Codman Award Winner Announcement
E. Tsai

2:39-2:49 p.m.
2015 Codman Neurotrauma Research Award Presentation
P. Koch
2:50-2:59 p.m.  
ThinkFirst Injury Prevention Award  
717 Transient Elevation of Brain Temperature Could Serve as a Surrogate Marker of Cortical Spreading Depolarization  
C. Li

3-3:09 p.m.  
718 Participation in pre-high school football and later life neurological, neuroradiological, and neuropsychological findings: A study of 45 retired NFL players  
S. Zuckerman

3:10-3:19 p.m.  
719 Serum biomarkers as predictor of long term outcome in severe traumatic brain injury  
A. Raheja

3:20-3:29 p.m.  
720 Beneficial Effect of Faster Cooling Elicited by Combination of TRPV1 Agonist (Dihydrocapsaicin) and Mild Physical Hypothermia in Ischemia/Reperfusion Injury  
K. Liu

3:30-4 p.m.  
Beverage Break in the AANS Exhibit Hall  
Location: Hall F1

4:01-4:03 p.m.  
Introduction to the Charles Tator Lecture  
J. Ullman

4:04-4:30 p.m.  
Charles Tator Lecture  
The Effects of Epidural Stimulation on Function and Health After Severe Spinal Cord Injury  
S. Harkema

4:31-4:40 p.m.  
721 Amyloid Deposition after TBI Correlates with Cognitive Deficits and Symptom Worsening  
J. Gatson
4:41-4:50 p.m.
722 Acute Effects of Human Protein S Administration after Traumatic Brain Injury in Mice
Q. Nguyen

4:51-5 p.m.
723 Using Diffusion Tensor Imaging as a Tool to Characterize Brainstem White Matter Track Injury
T. Williamson

5:01-5:10 p.m.
724 Efficacy of edaravone, a free radical scavenger, on early brain injury after experimental subarachnoid hemorrhage Early brain injury (EBI), which is consists of neuronal apoptosis and vasogenic edema has recently been recognized as an important factor affect M. Naraoka

5:11-5:20 p.m.
725 Early Trigeminal Nerve Stimulation Reduces Brain Edema and Lesion Volumes Following Traumatic Brain Injury
G. Britz

5:21-5:30 p.m.
745 Inhibitory mechanism of chronic subdural hematoma outer membrane growth
K. Osuka

2-5:30 p.m.
AANS/CNS Section On Tumors I
Location: W183 B
Moderators: R. Jensen; G. Zadeh

2-2:04 p.m.
Precision Medicine
G. Zadeh
2:05-2:21 p.m.
OMICS: Integrating into Clinical Practice
K. Aldape

2:22-2:38 p.m.
Can you “DIY” Large Scale Genomic Data Analysis
R. Verhaak

2:39-2:55 p.m.
Targetted Clinical Trials Design - iSPY
D. Berry

2:56-3:12 p.m.
Immunotherapy
A. Heimberger

3:13-3:29 p.m.
Tumor Board
K. Aldape; S. Chang; A. Heimberger; S. Kalkanis; R. Verhaak; G. Zadeh

3:30-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:10 p.m.
Ronald L. Bittner Award on Brain Tumor Research
726 IDH Mutant Gliomas Escape Natural Killer Cell Immune Surveillance Through Downregulation of NKG2D Ligands
C. Deibert

4:11-4:20 p.m.
Synthes Skull Base Award
727 A Prospective, Randomized Control Trial for Lumbar Drain Placement after Endoscopic Endonasal Skull Base Surgery
N. Zwagerman

4:21-4:30 p.m.
728 Increased Survival when Combining BRAF Inhibitors and Stereotactic Radiosurgery in Patients with Melanoma Brain Metastases
A. Wolf
4:31-4:40 p.m.
729 Safety and Activity of Nivolumab ± Ipilimumab in Recurrent Glioblastoma: Updated Results From CHECKMATE-143
J. Sampson

4:41-4:50 p.m.
730 Laser-Induced Thermal Therapy in Treatment of Recurrent Intracranial Metastatic Disease post-Stereotactic Radiosurgery
D. Krivosheya

4:51-5 p.m.
731 Prospective Evaluation of Molecular Prognostication Indices for Clival Chordomas, and Their Natural History in Recurrent Tumors
G. Zenonos

5:01-5:10 p.m.
732 Navigated Transcranial Magnetic Stimulation Motor Cortex Mapping improves Outcome in Glioblastoma Surgery: a controlled observational Study
T. Picht

5:11-5:20 p.m.
733 Postoperative CSF Diversion Following Intraventricular Tumor Resection is Preventable
C. Sarris

5:21-5:30 p.m.
Integra Foundation Award
734 Morbidity and Mortality of Meningioma Resection Increases in Octogenarians
J. Steinberger
2-5:30 p.m.
AANS/CNS Section on Women in Neurosurgery
Location: W187 B
Moderator: U. Samadani

2-2:40 p.m.
Driving Innovation in Neurosurgery from Bench to Bedside
L. Liau

2:41-3:21 p.m.
The Clinician as Innovator
I. Germano

3:22-4 p.m.
Beverage Break in the AANS Exhibit Hall
Location: Hall F1

4:01-4:41 p.m.
How to Raise Angel and VC Money for Your Neurosurgical Startup
N. Jain

4:42-5:22 p.m.
The Business of Neurosurgery
E. Zusman

2-5:30 p.m.
Advancements in Neurotrauma Care
Location: W185 CD
G. Hawryluk; M. Huang; T. Lay; J. Medow; C. Schirmer; M. Stippler; J. Zacko
Ticket Required: $100
Supported by an educational grant from Codman Neuro, a Johnson & Johnson Company.
Tuesday, May 3

6-8 p.m.
Dinner Symposium
SEI31 The FDA: Investigational Device Exemptions, Regulatory Process and Moving Medical Devices to Patients
Location: Harry Caray’s Italian Steakhouse’s Old Comiskey Room – 33 West Kinzie Street
A. Abosch; M. Bydon; R. Heary; A. Machado; S. Misra; C. Pena; W. Welch; X. Zheng
Ticket Required: $195
No transportation provided

6:30-8:30 p.m.
Dinner Symposium
SEI30 Practical Management Topics in Spine and Cranial Trauma
Location: River Roast’s Monarch Room B – 315 North LaSalle Street
P. Mummaneni; D. Okonkwo; S. Timmons; M. Wang
Ticket Required: $195
Bussing will be provided from the Sheraton Grand Chicago Convention entrance at 6:15 p.m
Supported by an educational grant from DePuy Synthes, companies of Johnson & Johnson.
Wednesday, May 4

7-8:30 a.m.
AANS/CNS Section on Women in Neurosurgery Breakfast
Location: Michigan AB, Sheraton Grand Chicago

Louise Eisenhardt Lecturer
M. Siemionow

Supported by DePuy Synthes, companies of Johnson & Johnson, Medtronic and Sophysa.

7-9 a.m.
Breakfast Seminars
Ticket Required: $100

Breakfast will be available in the room of the session for Breakfast Seminar attendees.

301 Skating to Where the Puck Will Be: Strategies for Neurosurgery Practices and Programs to Compete in Health Care’s Future
Location: W185 CD
D. Coric; R. Friedlander; D. Kim; E. Zusman

302 Surgical Approaches to the Lateral Skull Base
Location: W178 B
L. Borba; J. Ciporen; J. Golfinos; J. Lee; J. Olson;
H. van Loveren; W. Vandergrift III

303 Intraoperative Neurophysiology in Spinal Cord Tumor Surgery
Location: W187 C
V. Deletis; K. Kothbauer; F. Sala; K. Than

304 Challenging Spinal Cases: Pearls and Pitfalls
Location: W183 B
E. Benzel; D. Bhowmick; B. Fernandez; W. Gluf;
D. Hoh; E. Woodard

305 Developing New Technology: Bringing Device to Market
Location: W183 C
J. Adler; R. Bucholz; K. Foley; M. Howard III
306 Cervical Spondylotic Myelopathy  
*Location: W470 A*
R. Heary; M. Kaiser; I. Kalfas; P. Mummaneni

307 Spondylolisthesis: Controversies in Management  
*Location: W179 A*
J. Caridi; R. Heary; J. Uribe; M. Wang; P. Weinstein

308 Anticoagulation for the Neurosurgeon and Hemostasis in Neurosurgery  
*Location: W185 AB*
B. Carter; H. Garton; C. Loftus; C. Roark; B. Tranmer

309 Return-to-play After Sports Injury II: Spine Injury  
*Location: W183 A*
M. Groff; D. Lu; C. Notarianni; S. Prasad

310 If I Could Do That Case Over Again: Discussion of Complications of Cranial Surgery  
*Location: W175 A*
O. Bozinov; C. Lumenta; P. Nakaji; A. Nanda; J. Rotta

311 Contemporary Stereotactic Radiosurgery  
*Location: W178 A*
I. Germano; M. Izurieta-Ulloa; A. Sahgal; M. Schulder; J. Sheehan; I. Yang

312 Complications of Complex Spinal Surgery: Lessons Learned  
*Location: W187 B*
A. Frempong-Boadu; Z. Gokaslan; R. Nockels; A. Sin; K. Yao

313 Resective Strategies for Epilepsy  
*Location: W187 A*
F. Boop; G. Grant; B. O’Neill; D. Roberts; M. Sather; N. Tandon

314 Open vs. Endoscopic Approaches to the Anterior Skull Base  
*Location: W175 C*
O. Al-Mefty; C. David; F. Gentili; T. Schwartz; C. Sen
315 Basics of Programming Neurosurgical Devices  
*Location: W175 B*  
S. Nagel; J. Pilitsis; J. Sweet; M. Wilock

316 Peripheral Nerve Entrapment Syndromes  
*Location: W180*  
A. Belzberg; L. Jacques; L. Yang; E. Zager

317 Osteoporosis and Spinal Fusion Surgery  
*Location: W179 B*  
D. Benzil; J. Knightly; F. La Marca; G. Trost

318 Adult Low-grade Gliomas  
*Location: W186 C*  
D. Cahill; S. Chang; L. Liau; G. Samandouras; D. Schiff; M. Westphal

319 Complication Management and Avoidance in Vascular Neurosurgery  
*Location: W176 A*  
C. Alleyne Jr.; S. Amin-Hanjani; F. Gonzalez-Llanos; L. Kim

320 Fluorescence Technologies in Tumor Neurosurgery: Present and Future Directions  
*Location: W176 C*  
K. Aziz; A. Cohen-Gadol; C. Hadjipanayis; N. Sanai

321 Neurosurgery at the Periphery: The History of Peripheral Nerve Surgery  
*Location: W176 B*  
L. Carson; C. Prestigiacomo; C. Sloffer

322 Advanced Estate Planning and Tax Saving Strategies for the Neurosurgeon  
*Non-CME event*  
*Location: W186 A*  
R. Levin; D. Mietty
Wednesday, May 4

9 a.m.-2:15 p.m.
AANS Exhibit Hall
*Location: Hall F1*

9-9:45 a.m.
Beverage Break in the AANS Exhibit Hall
*Location: Hall F1*

9:45 a.m.-1 p.m.
Plenary Session III
*Location: Skyline Ballroom, W375 ABC*
*Moderators: F. Boop; J. Morcos*

- 9:45-9:47 a.m.  
  Introduction to the Louise Eisenhardt Lecture  
  U. Samadani

- 9:48-10:18 a.m.  
  Louise Eisenhardt Lecture  
  M. Siemionow

- 10:19-10:28 a.m.  
  William H. Sweet Young Investigator Award  
  800 Antagonism of Wnk/Hsn2 kinase ameliorates neuropathic pain by reducing maladaptive KCC2 inhibitory phosphorylation after nerve injury  
  K. Kahle

- 10:29-10:30 a.m.  
  Assessment of the Trial Design/Level of Evidence  
  S. Haines

- 10:31-10:33 a.m.  
  Discussant  
  J. Pilitsis
10:34-10:43 a.m. 
Preuss Research Award
801 Cellular architecture of human IDH1-mutant gliomas revealed using single-cell RNA sequencing
A. Venteicher

10:44-10:45 a.m. 
Assessment of the Trial Design/Level of Evidence
S. Haines

10:46-10:48 a.m. 
Discussant
C. Brennan

10:49-10:51 a.m. 
Introduction to the Rhoton Family Lecture
H. Batjer

10:52-11:22 a.m. 
Rhoton Family Lecture
J. Salgado

11:23-11:32 a.m. 
802 Spine Stereotactic Radiosurgery with Concurrent Tyrosine Kinase Inhibitors for Metastatic Renal Cell Carcinoma
J. Miller

11:33-11:34 a.m. 
Assessment of the Trial Design/Level of Evidence
S. Haines

11:35-11:37 a.m. 
Discussant
M. Bilsky

11:38-11:47 a.m. 
Best International Abstract Award
803 Characterising the temporal evolution of ICP and cerebrovascular reactivity after severe traumatic brain injury.
H. Adams
11:48-11:49 a.m.
Assessment of the Trial Design/Level of Evidence
S. Haines

11:50–11:52 a.m.
Discussant
O. Harris

11:53-11:55 a.m.
Introduction of the Humanitarian Award
H. Batjer

11:56-11:59 a.m.
Humanitarian Award
K. Muraszko

12-12:02 p.m.
Introduction to the Van Wagenen Lecture
H. Batjer

12:03-12:23 p.m.
Van Wagenen Lecture
G. Ling

12:24-12:33 p.m.
804 30-Day Re-admission After Spine Surgery: An Analysis of 1400 Consecutive Spine Surgery Patients
O. Adogwa

12:34-12:35 p.m.
Assessment of the Trial Design/Level of Evidence
S. Haines

12:36-12:38 p.m.
Discussant
P. Mummaneni

12:39-12:48 p.m.
805 Thermal Flow Detection Improves Diagnostic Accuracy of Shunt Malfunction: Prospective, Multicenter, Operator-Blinded Study
D. Frim
12:49-12:50 p.m.  
Assessment of the Trial Design/Level of Evidence  
S. Haines

12:51-12:53 p.m.  
Discussant  
J. Wellons

12:54-12:56 p.m.  
Introduction of the Incoming AANS President  
H. Batjer

12:57-1 p.m.  
2016/2017 AANS President  
F. Boop

1-2 p.m.  
Lunch in the AANS Exhibit Hall  
Location: Hall F1

2-5 p.m.  
AANS Section on the History of Neurological Surgery  
Location: W185 CD  
Moderators: M. Preul; C. Sloffer

2-2:40 p.m.  
History Lectureship  
The Origin and Early Organization of Neurosurgery in Chicago  
W. Whisler

2:41-2:56 p.m.  
Question and Answer Session

2:57-2:59 p.m.  
Introduction of the Vesalius Abstract Award  
C. Sloffer

3-3:10 p.m.  
Vesalius Award  
812 Management of Basilar Invagination – A Historical Perspective  
A. Harshad
Wednesday, May 4

3:11-3:21 p.m.
813 The evolution of Charles Elsberg’s philosophy of spine surgery and the contemporary setting for his novel, innovative, revolutionary 1916 text
N. Martirosyan

3:22-3:32 p.m.
814 Standards of Care (SsC) in the Union Army: Case Studies of Head Injuries during the American Civil War
W. Hanigan

3:33-3:43 p.m.
815 “Pepper Pot”: Percival Bailey and Harvey Cushing
J. Mullin

3:44-3:54 p.m.
816 The Raney Brothers and the Invention of the Raney Clips
V. Ban

3:55-4:05 p.m.
817 Percival Bailey, Renaissance Man and Early Chicago Neurosurgeon
H. Fuhrman

4:06-4:16 p.m.
818 The Nonsurgical Sketches of Harvey Cushing
C. Karas

4:17-4:27 p.m.
R. Dossani

4:28-4:38 p.m.
820 Transtentorial herniation, the neurosurgeons blight: A historical sketch and future directions
B. Sindelar
4:39-4:49 p.m.  
821 The History of Neurosurgical Training: Where We Were, Where We Are, and Where Are We Going  
A. N. Amr  
4:50-5 p.m.  
Question and Answer Session

2-5 p.m.  
AANS/CNS Section on Pain

Location: W185 AB  
Moderator: J. Arle; J. Sweet

2-2:34 p.m.  
John Loeser Lecture  
Brain Markers for Predicting and Identifying Chronic Pain  
A. Apkarian  
2:35-2:39 p.m.  
Question and Answer Session  
2:40-2:56 p.m.  
DRG stimulation  
S. Falowski  
2:57-3:13 p.m.  
Burst Stimulation  
S. Falowski  
3:14-3:29 p.m.  
Ultrahigh Frequency Stimulation  
R. Levy  
3:30 p.m.-3:44 p.m.  
Peripheral Nervous System Stimulation  
K. Slavin  
3:45-3:59 p.m.  
Occipital Nerve Stimulation  
J. Sweet
Wednesday, May 4

4:09 p.m.
810 Low Back Pain Relief with a New 32-Contact Surgical Lead Using a Neural Targeting Algorithm
J. Pilitsis

4:10-4:19 p.m.
807 Rate of Peri-Operative Neurological Complications after Surgery for Cervical Spinal Cord Stimulation
A. Chan

4:20-4:29 p.m.
808 Intravenous Acetaminophen for Pain Control following Supratentorial Craniotomy - A Randomized, Double-Blinded, Placebo-Controlled Trial
W. Sivakumar

4:30-4:39 p.m.
809 Resistance to Cerebrospinal Fluid Outflow as Diagnostic Marker of Spontaneous Cerebrospinal Fluid Leakage
J. Beck

4:40-4:49 p.m.
806 Comparison of Effectiveness of Occipital Nerve Stimulation Frequency in Treating Allodynia in Rodent Migraine Model
S. Clark

4:50-4:59 p.m.
811 Cervical Spinal Cord Stimulation: Outcomes with Percutaneous and Paddle Leads
S. Owusu-Sarpong
2-5 p.m.

AANS/CNS Section on Pediatric Neurological Surgery

Location: W183 A

Moderators: L. Baird; J. Chern; S. Hwang; A. Jea; E. Rizk; C. Sayama

2-2:25 p.m.
Update on the Molecular Genetics of Medulloblastoma
S. Pomeroy

2:25-2:29 p.m.
Question and Answer Session

2:30-2:40 p.m.
Biopsy of Diffuse Pontine Gliomas: Updates and Controversies - Surgical Perspective
N. Gupta

2:41-2:51 p.m.
Biopsy of Diffuse Pontine Gliomas: Updates and Controversies - Medical Perspective
M. Prados

2:52-2:59 p.m.
Question and Answer Session

3-3:10 p.m.
Face-off: Surgical Treatment of Medial Temporal Lobe Epilepsy: Visualase
D. Curry

3:11-3:21 p.m.
Face-off: Surgical Treatment of Medial Temporal Lobe Epilepsy: Open Amygdalohippocampectomy
S. Bhatia

3:21-3:29 p.m.
Question and Answer Session

3:30-3:40 p.m.
Face-off: Surgical Treatment of Secondary Tethered Cord Syndrome: Traditional Untethering
G. Tuite Jr.
3:41-3:51 p.m.
Face-off: Surgical Treatment of Secondary Tethered Cord Syndrome: Spinal Column Shortening
A. Jea

3:51-3:59 p.m.
Question and Answer Session

4-4:04 p.m.
830 Intra-Arterial Chemotherapy for Retinoblastoma: Five-Year Experience and Discussion of Technical Nuances
S. Sur

4:05-4:09 p.m.
831 Investigating a thickened pituitary stalk in children: A retrospective review and prospective treatment paradigm
E. Kiehna

4:10-4:14 p.m.
832 Complication Avoidance in Minimally Invasive Endoscopic Craniosynostosis Surgery
H. Meltzer

4:15-4:19 p.m.
833 Correlating Prenatal Imaging Findings of Fetal Ventriculomegaly With the Need for Surgical Intervention at Birth
J. Gu

4:20-4:24 p.m.
834 Bmi1 is a Therapeutic Target in Recurrent Medulloblastoma
S. Singh

4:25-4:29 p.m.
Question and Answer Session

4:30-4:34 p.m.
M. Tamber
4:35-4:39 p.m.
836 Overdrainage-Related Ventricular Tissue is a Significant Cause of Proximal Shunt Obstruction
M. Kraemer

4:40-4:44 p.m.
837 Lumbar-Peritoneal Shunting in Hydrocephalus: Preventing Chiari Malformations and Decreasing Shunt Revisions
N. Marupudi

4:45-4:49 p.m.
838 Prenatal injury impairs cortical myelination and executive function in a preclinical rat model
J. Winer

4:50-4:54 p.m.
839 Creation of Novel Hi-Fidelity Patient-Specific 3D Printed Models for Simulation of Minimally Invasive Neurosurgery
R. Rehder

4:55-4:59 p.m.
Question and Answer Session

2-4:30 p.m.
AANS/CNS Section on Disorders Of The Spine and Peripheral Nerves – Spine Section Session

Location: W184 ABCD

Moderators: D. Coric; P. Mummaneni

Supported by an educational grant from DePuy Synthes, companies of Johnson & Johnson.

2-2:12 p.m.
Classification Systems for Spondylolisthesis: Clinical Applications
D. Resnick
Wednesday, May 4

2:13-2:25 p.m.
Grade 1 Degenerative Spondylolisthesis with Stenosis: Decompression or Decompression and Fusion
J. Knightly

2:26-2:38 p.m.
Treatment options for Patients with Isthmic Spondylolisthesis and Back Pain
M. Wang

2:39-2:51 p.m.
Treatment of High Grade Spondylolisthesis: Fuse in Situ or Listhesis Reduction
A. Kanter

2:52-3:04 p.m.
Complications in the Treatment of High Grade Spondylolisthesis
D. Coric

3:05-3:17 p.m.
Revision Strategies in Failed Spondylolisthesis Treatment
F. La Marca

3:18-3:25 p.m.
840 Development of Validated Computer Based Preoperative Predictive Model for PJF or Clinically Significant PJK
C. Ames

3:26-3:33 p.m.
841 Surgical Resection of Intradural Extra medullary Spinal Tumors: Patient Reported Outcomes and Minimum Clinically Important Difference
S. Chotai

3:34-3:41 p.m.
842 Graft Subsidence as a Predictor of Revision Surgery Following Stand-Alone Lateral Lumbar Interbody Fusion
Z. Tempel
3:42-3:49 p.m.  
843 Effect of Obesity on Cost and Effectiveness after Decompression with and without Fusion for Degenerative Lumbar Disease  
S. Parker  

3:50-3:57 p.m.  
844 Is Preoperative Duration of Symptoms a Significant Predictor of Functional Status and Quality of Life Outcomes in Patients Undergoing Surgery for the Treatment of Degenerative Cervical Myelopathy?  
M. Fehlings  

3:58-4:05 p.m.  
845 Total en bloc spondylectomy outcomes for primary malignant tumors of the lumbar spine  
C. Goodwin  

4:06-4:13 p.m.  
846 Natural History of Odontoid Pseudoarthrosis managed Non-Operatively  
J. Hong  

4:14-4:21 p.m.  
847 Risk factors for venous thromboembolism in patients undergoing spinal surgery  
K. Piper  

4:22-4:29 p.m.  
848 Efficacy of i-Factor™ Bone Graft versus Autograft in ACDF: Prospective Randomized FDA IDE Study Results  
P. Arnold
Wednesday, May 4

2-5 p.m.

**AANS/CNS Section On Tumors II**

*Location: W183 B*

*Moderators: M. Tate; M. Vogelbaum*

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2-2:02 p.m.
*Introduction: Surgical Innovation*
M. Tate

2:03-2:18 p.m.
*5-ala: Is it Prime Time*
C. Hadjipanayis

2:19-2:34 p.m.
*Laser Ablative Surgery - Does it Add Value*
G. Barnett

2:35-3:50 p.m.
*Intraoperative Adjuncts & Beyond in Glioma Surgery*
M. Aghi

2:51-3:06 p.m.
*What’s Next in Convection Enhanced Delivery*
M. Vogelbaum

3:07-3:22 p.m.
*High Frequency Focused Ultrasound*
G. Zadeh

3:23-3:37 p.m.
*Role of the Neurosurgical Specialist in the Multidisciplinary Team Treatment of Malignant Glioma*
C. Watts

3:38-3:47 p.m.
**American Brain Tumor Association Young Investigator Award**

*822 From Bench to Bedside: Results of a Phase I trial using a Notch inhibitor for Glioblastoma*
V. Tabar

---
3:48-3:57 p.m.
Brian D. Silber Award
823 BRAF alteration status and the histone H3F3A gene K27M mutation segregate spinal cord astrocytoma histology
G. Shankar

3:58-4:07 p.m.
824 “Cure” of Intracranial Metastases of less than 100 mm3 Treated by Stereotactic Radiosurgery
A. Wolf

4:08-4:17 p.m.
825 Indications and efficacy of Gamma Knife stereotactic radiosurgery for recurrent glioblastoma: two decades of institutional experience
B. Imber

4:18-4:27 p.m.
826 Stereotactic Radiosurgery for Jugular Foramen Schwannomas: An International Multicenter Study
H. Kano

4:28-4:37 p.m.
827 Recovery Room Cortisol Predicts Long-term Glucocorticoid Need after Transsphenoidal Surgery for Pituitary Tumors
A. Qaddoura

4:38-4:47 p.m.
828 Magnetic Resonance-Guided Laser Ablation for Postradiosurgery Metastatic Recurrence or Radiation Necrosis
R. Hernandez

4:48-4:57 p.m.
829 Pre- and post-operative factors associated with seizure in 1039 patients with supratentorial meningioma
S. Magill
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As of March 25, 2016
### Shuttle Service | Routes

<table>
<thead>
<tr>
<th>HOTEL</th>
<th>PICKUP LOCATION</th>
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<tbody>
<tr>
<td><strong>ROUTE-A</strong> PINK</td>
<td>3 Stops</td>
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<tr>
<td>4 Hotels</td>
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<tr>
<td>Embassy Suites Chicago - Downtown Lakefront</td>
<td>Columbus Street Side of hotel</td>
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<tr>
<td>Loews Chicago Hotel</td>
<td>Use Embassy Suites stop on Columbus</td>
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<tr>
<td>The Peninsula Hotel</td>
<td>Rush Street side of hotel</td>
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<tr>
<td>Four Seasons Hotel Chicago</td>
<td>Across Delaware from entrance</td>
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| **ROUTE-B** GREEN | 1 Stop |
| 2 Hotels | |
| Hyatt Regency Chicago | Curbside on Wacker Drive |
| Fairmont Hotel, MilleniumPark | Use Hyatt stop on Wacker |

| **ROUTE-B** BLUE | 1 Stop |
| 1 Hotel | |
| Sheraton Grand Chicago | Curbside on Columbus |

| **ROUTE-C** ORANGE | 1 Stop |
| 4 Hotels | |
| Chicago Marriott Downtown Magnificent Mile | On Ohio at Rush Street |
| The Gwen | On Ohio at Rush Street |
| Intercontinental Chicago Magnificent Mile | On Ohio at Rush Street |
| Hilton Garden Inn Magnificent Mile | On Ohio at Rush Street |

| **ROUTE-D** YELLOW | 1 Stop |
| 1 Hotel | |
| Palmer House a Hilton Hotel | Wabash entrance |

<p>| <strong>WALKING HOTELS</strong> | |
| 1 Hotel | |
| Hyatt Regency McCormick Place | |</p>
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<tr>
<td>3:30-5:45 p.m.</td>
<td>Every 15 Minutes</td>
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FORGING THE FINAL FRONTIER IN BRAIN SURGERY.
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As of March 25, 2016
84th Annual Scientific Meeting

Visit the Exhibits - Hall F1
Visit more than 200 companies displaying their products and services related to the practice of neurosurgery.

Exhibit Hours:
Monday, May 2 | 9 a.m.-4:15 p.m.
Tuesday, May 3 | 9 a.m.-4:15 p.m.
Wednesday, May 4 | 9 a.m.-2:15 p.m.

Beverage Breaks in the AANS Exhibit Hall
Monday, May 2 | 9-9:45 a.m. | 3:30-4 p.m.
Tuesday, May 3 | 9-9:45 a.m. | 3:30-4 p.m.
Wednesday, May 4 | 9-9:45 a.m.

Lunch in the AANS Exhibit Hall
Monday, May 2 | 1-2 p.m.
Tuesday, May 3 | 1-2 p.m.
Wednesday, May 4 | 1-2 p.m.
THE MORE DIFFICULT THE CASE, THE LESS DIFFICULT THE CHOICE OF HOSPITAL.

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The Mount Sinai Hospital is ranked in the top fifteen by U.S. News & World Report in Neurology & Neurosurgery, 2015–16. Our world-class specialists are committed to the discovery of new treatments for neurological conditions and hold faculty appointments at Icahn School of Medicine at Mount Sinai, ranked among the nation’s top 20 medical schools by U.S. News & World Report.

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