Tumer EWS





AANS/CNS Section on Tumors

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Spring 2018

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CHAIR'S MESSAGE

Dear Colleagues,

Thank you so much for placing your trust in me. As my term comes to a close, I have reflected on all that we have accomplished together over the past two years. It has been the honor of a lifetime to serve

as chair of the AANS/CNS Section on Tumors, founded in 1984 by my mentor at Henry Ford, Mark Rosenblum, MD, FAANS(L). I have been blessed with incredible role models in my neurosurgical career thus far; my predecessor as Tumor Section chair, Fred G. Barker II, MD, FAANS, led us into a new era of unprecedented growth and relevance in organized neurosurgery. Fred was also one of my earliest tumor mentors when I trained at the MGH. I also know that I am leaving the Section in the most capable and enthusiastic hands, as Manish Aghi, MD, PhD, FAANS, will champion the cause of our Section and our profession and lead us to even greater heights. Indeed, mentorship serves as a powerful and enduring bond among all of us who pursue the calling of neurosurgery. Many of our strategic initiatives over the past two years focused intensely on transforming the Section into a beacon of mentorship, innovation and best-practice expertise for our growing worldwide membership.



Steven N. Kalkanis, MD, FAANS Chair, Tumor Section

Together, thanks to YOUR leadership:

- We expanded overall Section membership including international partners by 10 percent at a time when membership in professional societies and meeting attendance are dropping and we have increased our treasury to an all-time high in order to sponsor more fellowships and educational outreach.
- In 2016, we hosted a remarkable Satellite Symposium in San Diego, which broke all prior
 attendance records while honoring multiple luminaries in our field. We focused on the management
 of low grade gliomas, with three keynote speakers, Mitchel Berger, MD, FAANS; Hugues Duffau,
 MD; and Jim Rutka, MD, PhD, FAANS, all world-renowned pioneers in the management of low
 grade gliomas and multi-modality, maximal safe resection. We are looking forward to another
 phenomenal Satellite meeting this October in Houston as well.
- We assembled a spectacular line-up of practical courses, seminars and special scientific program offerings at multiple national meetings. Thanks goes to the incredible efforts of our program chairs, Chetan Bettegowda, MD, FAANS; Brian Nahed, MD; Ian Lee, MD, FAANS; Ekkehard Kasper, MD, PhD, FAANS; Pamela Jones, MD, MPH; Adam Robin, MD; Shawn Hervey-Jumper, MD, FAANS; and Peter Fecci, MD. All of these program chairs worked closely with our Section Scientific Program Chair Jason Sheehan, MD, PhD, FAANS, who, in this new role, coordinated a phenomenal, integrated educational offering to our members.
- In the spirit of mentorship and service, we launched a brand new Tumor Section mentorship award named in honor of the late Andy Parsa, MD, PhD, and we renamed our Distinguished Service Award in honor of our founder, Dr. Rosenblum.
- We have continued the time honored traditions of our Young Neurosurgeon's mentoring reception under the enthusiastic leadership of Walavan Sivakumar, MD, and the Bittner (Russ Lonser, MD, FAANS, and Dr. Rosenblum) and Guha (Fred Lang, MD, FAANS) awards as well in partnership

Continued on the next page >>

Chair's Message Continued

with the Society for Neuro-oncology.

- Thanks to the herculean efforts of Awards Chair Isabelle Germano, MD, FAANS, and her awards team, we have distributed a record number of grants, fellowships and honors to young neurosurgeons ready to start their careers in neurosurgical oncology, including the BrainLab, Journal of Neuro-oncology, ABTA, Preuss, Stryker Neuro, Integra, Synthes Skullbase and Columbia Softball Pediatric Brain Tumor awards. I am also pleased to announce that our three section-based NREF Honor Your Mentor funds (Parsa, Wilson, Rutka) now have a combined value of over \$1M and offer additional opportunities for the Section to impact the careers of young neurosurgeons. In addition to the traditional Tumor Section fellowships, we launched two new \$50,000 fellowship awards: the Andrew Parsa Research Award and the BCured Tumor Section Award.
- Tumor Guidelines, under the leadership of Jeff Olson, MD, FAANS, and Brian Nahed, MD, powered most of the guidelines effort for all of organized neurosurgery, with incredible productivity from our tumor author groups. Over the past two years alone, we have produced guidelines in pituitary adenoma, vestibular schwannoma, low grade glioma, spinal metastases and updates on malignant gliomas and brain metastases.
- A powerful new social media initiative was launched on Facebook, LinkedIn and Twitter (@NSTumorSection), thanks to Edjah Nduom
 and his team. Within 48 hours of the launch, over 250 members and potential future tumor section members had already signed up,
 including from places like Brazil, Nigeria, Myanmar, Australia and nearly everywhere in between. We believe this significant enhancement
 in our digital connectivity, combined with our brand new website re-design at http://www.tumorsection.org launched and updated by Jeff
 Weinberg, MD, FAANS, and his team will significantly increase the reach, and relevance, of the Tumor Section for years to come.
- Last year, Costas Hadjipanayis, MD, PhD, FAANS, and I had the honor of testifying before the Food and Drug Administration Medical Imaging Drugs Advisory Committee and achieved unanimous approval for the use of 5-ALA as an imaging agent to facilitate the real-time detection and visualization of malignant tissue during glioma surgery. Dr. Hadjipanayis served as the lead study investigator and has been working tirelessly for many years, along with Walter Stummer, MD, PhD, from Germany, to provide evidenced based support for the use of 5-ALA in the United States. In fact, many in the Tumor Section participated in training sessions and the national multi-institutional clinical trial led by Isabelle Germano, MD, FAANS, to study efficacy and positive predictive value of 5-ALA.
- Thanks to Ric Komotar, MD, FAANS, and his team, we nearly doubled the size of our international committee to include representatives from every continent and major world society.
- We expanded our membership outreach under committee chair Jen Moliterno Gunel, MD, FAANS, and customized program offerings
 thanks to Randy Jensen, MD, PhD, FAANS; Ron Warnick, MD, FAANS; Isaac Yang, MD, FAANS; Orin Bloch, MD; and Jason
 Sheehan, MD, PhD, FAANS, who launched new membership surveys to help guide the course of our field through best practice paradigm
 development.
- Our development efforts have never been more successful thanks to Will Curry, MD, FAANS, and his team. This has powered much of our
 programmatic offerings over the past two years, including more robust relationships with industry awards as well, led by Andy Sloan, MD,
 FAANS.
- My hope is that our focus on new academic career advising activities for young neurosurgeons in terms of how to start a practice, set up a lab, apply for grants, maximize protected time, negotiate contracts and become more involved in organized neurosurgery, as well as expanding our Young Neurosurgeons events at the annual meetings, will carry our profession and the Tumor Section ever higher in the years and decades to come. I especially want to thank our entire Executive Committee, listed on the back page of this newsletter, for their service, commitment and enthusiasm over the past two years. I must also thank our newsletter editors, Drs. Ian Lee and Pamela Jones, for producing the most expansive and most widely distributed newsletters in our history.

It is now my honor to formally welcome and congratulate Dr. Manish Aghi on his new role!

I'm looking forward to seeing everyone in New Orleans.

Onward and upward,

Steven N. Kalkanis, MD, FAANS Chair, Section on Tumors

2018 AANS ANNUAL SCIENTIFIC MEETING HIGHLIGHTS

Rohan Ramakrishna, MD, FAANS; Wajd Al-Holou, MD

The 2018 AANS Annual Scientific
Meeting is shaping up to be an exciting
event! Our members have had many
invaluable suggestions related to
improving the educational content
of both our scientific sessions and
seminars. One of the suggestions was to
incorporate spinal neuro-oncology into our program
as this had not been a focus in recent years.

To that end, we devote one of our scientific sessions to the spine and expect this to be educational and stimulating for both the general and subspecialty neurosurgeon. We will hear presentations given by experts in the field including Drs. Ziya Gokaslan, Mark Bilsky, Claudio Tatsui, Laurence Rhines, Jason Sheehan and Nick Szerlip. These discussions will cover up-to-date material for management of primary and metastatic spinal tumors. Additionally, the presentations will be followed by an interactive panel discussion simulating a Spine Tumor Board with audience polling.

Our second scientific session relates to viral oncolytic therapy in glioma. The last decade has seen tremendous scientific progress made in designing viruses for oncolytic purposes, with many phase 2/3 trials underway. To put this all in perspective, showcase its promise, describe its limitations and point the way forward – we have assembled a stellar group. These luminaries include Drs. Robert Martuza, Nino Chiocca, Fred Lang, James Markert and special guest Juan Fueyo. We expect this to be a tremendous scientific exchange.

Finally, there are a number of new and updated Breakfast Seminars and Practical Clinics being offered this year. Topics include general updates in the management of gliomas, thoughtful discussions about the management of skull base lesions, the role of laser interstitial thermal therapy, the role of fluorescence-guided surgery and many more. Please check out the 2018 AANS Annual Scientific Meeting online program here for more information. See you in New Orleans!



Tumor Education and Meetings

Jason Sheehan, MD, PhD, FAANS; Gordon Li, MD, FAANS; and Ian Lee, MD, FAANS

For the 2018 AANS Annual Scientific Meeting in New Orleans, Drs. Ramakrishna, Al-Holou, and Sheehan have been working with Tumor Section leadership to develop scientific content. Highlights of practical courses include the Update on Tumors for General Neurosurgeons, a course on peripheral nerve injuries, entrapments and tumors and how to launch a career in tumor neurosurgery. Breakfast Seminars include ones on acoustic neuroma management, intracranial endoscopy and low grade gliomas. A dinner seminar will focus on 5-ALA in neuro-oncology.

The Bittner lecture will be given by Mark Rosenblum, MD, FAANS(L), former chair of neurosurgery at Henry Ford Hospital.

Special sessions for the Tumor Section include topics on spinal oncology and viral oncolytic therapy in gliomas. We are excited to see Tumor Section members at the 2018 Congress of Neurological Surgeons annual meeting this year. The Tumor Section is putting together an exciting agenda full of world expert surgical neurooncologists. The topics of the two main tumor sessions will cover contemporary management and guidelines for incidentally found tumors and technological advances in adjuncts to brain tumor surgery. We have a number of Practical Clinics covering topics from 3-D surgical anatomy, to modern applications of radiosurgery and surgical management of eloquent brain tumors. Lunchand-learn Seminars include current management strategies for acoustic neuromas as well as cutting edge management in brain metastases. Drs. Yang and Weinberg are coordinating the scientific planning for the Joint Section Tumor Satellite symposium.

CNS 2018

Gordon Li, MD, FAANS; Seunggu Han, MD

We are excited to see everyone at the Congress of Neurological Surgeons annual meeting this year. The Tumor Section is putting together an exciting agenda full of international expert surgical neuro-oncologists. The topics of the two main tumor sessions will cover contemporary management and guidelines for incidentally found tumors and technological advances in adjuncts to brain tumor surgery. We have a number of practical course covering topics from 3-D surgical anatomy to modern applications of radiosurgery and surgical management of eloquent brain tumors. Lunch seminars include current management strategies for acoustic neuromas as well as cutting-edge management in brain metastases.

CNS 2017

Pamela Jones, MD, MPH; Adam Robin, MD

The 2017 CNS Annual Meeting was an unmitigated success. Themed Transformation & Celebration, concepts that challenge traditional neurosurgical paradigms were presented and reviewed by luminaries in our field.

Drs. Brooke Swearingen, Jason Sheehan and Edward Laws moderated our first Tumor Session, focused on the first comprehensive guidelines for the management of non-functioning pituitary adenomas and supported by the AANS/CNS Section on Tumors. Drs. Paul Gardner, Ian Dunn and Gabriel Zada went on to further explore and review the guidelines, the genetics of adenoma and modern techniques used in surgery for pituitary tumors. The presentation of oral abstracts were amongst the most illuminating in recent years.

Breaking with a century of tradition, the 2016 World Health Organization Classification on Tumors of the Central Nervous System recently moved beyond a system based largely on tissue evaluation under a microscope to a hybridized classification, incorporating molecular data. Drs. Maria Martinez-Lage Alvarez, Bob Carter and Fred Lang helped us to understand the new classification system, its prognostic and predictive value and updated us on current clinical trials and targeted therapies for glioma.

The CNS 2017 program also featured a variety of dinner seminars on the contemporary management of skull base tumors as well as interactive breakout sessions. More than a dozen tumor-focused practical courses and luncheon seminars were well-attended, including a program spotlighting new clinical trials directed by Dr. Michael A. Vogelbaum.

We hope you enjoyed celebrating with us the many accomplishments of neurosurgeons from around the world!

2017 ANNUAL SNO MEETING SUMMARY

Susan M. Chang, MD

The 22nd Annual Scientific Meeting of the Society for Neuro-Oncology (SNO) took place November 16-19, 2017, in San Francisco. Manish Aghi, MD, PhD, FAANS, was one of the scientific directors of the meeting and was also instrumental in the organization of the local events. Nino Chiocca, MD, PhD, FAANS, completed his term as president of the society with Patrick Wen, MD, assuming the position.

There continues to be strong involvement of Tumor Section members in leadership positions, either as an officer or on the SNO Board of Directors. These include Gelareh Zadeh, MD, PhD, FAANS (vice president); Ian Dunn, MD, FAANS (neurosurgery representative); Michael Taylor, MD, PhD (basic science representative); and Mitchel Berger, MD, FAANS (member of the SNO Foundation Board).

Across the meeting, the Cancer Moonshot Project was broadly featured and included a keynote presentation from W. K. Alfred Yung, MD, that highlighted areas where neuro-oncology plays a pivotal role within the 10 Blue Ribbon Panel priority areas for accelerating progress in cancer. In addition, the SNO Education Day focused on three Cancer Moonshot recommendations: overcome therapeutic resistance, minimize side effects of cancer treatments and develop new cancer technologies.

A few of the many important scientific presentations at this year's meeting highlighted the results of therapeutic clinical trials that spanned diverse approaches to treatment that included tumor-specific antibody-drug conjugates (depatux-m), an autologous formalin-fixed tumor vaccine, intensive combinations of standard alkylating chemotherapy agents in promotor methylated O6-methylgunaine-DNA methyltransferase glioblastoma, retroviral replicating vector Toca 511 and inhibitors of isocitrate dehydrogenase 1.

On the basic and translational science side, highlights included presentations on the mechanism of alternative telomere lengthening in IDH mutated tumors, modulation of the transcription of oligodendrocyte transcription factor (OLIG2) target genes using a small-molecule inhibitor CT-179, molecular characterization of aggressive meningioma that identified Forkhead Box M1 as a prognostic marker and studies that demonstrated the importance of molecular classification of pediatric embryonal tumors in clinical trials.

The 2018 annual meeting will be held in New Orleans from November 15-18 and, if the pattern continues, we anticipate record-breaking abstract submissions and attendance numbers.

TUMOR SECTION AWARDS UPDATE - SPRING 2018

Isabelle M. Germano, MD, MBA, FAANS

The Tumor Section Awards Committee continues to actively develop the most robust award program for outstanding research of any of the AANS/CNS sections. Each year, we give 12 awards, plus one named lectureship at the AANS Annual Scientific Meeting and nine awards, plus one lectureship every-other-year at the CNS meeting. Additionally, we offer three awards at our Biennial Tumor Satellite Symposia. Most of the awards are limited to Tumor Section members, which provides an additional incentive for membership.

The AANS/CNS Section on Tumors would like to thank the award sponsors for helping to encourage submissions of the highest quality work in neurooncology.

The Tumor Section nine CNS 2017 award winners and the Gupta Award lectureship, given at the CNS meeting, are shown below. Congratulations to each winner!

The section is looking forward to recognizing 12 award winners at the 2018 AANS Annual Scientific Meeting, as summarized in the table. Congratulations!

Abhijit Guha Award and Lectureship

Fred Lang, MD, FAANS, is the recipient of the 2017 Abhijit Guha Award for his numerous outstanding scientific contributions with clinical and research relevance in the field of brain tumors.



Dr. Fred Lang, AANS/CNS Section on Tumors past president (2011-13), is the recipient of the Abhijit Guha Award at the CNS 2017. His lecture during the 2017 CNS Annual Meeting Plenary Session on Wednesday October 11, 2017 was introduced by Dr. Steven Kalkanis, AANS/CNS Tumor Section Chair.

The Abhijit Guha Award and lecture are jointly sponsored by the Society of Neuro-Oncology (SNO) and it is given annually, alternating between the SNO and CNS meeting. The winner is a physician scientist making great strides in the laboratory and clinic.



2018 CONGRESS OF NEUROLOGICAL SURGEONS AWARDEES

American Brain Tumor Association Young Investigator Award

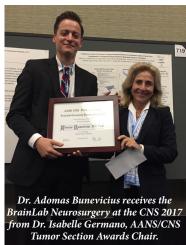
Arka Mallela, MD, is the 2017 recipient of the American Brain Tumor Association Award for the work entitled *Topical Vancomycin Reduces Surgical-site Infections After Craniotomy: A Prospective, Controlled Study*, presented during the Tumor Section Session I on Monday, October 9, 2017.

Sponsored by the American Brain Tumor Association, the Young Investigator Award is given at the AANS Annual Scientific and the CNS meetings to a young faculty member involved in neuro-oncology research and has demonstrated outstanding potential for future basic scientific research. The applicant must have been out of training for less than six years. A \$2,000 honorarium accompanies this award.

BrainLab Neurosurgery Award

Adomas Bunevicius, MD, is the recipient of the 2017 BrainLab Neurosurgery Award that was presented at the CNS meeting for the work entitled: *Prognostic Role of the Low Tri-Iodothyronine Syndrome in Brain Tumor Patients*, presented during the Tumor Section Session I on Monday, October 9, 2017.

AWARDS UPDATE (CONTINUED)



The BrainLab
Neurosurgery Award
is presented at the
annual meetings of
the AANS and CNS.
This award is given to a
neurosurgeon practicing
in a nonacademic or
international setting with
the best abstract related
to central nervous
system tumors. Previous
AANS/ CNS Section on
Tumors chairs Michael

McDermott, MD, FAANS, and Ronald Warnick, MD, FAANS, were instrumental in securing this award, given through the generosity of BrainLAB. The award carries an honorarium of \$1,000.

Columbia Softball Pediatric Brain Tumor Award

Hongwei Zang, MD, was the recipient of the 2017 Columbia Softball Charity Award for the work entitled: *Interaction Between MELK and EZH2 Regulates Medulloblastoma Cancer Stem-like Cells Proliferation*, presented during the Section on Tumor Session II on Tuesday, October 10, 2017.

The Columbia Softball Pediatric Brain Tumor Award is given to the best pediatric tumor abstract submitted by a resident or faculty member who is a member of the Tumor Section at each AANS/CNS meeting. The section would like to acknowledge previous Section Chairs Jeff Bruce and Fred Barker and Rich Anderson for putting together the plan to use a portion of the proceeds from the annual tournament to support this award. The award carries an honorarium of \$1,000.

Integra Foundation Award

Matthew Agam, MD, is the recipient of the 2017 Integra Award for the presentation entitled: Complications Associated with Transsphenoidal Pituitary Surgery: Experience of 1,171 Consecutive Cases Treated at a Single Tertiary Care Pituitary Center, presented during the Section on Tumor Session I on Monday, October 9, 2017.

The Integra Foundation Award, sponsored by the Integra Foundation, is given at both the AANS and CNS meetings for the best research or clinical paper submitted that



investigates benign brain, spinal or peripheral nerve tumors. The award carries an honorarium of \$1,000.

Mahaley Clinical Research Award

Tareq Juratli, MD, was the recipient of the 2017 Mahaley Clinical Research Award for the presentation entitled: *TERT Promoter Mutations in Progressive Treatment-resistant Meningiomas*, presented during

Dr. Tareq Juratli receives the Mahaley
Clinical Research Award at the CNS
2017 meeting from Dr. Isabelle M.
Germano, AANS/CNS Tumor Section
Awards Chair.

the Section on Tumor Session I on Monday, October 9, 2017.

The NBTS Mahaley Award is given at each of the AANS and CNS meetings to a neurosurgery resident, fellow or attending physician who submits the best clinical study in neuro-oncology. The award carries a \$1,000 honorarium.

Preuss Young Scientist Award

Matthew Garrett, MD, PhD, was the recipient of the Preuss Young Scientist Award at the CNS 2017 meeting for the work entitled: *Metabolic Characterization of IDH1mutant and IDH Wildtype*

AWARDS UPDATE (CONTINUED)

Gliomaspheres
Uncovers Cell-type
Specific Vulnerabilities,
presented during the
Section on Tumor
Session II on Tuesday,
October 10, 2017.
Sponsored by the
Preuss Foundation, the
Preuss Young Scientist
Award is given at each
of the AANS and CNS
meetings to a young



Dr. Matthew Garrett receives the Preuss Young Scientist Award from James Harrop, MD, FAANS, 2017 CNS Annual Meeting Chairman

scientist investigating brain tumors, within 10 years of training, and who has submitted the best basic science research paper. This award has a \$1,000 honorarium.

The Springer Journal of Neuro-Oncology Award

Desmond A. Brown, MD, PhD, was the recipient of the Springer Journal of Neuro-Oncology Award at the CNS 2017 meeting for the work entitled: *Small Terminal Deletions/Duplications and Alternative Lengthening of Telomeres are Co-Occur in IDH Mutation Only Gliomas*, presented during the Section on Tumor Session I on Monday, October 9, 2017.

The Springer Journal of Neuro-Oncology Award is presented at both the annual AANS and CNS meetings to a highly-ranked abstract in either clinical or basic science, as related to neuro-oncology. This award is sponsored by the generosity of Springer. This award carries a \$1,000 honorarium.

Stryker Neuro-Oncology Award

Suganth Suppiah, MD, was the recipient of the Stryker Neuro-Oncology at the 2017 CNS meeting for the presentation entitled: *Genomic Landscape of Radiation-Induced Meningiomas*, presented during the Section on Tumor Session I on Monday, October 9, 2017.



The Stryker Neuro-Oncology Award is given to a high-ranking brain tumor clinical or basic science abstract submitted by a resident or medical student. The award is presented at the CNS and AANS annual meetings and the senior author of the paper must be a member of the AANS/CNS Section on Tumors. This award carries a \$1,000 honorarium. Moving forward this award is re-named as the AANS/CNS Joint Section on Tumors Neuro-Oncology Trainee Award.

Synthes Skull Base Award

Fahad Alkherayf, MD, FAANS, is the recipient of the 2017 Synthes Skull Base Award for the presentation entitled: Reinventing the Wheel: Intraoperative Continuous Flash Visual Evoked Potentials, a Novel Technique to Lessen Intraoperative Optic Nerves



Dr. Fahad Alkherayf is the recipient of the Synthes Skull Base Award at the CNS 2017 meeting.

and Chiasmal Injury in Endoscopic Skull Base Surgery, presented during the Section on Tumor Session I on Monday, October 9, 2017.

The Synthes Skull Base
Award is given to an
attending neurosurgeon,
resident or fellow in
the Tumor Section
who submits the best
abstract related to skull
base surgery. This award
is given at the annual
meetings of the AANS and
CNS. The award includes a

\$1,000 honorarium. Moving forward this award is renamed the AANS/CNS Joint Section on Tumors Skull Base Award.

Congratulations to the 2018 AANS Tumor Section Award Winners. Please join us for their presentations!

Award	Awardee	Title	Date and Time	Session
Integra Foundation Award	Andrew Scott Little, MD, FAANS	Prospective Multicenter Study Comparing Surgical Outcomes of Microscopic Transsphenoidal Surgery and Fully Endoscopic Transsphenoidal Surgery Techniques for Nonfunctioning Pituitary Adenomas (TRANSSPHER Study)	05/02/2018 12:34-12:44 p.m.	Plenary Session III
ABTA Young Investigator Award	Gautam Unmeel Mehta, MD	Repeat Stereotactic Radiosurgery for Cushing's Disease: Outcomes of an International, Multicenter Study.	05/01/2018 4:41-4:50 p.m.	AANS/CNS Section on Tumors I
AANS/CNS Joint Section on Tumors Skull Base Award	Soichi Oya, MD, IFAANS	Intraoperative Assessment of Meningioma Proliferative Potential Revealed Intratumoral Heterogeneity and Its Relevance to Biological Characteristics	05/01/2018 4:31-4:40 p.m.	AANS/CNS Section on Tumors I
Leksell Radiosurgery Award	Dale Ding, MD	Stereotactic Radiosurgery for the Management of Acromegaly: Outcomes of a Multicenter Retrospective Cohort Study 05/01/2018 4:21-4:30 p.m.		AANS/CNS Section on Tumors I
Brainlab Neurosurgery Award	Koray Ozduman, MD	Analysis of Mutational Processes in 23 Adult Hemispheric Diffuse Gliomas Identifies DNA- Damage Repair Deficiency as a Major Contributor of Gliomagenesis. 04/30/2018 3:10-3:19 p.m.		Scientific Session I: Tumor
Brian D. Silber Award	Anick Nater-Goulet, MD	Predictive Factors of Survival in a Surgical Series of Metastatic Epidural Spinal Cord Compression and a Complete External Validation of Eight Multivariable Scoring Systems in a Prospective North American Multi-Centre Study		Scientific Session II: Spine
Columbia Softball Pediatric Award	Peter Madsen, MD	In Silico Identification of Neo-Antigens in a High- Grade Pediatric Brain Tumor Cohort Utilizing Next-Generation Sequencing: Pilot Study of a Discovery Pipeline for Immunotherapy Targets	05/01/2018 4:51-5:00 p.m.	AANS/CNS Section on Tumors I
Mahaley Clinical Research Award	Ganesh Mani Shankar, MD	Genotype Based Local Targeted Therapy for Glioma	04/30/2018 3:00-3:09 p.m.	Scientific Session I: Tumor
Journal of Neuro- Oncology Award	Bob S. Carter, MD, PhD, FAANS	Evaluation of Durable Response Rate in the Post- Resection Setting and Association with Survival in Patients with Recurrent High Grade Glioma who Received Vocimagene Amiretroprepvec and 5-Fluorocytosine Treatment	05/01/2018 11:32-11:42 a.m.	Plenary Session II
Preuss Research Award	Rohan Ramakrishna, MD, FAANS	Whole Exome and Targeted Sequencing of Adult Infiltrating Astrocytomas: Experience at a Single Institution.	04/30/2018 4:01-4:10 p.m.	Scientific Session I: Tumor
Ronald L. Bittner Award on Brain Tumor Research	Todd Hollon, MD	Convolutional Neural Networks Provide Rapid Intraoperative Diagnosis Of Neurosurgical Specimens Imaged With Stimulated Raman Histology	04/30/2018 3:20-3:29 p.m.	Scientific Session I: Tumor
AANS/CNS Joint Section on Tumors Neuro- Oncology Trainee Award	Amparo Myrelle Wolf, MD, PhD	The Risk of Malignancy after Stereotactic Radiosurgery	04/30/2018 4:11-4:20 p.m.	Scientific Session I: Tumor

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MEMBERSHIP REPORT

Jennifer Moliterno, MD, FAANS

As part of our outreach efforts, we have offered membership to those neurosurgeons who sit for the ABNS Oral Board Examination and declared Tumor as his/her subspecialty. From the May 2017 board exam, there are seven individuals who stated Tumor as their subspecialty and four of them are now Tumor Section members. From the November 2017 board exam, there were nine who stated Tumor as their subspecialty and seven are now Tumor Section Members. We welcome these new members and congratulate them on sitting for the ABNS Oral Boards!

Tumor Section Membership Statistics as of 2/20/2018							
Class Code	Subclass	2018 Dues	Members as of Sept. 2017				
Associate	15D	\$0.0	70	70			
Adjunct	60D	\$37.50	22	25			
Active	01S	\$150.00	531	569			
International	40S	\$150.00	63	67			
Intl. Developing Country	40SD	\$75.00	8	14			
Honorary	45S	\$0.0	20	20			
Medical Students	15M	\$0.0	9	9			
Intl Resident/Fellow	40R	\$0.0	3	18			
Resident/Fellow	50R	\$0.0	1,692	1,816			

REPORT FROM THE ALLIANCE FOR CLINICAL TRIALS IN NEURO-ONCOLOGY

J. Bradley Elder, MD, FAANS Liaison to Alliance for Clinical Trials in Oncology

The AANS/CNS Tumor Section has implemented a collaboration with the Alliance for Clinical Trials in Oncology to facilitate cooperative efforts between neurosurgeons, neuro-oncologists and radiation oncologists at the national level in an effort to more efficiently support neuro-oncology clinical trials. Each issue of the Tumor Section Newsletter will highlight a clinical trial that is being sponsored by the Alliance or presented at one of the semi-annual meetings that may be of interest to neurosurgeons. Additional information regarding the Alliance is available on the website allianceforclinicaltrialsinoncology.org.

Recent report highlights:

- Phase I/Comparative Randomized Phase II Trial of TRC105 Plus Bevacizumab Versus Bevacizumab in Bevacizumab-Naïve Patients with Recurrent Glioblastoma Multiforme PI: Evanthia Galanis, MD; Mayo Clinic
- A phase II/III randomized trial of veliparib

- or placebo in combination with adjuvant temozolomide in newly diagnosed glioblastoma with MGMT promotor hypermethylation
- ° PI: Jann Sarkaria, MD at Mayo Clinic
- Phase II trial of SMO/AKT/NF2 inhibitors in progressive meningiomas with SMO/AKT/NF2 mutations
 - ° PI: Priscilla Brastianos, MD

The clinical trial highlighted in this report involves patients with progressive glioma and is entitled: Radiation Therapy with Concomitant and Adjuvant Temozolomide versus Radiation Therapy with Adjuvant PCV Chemotherapy in Patients with Anaplastic Glioma or Low Grade Glioma

This phase 3 clinical trial will enroll patients newly diagnosed co-deleted 1p/19q anaplastic glioma or high risk low grade glioma. Tumors must have known 1p/19q codeletion and IDH mutation. Patients who meet these and other eligibility criteria are candidates

CLINICAL TRIALS (CONTINUED)

for one of two treatment arms:

- Arm A: Patients receive radiation therapy followed by PCV chemotherapy
- Arm B: Patients receive radiation therapy with concomitant temozolomide followed by adjuvant temozolomide

Primary objectives:

- Determine whether patients in Arm B have better progression-free survival compared to patients in Arm A
- Secondary objectives:
- Compare toxicities of each arm
- Determine neurocognitive and QOL effects and correlate results with outcome
- · Correlate exploratory biomarkers and survival
- Determine whether patients in Arm B

have longer time to progression (clinical or radiographic) compared to patients in Arm A

This trial is open at 231 centers in the United States and Canada. Estimated enrollment is 360 patients. The PI is Kurt Jaeckle, MD, at Mayo Clinic. Further information regarding this clinical trial can be obtained from the Alliance website at allianceforclinicaltrialsinoncology.org or clinicaltrials. gov. A list of ongoing trials sponsored by the Alliance can be accessed via the Alliance website.

The spring Alliance for Clinical Trials in Oncology meeting is May 10-12, 2018, in Chicago. For details regarding the meeting, please contact myself or Ian Parney, MD, PhD, FAANS.

JOURNAL OF NEURO-ONCOLOGY

Jason Sheehan, MD, PhD, FAANS

The Journal of Neuro-Oncology is the official journal of the AANS and CNS Tumor Section and is published by Springer. There are 12 regular issues and up to three supplements per year.

Journal Metrics:

Impact factor = 2.980 for 2016

Impact factor for 5 years = 3.046

Number of days from submission to first decision = 58 days

Number of days from acceptance to online publication = 12 days

Number of publications for each of the last 3 years

2014: 348

2015: 327

2016: 365

Impact factor for each of the last 3 years

2014: 3.07

2015: 2.75

2016: 2.98

Number of citations for each of the last 3 years

2014: 8,579

2015: 9,092

2016: 9,765

Downloads for the past 3 years

2014: 251,657

2015: 253,687

2016: 364,018

Special appreciation is given to the Tumor Section members who serve on the editorial board for JNO. Those on the editorial board are listed on the JNO website (http://www.springer.com/medicine/oncology/journal/11060/PS2?detailsPage=editorialBoard). For those interested in serving as a reviewer, please contact me. Also, ideas for JNO supplements and willingness to serve as an associate editor or editor for a supplement would be most appreciated. I can be reached at jsheehan@virginia.edu.

INTERNATIONAL COMMITTEE UPDATE

Ricardo J. Komotar, MD, FAANS

The International Committee has had a successful year, thus far, in 2018. To briefly summarize, the World Federation of Neurosurgical Societies (WFNS) has two neuro-oncology courses planned for this coming year. The European Tumor Section continues to demonstrate significant growth, achieving membership of over 200 individuals. The WFNS is also actively integrating into the AANS/CNS Tumor Section with collaborative training courses and clinical trials. The Indian Society of Neuro-Oncology has rapidly expanded their annual meetings with high attendance and plans to host a live brain tumor surgery workshop in late 2018. The

Argentinean Neurosurgery Society is formalizing an exchange program for their neurosurgeons to observe in the U.S., allowing an open forum for integrated educational opportunities. This will be for three months and fully funded by Cosair Medical. The Chinese Neurosurgery Society is also planning to lead a journal issue entirely dedicated to international neurosurgery. Finally, the Federation of Latin American Neurosurgeons (FLANC) is very interested in expanding collaborations with the AANS/CNS Tumor Section. Led by Danny Prevedello, MD, this collaboration continues to expand.

STEREOTACTIC RADIOSURGERY UPDATE

Jason Sheehan, MD, PhD, FAANS

Contact: JSheehan@virginia.edu

Radiosurgical Registry Update

The AANS and ASTRO SRS registry has expanded to include 28 initiated sites from across the U.S. Thus far, over 3,000 patients have been accrued to the SRS registry. Thank you to all those who have contributed time and effort to the initiative.

Requests for access to data in the SRS registry can be submitted to the registry's scientific board. A brief proposal regarding the data sought and the intent of the analysis is required. Several scientific studies are currently underway.

For further information, please contact Jason Sheehan at jsheehan@virginia.edu.

Radiosurgical Education and Meetings:

Upcoming radiosurgical scientific meetings include the following:

The 14th International Stereotactic Radiosurgery Society meeting will take place in Rio de Janeiro, Brazil. The meeting is June 9-13, 2019. It is hosted by Dr. Tony DeSalles. For further information, please see http://www.isrsy.org/.

Also, for those interested in SRS webinars, the ISRS has a series of SRS-focused webinars that are available for free. Further information and registration for webinars can be found at http://www.isrsy.org/en/courses/webinars/.

The SRS survey on education and training requirements has been sent out. The effort, led by Dr. Ron Warnick and assisted by Drs. Jensen, Yang, Bloch, and Sheehan with support from Dr. Kalkanis, will evaluate the current training of SRS for residents and help to identify opportunities for improvement in the same.

NORTH AMERICAN SKULL BASE MEETING UPDATE

Michael J. Link, MD, FAANS, Mayo Clinic, Rochester, MN Daniel Prevedello, MD, Ohio State University Wexner Medical Center, Columbus, OH

The 29th Annual Scientific Meeting of the North American Skull Base Society (NASBS) just wrapped up on Coronado Island, Ca. Once again, this was a record-setting meeting in all respects. Ian Witterick, MD, an otorhinolaryngologist specializing in head and neck oncology at the University of Toronto, completed his presidential year by welcoming 750 medical registrants, including practicing neurosurgeons and otorhinolarngologists, radiation and medical oncologists, ophthalmologists, plastic and reconstructive surgeons, fellows, residents, medical students, nurse practitioners and physician assistants. Including industry support attendees, nearly 900 people participated in the scientific and social programs. The society welcomed 121 new members this past year.

The theme of the meeting was Dynamic mentoring of the skull base surgeon: Training our future. Directly addressing this important topic, honored guests Dr. Patrick Gullane (otorhinolaryngology), Dr. Fred Gentilli (neurosurgery) and Dr. Peter Neligan (plastic and reconstructive surgery) gave insightful addresses about their cumulative experience over the last three decades shepherding the next generation of leaders in skull base surgery. Dr. Harry van Loveren, professor and chairman of neurosurgery at University of South Florida in Tampa gave a very practical and thoughtful address about the "10 rules" of surgical mentorship.

The remainder of the program was packed with expert debate panels, special topic sessions, proffered papers and posters addressing every aspect of the diagnosis and management of skull base disorders. As usual, there was a 2-day, pre-meeting, hands-on practical dissection course, this year held at the UCSD practical lab, that sold out and received rave reviews from participants. Also, the day before the meeting opened, there was a symposium specially dedicated to the management of meningioma, with experts in the field of surgery, radiation and molecular biology providing an extremely informative and thought-provoking one-day focused overview.

There were several unique and new sessions during

this year's meeting. There was a special "Rhoton room," dedicated to the incredible legacy of Albert L. Rhoton Jr., MD, FAANS(L), and his contribution to surgical anatomy and skull base tumors in particular. There were expert 3-D anatomy presentations by his former fellows and dueling dissections in which two different teams performed live cadaveric dissections to demonstrate various open and endoscopic skull base approaches with commentary and moderation provided by the true giants in the field. The top ten submitted scientific abstracts were selected for a "three-minute thesis," in which the presenting author is allowed one slide and three minutes to explain their research in a judged competition. In addition, there was a special session dedicated to women in skull base surgery. Finally, the last day of the meeting addressed pituitary tumor diagnosis and non-surgical and surgical management.

James Evans, MD, FAANS, professor of neurosurgery at Thomas Jefferson University in Philadelphia was elected President of the NASBS for the upcoming year. He is already well into planning a very dynamic meeting for February 15-17, 2019, at the Hilton Orlando Bonnet Creek Hotel, in Orlando. A special full-day symposium regarding the diagnosis and management of pituitary tumors is planned for February 14, 2019. If you are interested in participating in any aspect of the 30th annual scientific meeting of the NASBS, please contact Jim at (james.evans@jefferson.edu) or the scientific program co-chairs, Dr. Amir Dehdashti (adehdashti@northwell.edu) and Dr. Adam Zanation (adam.zanation@med.unc.edu). Also, be sure to note that if you have residents or fellows that would like more hands on experience with complex endoscopic and open skull base approaches, the NASBS summer practical course will be held July 26-29, 2018, at LSU Health Sciences center in New Orleans. All details can be found at www.NASBS.org.

Looking forward to seeing everyone at the Tumor Section events at the 2018 AANS Annual Scientific Meeting in New Orleans in April/May.

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YOUNG NEUROSURGEONS COMMITTEE RECEPTION

AANS/CNS Section on Tumors – Young Neurosurgeons Reception CNS Annual Meeting October 10, 2017 Walavan Sivakumar, MD

Boston – Russell R. Lonser, MD, FAANS, professor and chair of neurosurgery at Ohio State University and former president of the CNS, was the honored guest at the AANS/CNS Section on Tumors Young Neurosurgeons Reception, co-hosted by the Young Neurosurgeons Committee, at the CNS Annual Meeting on October 10, 2017.

A national recognized neurosurgeon and researcher, Dr. Lonser addressed over 75 young neurosurgeons and leaders of the tumor section on the current state, challenges and opportunities available to neurosurgeon-scientists early in their career. He began his lecture by discussing the current challenges facing research scientists attempting to balance their scientific aspirations with the need for clinical productivity, including the apparent decrease in total research funding. Despite these roadblocks, he surprised many in the audience by highlighting recently published data illustrating the progressively increased number of patents and publications from neurosurgeons over the past 20 years. Additionally, given his experience, he educated the group on the funding timeline early neurosurgeon-researchers could take within the NIH, working from early investigator opportunities like R25 and K12 grants to the ultimate goal of many in attaining an R01 grant. Through his journey down the funding timeline, he emphasized the importance of the young neurosurgeon's first five years in practice. He ultimately appeared to quell the concerns of many in the audience striving to develop a research career

by illustrating various models one could take to attain research success and highlighting the fact that funding and research opportunities are actually greater now than ever within neurosurgery.



(left to right) Walavan Sivakumar, Edjah Nduom, Russell Lonser, Frederick Barker, Isabelle Germano

The AANS/CNS Section on Tumors and the Young Neurosurgeons Committee are pleased to announce that the honored guest for the Young Neurosurgeons Reception at the 2018 AANS Annual Scientific Meeting (Tuesday, May 1st from 6:15 to 8:15 p.m.) is the new chairman of the department of neurosurgery at the MD



Anderson Cancer Center, Frederick Lang, MD, FAANS.

GUIDELINES COMMITTEE

Jeffrey J. Olson, MD, FAANS; Brian V. Nahed, MD

The prolific work of the Tumor Section on guidelines provided a significant impact at the recent annual CNS meeting in Boston. This included a training course entitled "A Primer on the Development and Review of Evidence-Based Clinical Guidelines" for new and prospective members of the Joint Guidelines Committee to understand how to review guidelines from throughout the specialty. The Tumor Section provided multiple speakers for this course in view of our member's extensive experience with this topic. There was also a "Guidelines on Brain Tumors Update" presented by our members involved in the guidelines creation for non-functioning pituitary adenomas, low grade gliomas, vestibular schwannomas and metastatic brain tumors.

Vestibular Schwannoma Management Guidelines

This guideline was published electronically in the December 2017 issue of Neurosurgery and is available in hard copy. It is now available in the CNS Guidelines Application.

Metastatic Brain Tumor Management Guidelines Update

This 9-part guideline is now in the second round of Joint Guidelines Review Committee for review. We are working with ASTRO, ASCO, SNO and Cancer Care Ontario to obtain their endorsements and their assistance in disseminating these guidelines to all five societies.

Newly Diagnosed Glioblastoma Management Guidelines Update

The manuscripts for this have been completed and are pending submission to the Joint Guidelines Review Committee for review with the goal of publication in Journal of Neuro-Oncology, as were the original guidelines published on this topic.

Metastatic Spine Tumor Management Guidelines

A first set of manuscripts for these guidelines have been completed and are pending submission to the Joint Guidelines Review Committee, with the goal of being published in Neurosurgery. The Guidelines Committee remains open to new ideas and projects:

- 1. For those that wish assistance by the CNS Guidelines Office, there is a formal application form that can be obtained from Trish Rehring in the CNS Guidelines Office via the CNS website. Once completed, it can be returned for consideration first by the Joint Tumor Section Guidelines Committee and then by the CNS Guidelines Committee, where it is prioritized for development, particularly if CNS resources are requested to assist in their construction. The Tumor Section Guidelines Committee can then serve as consultants for the writers at whatever level is necessary to assist in completion.
- 2. Alternatively, for those who wish to develop a guideline independently, allowing greater latitude in publication options, the Joint Tumor Section Guidelines Committee can provide step-by-step instruction and critique to create a quality product for Joint Guidelines Review Committee submission.

AANS/CNS Section on Tumors Executive Committee Update

Chair 2016 - 2018: Steven Kalkanis Secretary-Treasurer: Manish Aghi Past Chair; Nominating: Fred Barker

Advisory Board

Fred Lang Gene Barnett

Mitchel Berger Jeff Bruce

Roberta Glick

Iim Markert

Mark Rosenblum

James Rutka

Raymond Sawaya

Michael McDermott

Peter Black

William Couldwell

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Awards: Isabelle Germano

Bylaws: Jason Heth

Clinical Trials - Chair: Michael

Vogelbaum

Clinical Trials - ABTC: Andy Sloan

Clinical Trials - Alliance: Brad Elder

Clinical Trials - NRG: Dan Cahill

Communications/IT/Website - Chair: Jeff Weinberg

Communications/IT/Website - Social Media: Edjah Nduom

Communications/IT/Website

Adam Sonabend

Pierpaolo Peruzzi Dimitris Placantonakis

Development - Co-Chair

Will Curry Allen Waziri

Development Orin Bloch

Chris Farrell

Ian Dunn

Michael Lim

Brian Nahed

Nader Sanai

Isaac Yang

Education - Scientific Program Chair: Jason Sheehan

Education - Continuing/Practice Assessment Chair: Costas Hadjipanayis

Guidelines - Chair

Jeff Olson

Brian Nahed

Guidelines

Timothy Ryken

Ian Dunn

Gavin Dunn

Gabriel Zada

History: Tony D'Ambrosio

Immunotherapy: Ian Parney

International - Chair: Rick Komotar

International -Vice Chair (Europe):

Ekkehard Kasper

International-Vice Chair (Asia): Clark

International - EANS Zvi Ram Colin Watts

Zadeh

Germano

International - Argentina: Alejandra Rabadan

International - WFNS Liaison: Gelareh

International - Advisor: Isabelle

International - Australia: Charlie Teo

International - Central America: Jose Valerio

International - India: Atul Goel

International - Pakistan (South Asia

liaison): S. Ather Enam

International - Italy: Francesco Dimeco

International - Germany: Manfred

Westphal

International - England: S George

amandouras

International - Japan: Fumio

Yamaguchi

International - Nigeria (Africa

Liaison): Okezie Obasi Kanu

International - Switzerland: Dominik Cordier

International - Turkey: Ugur Ture

International - AANS Ambassador for **AASNS: Clark Chen**

International - AANS Ambassador for **CAANS: Brian Nahed**

International - AANS Ambassador for **EANS: Michael McDermott**

International - AANS Ambassador for **EANS: Fred Barker**

International - AANS Ambassador for FLANC: Danny Prevedello

Journal of Neuro-oncology (Editor): Linda Liau

MATRIX and CAST: Ennio Chiocca

Medical Neuro-Oncology: Susan Chang

Membership - Chair: Jen Moliterno Gunel

Membership - Vice Chair: Edjah Nduom

Member Services and Outreach -

Chair: Randy Jensen

Member Services - Mentor/Job Match:

Gavin Dunn

Member Services- East Coast

Membership Director: Edjah Nduom

Member Services-Midwest

Membership Director: Brad Elder

Member Services-West Coast

Membership Director: Gabriel Zada

Newsletter- Editor: Ian Lee

Newsletter - Assistant Editor: Pamela

NeuroPoint Alliance/Outcomes - Co-Chair

> Mark Linskey Brad Elder

NeuroPoint Alliance/Outcomes:

Timothy Smith

Pediatrics: Paul Klimo

Prize Stewardship - Chair: Andy Sloan

Prize Stewardship

Orin Bloch

Tony D'Ambrosio

Program Chair - Satellite 2016

Chetan Bettegowda

Brian Nahed

Program Chair - AANS 2017

Peter Fecci

Shawn Hervey-Jumper

Program Chair - CNS 2017

Pamela Jones

Adam Robin

Program Chair - AANS 2018

Wajd Al-Hallou

Rohan Ramakrishna

Program Chair - CNS 2018

Seunggu Han

Gordon Li

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Michael Sughrue

Ian Dunn

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Research/ Parsa Fellowship

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Simulation & Technology: Aaron

Cohen-Gadol

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Michael Link

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SNO Liaison

Gelareh Zadeh **SNS Liaison:**

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Spine: Nicholas Szerlip

Washington Committee - Chair: Brian Nahed

WINS - Liaison: Analiz Rodriguez

Young Neurosurgeons - Chair:

Walavan Sivakumar

Young Neurosurgeons - Vice Chair: **Brian Howard**