AANS CNS

Newsletter

SPRING 2025

We present to you the Spring 2025 edition of the AANS/CNS Section on Tumors Newsletter. The Sub-Committees of the Tumor Section have been quite active with lots of exciting updates herein. The theme of the AANS Annual Meeting is "*Power of One, Impact of Many.*" As we consider the impact of the individual as well as neurosurgery as a whole, we not only see what we have accomplished, but the work that remains for the willing. Through our individual and collective efforts, we improve the lives of our patients through education, collaboration and research. This edition highlights the efforts of the Sub-Committees of the Tumor Section. We hope you enjoy the reading and discovery as much as we did in its preparation.

D. Ryan Ormond MD, PhD and Stephanie Kim Cheok, MD
Tumor Section Newsletter Co-Chairs

CHAIR'S MESSAGE

Dear Section on Tumors Members and Colleagues,

Spring is upon us after a long winter that was memorable! The AANS meeting in Boston is right around the corner and we are reminded that the theme of the meeting which focuses on the "Power of One" and the "Impact of Many" could not be more fitting for our Tumor Section. Our Tumor Section subcommittees have been quite busy with a number of new initiatives that have focused on education and research with impact that is far reaching. Since the fall of last year, we have held over 12 recorded webinars on a variety of tumor-related topics that include brain mapping, innovations in glioma therapy, latest highlights in neurosurgical oncology, molecular diagnosis in neurosurgical oncology and spinal oncology. The AANS has provided essential support for these webinars (outreach and recording), and they are all available on our newly revamped Tumor Section website for trainees to freely view at their leisure moving forward. I want to thank our webinar participants and especially our subcommittee members **Noor-ul-Huda Maria**, **Yoshua Esquenazi**, **Daniel Orringer**, **Ankush Chandra**, and **Chris Newman** for all their hard work organizing these webinars. Our newest webinar series entitled Limelight Research Webinars, will feature neuro-oncology research by students, residents, fellows, and early career faculty neurosurgeons. **Gelareh Zadeh** and **Dan Cahill** have led this new initiative. Another new initiative we will be launching in the new academic year is the Emerging Technologies Traveling Fellowship spearheaded by **Raj Mukherjee** with industry support. Fellowship applicants selected will be announced at our executive committee meeting at the AANS in Boston.

Christopher Cifarelli and **Dominique Higgins** have assembled an outstanding scientific program for our Tumor Section at the 2025 AANS Annual Meeting in Boston that will surely be remembered. Some highlights include a not to be missed plenary talk on immunotherapy by **Linda Liau**, and the Ronald Bittner Lectureship that will be delivered by **Jason Sheehan**. The Awards subcommittee, led by **Linda Bi** and

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The views reflected in this newsletter are solely the views of the authors and do not necessarily represent the views, opinions or positions of either the AANS or the CNS.

CHAIR'S MESSAGE *continued from page 2*

Jennifer Moliterno, granted a total of 18 awards to the highest scored abstracts submitted to our Tumor Section for the AANS. The Early Career Neurosurgeon subcommittee members, **Yoshua Esquenazi**, **Ankush Chandra**, and **Ashish Shah** have organized a Tumor Soiree where our young tumor neurosurgeons can discuss complications, innovations, and cases together. **Randy Jensen** will be our honored guest this year during this event.

Thank you all for creating a "ripple effect" in our field with all your help and dedication towards the Tumor Section. After much thought, we will create a new Resident subcommittee in our Tumor Section Executive Committee that will be open to neurosurgery residents with a dedicated interest in neurosurgical oncology who also want to continue creating "ripples" in our field by actively helping and participating in all our various activities.

Looking forward to seeing everyone in Boston in April!

Sincerely,

Costas G. Hadjipanayis, MD, PhD
Chair, AANS/CNS Section on Tumors

BRAIN METASTASIS SUB-COMMITTEE

Chairs: Melanie Gephardt Hayden, MD, and Adam Robin, MD

As the inaugural Brain Metastasis (BrM) Sub-Committee (SC), our group continues to define our objectives, grow our power through partnerships and extend our impact. Our aim to represent the BrM neurosurgery community at annual meetings through cross disciplinary and multi-sector collaboration is well underway with expected participation at the SNO/ASCO CNS Metastases Conference, SNO and ASCO in 2025. We are working to expand communications with NCI leadership to advocate for greater representation of our BrM SC members in research discussions and treatment advances. Efforts are ongoing to increase BrM SC member participation in multidisciplinary trials and panels to help define standard of care and synthesize BrM efforts across consortiums. We aim to foster mentorship through involvement with academic physician scientists attracted to the study of BrM. Finally, we are interested in forging a BrM collaborative to capitalize on the talent and volume of individual CNS Metastasis Centers coming together to make an impact through our shared efforts.

AWARDS SUB-COMMITTEE

Committee Co-Chairs: Jennifer Moliterno-Gunel, MD and Wenya Linda Bi, MD PhD

For the AANS/CNS Section on Tumors, we are happy to report the highest scoring scientific abstracts during the 2025 American Association of Neurological Surgeons meeting from a competitive pool of submitted studies. Multiple awards were chosen based on awardee criteria provided by sponsoring institutions. In line with the AANS 2025 theme of "*Power of One, Impact of Many*", the award-winning abstracts highlight advances in understanding current clinical and scientific topics.

Congratulations to the following AANS 2025 awardees for their exceptional work:

AANS/CNS Joint Section Tumor Neuro-Oncology Trainee Award (Ray Sawaya Trainee Award)— Andrew Ajisebutu

Rosenblum-Mahaley Clinical Research Award— Carlos Aude

Elekta Tumor Section Award—Eric Suero Molina

StacheStrong Award—Lindsey Dudley

Mizuho Minimally Invasive Brain Tumor Surgery Award—Beverly Allen

Southeastern Brain Tumor Foundation (SBTF) Award— Poojan Shukla

BrainLab Neurosurgery Award—Ahmed Altaf

Gladiator Project Award—Youssef Sibih

Stryker Tumor Award—John Choi

Leica Proficient Tumor Award—Sanjeev Herr

Synaptive Preuss Brain Tumor Research Award— Ankush Chandra

KLS Martin Tumor Award—Arman Jahangiri

Integra Foundation Award—Mark Damante

American Brain Tumor Association Young Investigator Award—Zeynep Huseyinoglu

Zeiss Brain Tumor Research Award—Jared Bassett

Globus Spine Tumor Award—Meghana Bhimreddy

Columbia Softball Skull Base Surgery Award Skull Base Surgery Award—Robert Osorio

Journal of Neuro-Oncology Award—Yuan Yang

James Rutka Pediatric Award—Hannah Weiss

BYLAWS SUB-COMMITTEE

Co-Chairs: Desmond Brown, MD PhD and Walavan Sivakumar, MD

The Bylaws Committee incorporated and codified responsibilities of new subcommittees (metastases, nonprofits, radiation oncology, diversity, equity and inclusion) to the standard operating procedures. More information to follow!

COMMITTEE ON ADVANCED SUBSPECIALTY TRAINING (CAST) FELLOWSHIPS

Co-Chairs: Jason Sheehan, MD and Jeffrey Weinberg, MD

After careful evaluation of surveyed fellowship programs for neurosurgical neuro-oncology and consultation with CAST and Tumor Section leadership, we are working to solidify a vendor to host the match. Having a match neurosurgical oncology match should allow for a more consistent and equitable process for candidates and fellowship programs. Further details on the timeline for implementation and financial specifications will be forthcoming. We will be in touch with the program directors about the next steps with the hope to have the process in place no later than the Fall 2026 interview and selection process.

CLINICAL TRIALS AND REGISTRIES SUB-COMMITTEE

Chairs: Debraj "Raj" Mukherjee, MD, MPH and Brad Elder, MD

From the Clinical Trials and Registries Subcommittee, we are excited to provide updates on the new Emerging Technologies Traveling Fellowship, as well as important tumor registry and clinical trial activities. In addition to this update, we will be analyzing a recently completed survey sent to Tumor Section members gauging their involvement and interest in national brain tumor clinical trials and registries. We also welcome new members including Michele Aizenberg, MD; Rupa Juthani, MD; Ignacio Jusue-Torres, MD; Pierre Paolo Peruzzi, MD; Marie Roguski, MD; and Ashish Shah, MD.

The Section on Tumors' Emerging Technologies Traveling Fellowship is sponsored by Omniscient Neurotechnology and will fund two (2) senior residents or fellows to spend one (1) week at University of Pittsburgh Medical Center, University of Virginia, or Johns Hopkins University School of Medicine during the 2025–2026 academic year. The Fellowship is meant to spur collaboration and exchange of ideas. Inaugural winners will be announced at the Section on Tumors' Executive Meeting at AANS 2025.

The QOD-Tumor Registry continues to accrue patients nationally with numerous initial multi-site abstract submissions actively being analyzed for eventual submission to the CNS 2025 Annual Meeting. Site PIs meet monthly on the 2nd Tuesday of every month via Zoom from 7–8pm EST to assess progress and push forward shared projects. Those interested in more information regarding participating in the QOD-Tumor Registry should contact Brad Elder at brad.elder@osumc.edu, Raj Mukherjee at drraj@jhmi.edu or Michele Anderson at manderson@neuropoint.org.

The Alliance for Clinical Trials in Oncology's Neuro-Oncology Committee began more regularly scheduled virtual meetings to help move clinical trial concepts along between larger Alliance meetings. The first such session was held on Wednesday, January 22, 2025 from 2–3pm EST. Topics included discussing of new trial concept entitled "Dose Escalated Re-Irradiation with Concurrent TMZ/Bev followed by Adjuvant TMZ/Bev for Recurrent IDH-mut High Grade Gliomas" led by Corbin Helis and Michael Chan of Wake Forest School of Medicine.

DEVELOPMENT & PARTNERSHIPS SUB-COMMITTEE

Chair: Christopher Cifarelli, MD PhD

The subcommittee on Development & Partnerships has reviewed the current and past TS sponsors, including industry and foundations. While most of these efforts have focused on abstract awards and TS Symposium support, we plan to expand our current compliment of partners and offer sponsorships for additional activities such as the TS Webinar series. With additional webinar topics on spinal oncology and skull base, we plan to offer the sponsors access to distinct audiences to further strengthen the Section's ability to maintain support for educational and research efforts.

AANS/CNS TUMOR SECTION SUB-COMMITTEE ON 2025 AANS ANNUAL MEETING

Co-Chairs: Christopher P. Cifarelli, MD and Dominique Higgins, MD

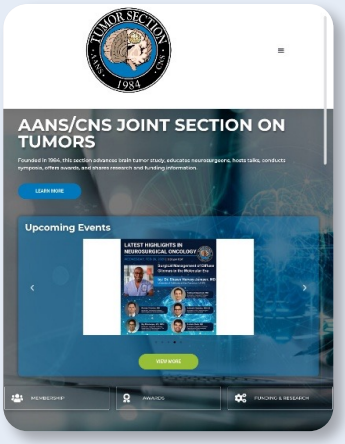
The 2025 AANS Tumor Section Meeting in Boston, MA promises to offer a comprehensive program with five sessions held over two days covering topics such as, Primary Tumors: Advances in Care Beyond the Scalpel, Team Based Care Delivery in Metastatic Disease, and Impact through Innovation. With continued record-breaking numbers of abstracts, awards, and attendees, we anticipate a great exchange of ideas and look forward to seeing everyone in Boston.

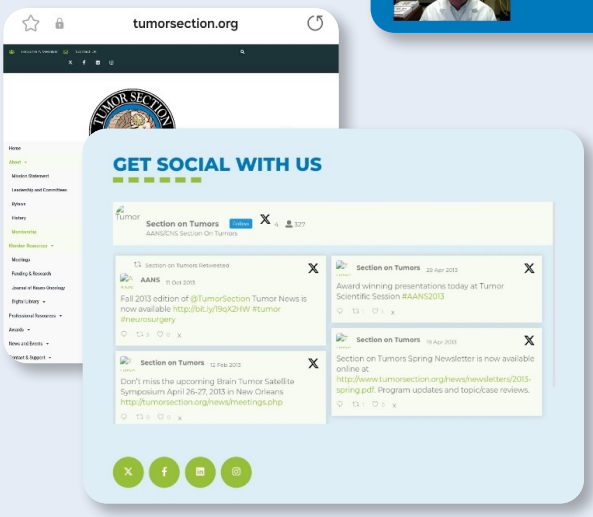
COMMUNICATIONS SUB-COMMITTEE

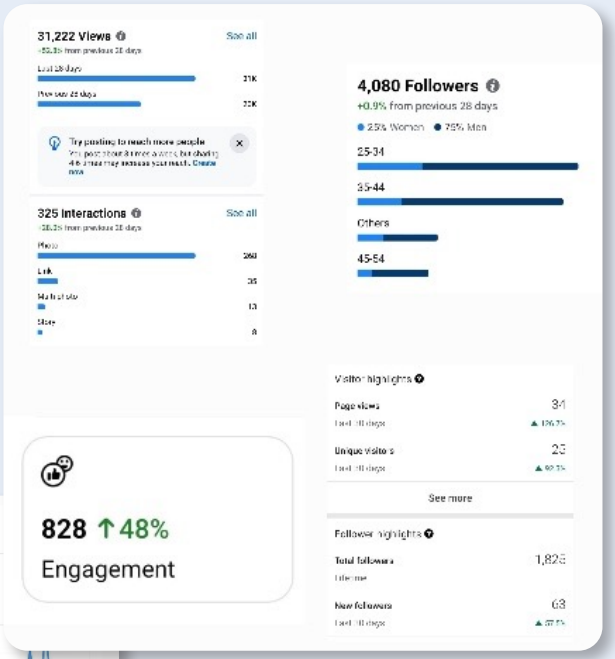
Co-chairs: Noor-ul-Huda Maria, MD, Kristin Huntoon DO, PhD and Randy D'amico, MD

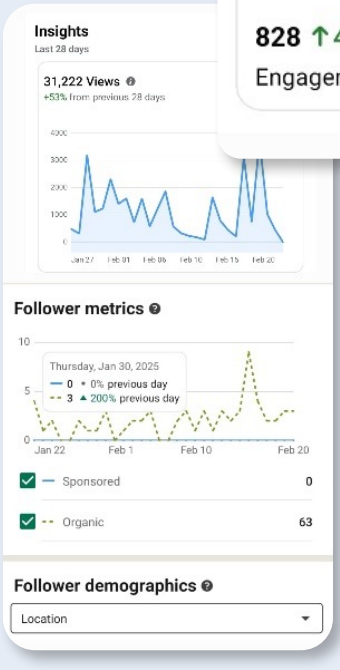
It is a pleasure to share our communication report with you. One of our largest achievements this year has been the launch of our website, thanks to the dedication of Prof. Costas Hadjipanayis with active contributions from Dr. Noor-ul-Huda Maria and technical support from the AANS team! The website has been crafted mindfully to allow easy browsing and offers a user-friendly format for all types of devices.

We have also created a Digital Library so everyone can easily access the recordings of all of our webinars! Our social media platforms actively update the attendees about both onsite and online future events. We are grateful to all the followers who keep showing interest in what we do! Moreover, we keep on sharing the publications from our official journal, the Journal of Neuro-Oncology. Our social media statistics serve as markers for the quality of our content and also in our success of achieving the goal of promoting more education. It is a matter of pure delight to show the continuous rise of followers, engagements and post views/reach. For any collaboration, or to share your content for consideration, please contact us and we will be happy to go through it.









EDUCATION SUB-COMMITTEE

Co-chairs: Noor-ul-Huda Maria and Isaac Yang, MD

It has been an incredible year for the Education Committee, as under the leadership of Prof. Costas Hadjipanayis, we introduced a myriad of Educational Activities ranging from Webinar Series to Fellowship Programs! Our section is taking the lead in actively organizing web-based activities on a variety of topics! Let's have a look at all our greatest achievements so far.

Revamped Website:
One of the greatest challenges was to provide a single platform that would help everyone find everything they need from our section at a single place. In keeping with the nature of various different devices, internet speed and experience of the visitors, we mindfully designed the website to be as clear and user friendly as possible. We also introduced our Digital Library so everyone can access the recordings of our webinars. The homepage shows flyers of all upcoming activities and the user can find details with just a single click!

Webinar Series:
Our section is actively organizing a wide variety of webinars. After debuting the Brain Mapping Series followed by the Innovations in Glioma Therapy (led by Dr. Noor ul Huda Maria), the Latest Highlights in Neurosurgical Oncology series (led by Dr. Yoshua Esquenazi) and an insightful webinar led by Prof. Gabriel Zadeh and suggested by Dr. Daniel Orringer on Molecular Diagnosis in Practice of Neurosurgical Oncology, we are delighted to share that we are launching two more series including Prof. Galereh Zadeh's lab "Limelight Series," where the residents and junior neurosurgeons will be allowed to present their innovative work (Please submit abstracts as a pdf or word document to: limelight.webinar@gmail.com) and a series on Spine Oncology (led by Dr. Christopher Newman). We take immense pride and joy in bringing the top neurosurgeons from all around the globe to share their knowledge firsthand while allowing interactive participation from the attendees and also by discussing the most raging and innovative topics which have never been covered before! In this way, we are bridging the knowledge gap, keeping everyone updated and prepared for the Spring 2025 meeting.

EARLY CAREER NEUROSURGEONS SUB-COMMITTEE

Co-chairs: Yoshua Esquenazi, MD and Ashish Shah, MD

As co-chairs for the Early Career Neurosurgeons Subcommittee, Dr. Esquenazi and Dr. Shah are very excited about the progress of our committee over the last year. We have begun our series of Tumor Section webinars with neurosurgeons from across the world to discuss relevant topics in neuro-oncology. These educational initiatives are designed to provide robust learning opportunities, and allow for ECNC members to network and engage in a thoughtful discussion on emerging issues in tumor neurosurgery. Additionally, we are planning our first inaugural Tumor Soiree on April 27 that the AANS to discuss controversial cases and novel treatment paradigms for brain tumors on Sunday. Our dinner will feature young and mid-career neurosurgeons and will encourage collegia discussions on important clinical cases. In keeping with the theme of "Power of One, Impact of many", we will also be honoring Dr. Randy Jensen at the dinner at the AANS to highlight his indelible impact on tumor neurosurgery. We look forward to seeing you at the AANS!

HISTORY SUB-COMMITTEE

Co-chairs: Ian Parney, MD PhD and Jonathan Sherman, MD

The History Sub-committee continues to support the study of tumor-related topics in neurosurgical history. This work correlates directly with the mission of the AANS Section on the History of Neurological Surgery. At the upcoming meeting of the AANS, there will be an oral presentation entitled "The Evolution of the Diagnosis of Brain Tumors: A Look Back into the Beginnings of Neurosurgery." The work associated with this presentation is also being organized into a formal manuscript. In addition to this presentation, there exist numerous poster presentations focused on tumor/neuro-oncology related history. In addition to the study of history, the Section also continues to support the preservation of history through the "Leaders in Neurosurgery Interview Series." There exist numerous interviews with leaders specializing in tumor/neuro-oncology. The most recent additions include an interview with Dr. Richard Byrne and with Dr. Mark Bilsky.

GLOBAL NEURO-ONCOLOGY SUB-COMMITTEE

Co-Chairs: Kate Drummond, MD, and Walter Stummer, MD

The AANS/CNS Section on Tumors Global Neurosurgery Committee continues to work to our mission to collaborate with global organizations focusing on neurosurgical oncology, providing education and facilitating communication among international neurosurgical organizations, ultimately, advancing neurosurgical care of brain and spine tumor patients across the globe. This mission is as important as ever with more than two-thirds of the world's population unable to access even basic care for their brain and spine tumors.

Our most exciting activity since the last report was a combined AASNS/CNS Section on Tumors and Asian Australasian Society of Neurological Surgeons (AASNS) Tumor Board Session at the AASNS Congress in Taiwan in November 2024. Two sessions (glioma and meningioma) with case presentation and lively discussion were well attended and future collaborations are planned.

The focus for the next period will again be on providing education activities with quarterly webinars. We are also looking at new content for interactive webinars to aid development of neuro-oncology and surgical neuro-oncology in emerging countries, in particular covering guidelines for structured neurooncological care and rational neurooncological surgery accounting for limited financial and technical resources in low-income countries. Finally, together with neurosurgical organizations worldwide, we intend to establish an observership matching platform.

We thank the members of the AANS/CNS Joint Tumor Section who have in the past contributed to the committee's activities and look forward to continuing support!

MEMBERSHIP SUB-COMMITTEE

Co-Chairs: Garni Barkhoudarian, MD and Randy Jensen, MD PhD

The membership committee continues to work to add value to Tumor Section membership. We personally contacted all tumor section members that had not paid their 2023 and 2024 membership dues. Many members responded to our reminder, and we have significantly improved our number of dues paying members. That said, if you happen fall into this category, please take a little effort to pay those dues and be an up-to-date member of our Section.

We continue to adjudicate member survey requests. Each year several surveys are sent to the Tumor Section leadership to ask to send surveys to our members. To prevent our members from being continuously inundated with frequent surveys we want to limit these surveys to only the most important and potentially beneficial for our Section. Any input from Section members would be appreciated.

We continue to explore ways to maximize Tumor Section member benefits and value. We are also thinking of ways to expand our membership to groups that have not been traditionally part of our group. We would appreciate member input on both goals.

We currently have 2,188 members, over 500 active members and over 1,000 medical student, resident and fellow members. Since last year we have added 77 new members to our group including 29 Active members and more than 50 medical students, fellows and residents.

GUIDELINES SUB-COMMITTEE

Co-Chairs: D. Ryan Ormond, MD, PhD and Kristin Huntoon, DO, PhD

This year's theme at the AANS Annual meeting is "Power of One, Impact of Many." The Guidelines Sub-Committee's efforts truly exemplify this theme. We work individually on Guidelines development, and through this collective effort, work to improve the care of our tumor patients. The Congress of Neurological Surgeons Guidelines development methodology has recently been updated and refined, with these updates now being utilized and published for new and upcoming Guidelines. Significant work is being performed by authors of various Guidelines as well as review work by members of the JGRC from the Tumor Section.

Recently completed works include the publication of the update to the **Low-Grade Glioma Guidelines** and an update for **Emerging Therapies for Metastatic Brain Tumor**.

Vestibular Schwannoma Guidelines updates are in press in Neurosurgery. **Functioning Pituitary Adenoma Guidelines** have been endorsed by the AANS/CNS and will shortly be submitted for publication in Neurosurgery.

Metastatic Spine Tumor Guidelines under the direction of Dan Sciubba and John O'Toole are working through the systematic review of eligible articles.

Nonfunctioning Pituitary Adenoma Guidelines are ripe for an update, and this work is now starting under the direction of Manish Aghi. PICO questions are with the CNS Guidelines Committee for approval and a literature search and abstract review will begin shortly.

Primary Glioblastoma Guidelines are due for an update, and author groups have been organized under the direction of Ryan Ormond and work will commence later this year.

Metastatic Brain Tumor Guidelines are being updated through a PCORI grant with the systematic review underway.

Craniopharyngioma Guidelines have been accepted as the newest of the Tumor Guidelines by the CNS Guidelines Committee and work on PICO question writing and approvals are underway.

In order to improve trainees' experience in the use and development of guidelines across the entire spectrum of neurosurgical experience, the CNS guidelines office has established a fellowship program to expose trainees to the importance of guidelines and the details of their development. The Joint Tumor Section is actively using this resource for guideline search development and refinement and to assist in the modification of guidelines methodology. Residents and fellows interested in these positions should contact the CNS Guidelines office. There are multiple positions available.

Finally, The Joint Tumor Section strives to increase the efficiency of Guidelines Development. With a large backlog of CNS Guidelines from multiple sections, we appreciate that the Tumor Section Executive Committee Leadership has approved the purchase of four Distiller licenses for the Tumor Section's exclusive use, along with the strategic use of Rayyan software, to help keep Guidelines writing moving more efficiently through the development process.

Guidelines

Application for development of future guidelines projects can be obtained at cns.org/guidelines/nominate-a-guideline. If individuals in the section are interested in developing a topic, the Joint Tumor Section Guidelines Committee can assist in the technical aspects of such a project. If authors want the assistance of the CNS Guidelines Office resources for this work, the proposed topic must be proposed in the official nomination form (from the above website), presented to and approved by the CNS Guidelines Committee. The use of the CNS Guidelines Office will obligate the authors, by written agreement, to publish in Neurosurgery.

Practice Parameters

Information on the steps to formally initiate this process and obtain CNS support is available at cns.org/guidelines/practic-parameters.

CNS Guidelines Office Resources

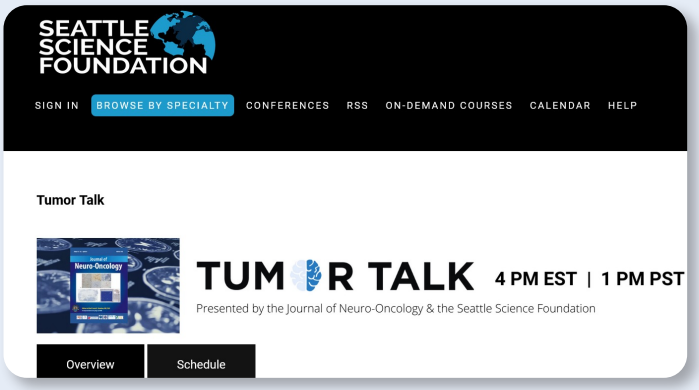
The Joint Tumor Section strives to increase the efficiency of Guidelines Development. With a large backlog of CNS Guidelines, we appreciate that the Tumor Section Executive Committee Leadership has approved the purchase of four Distiller licenses along with the strategic use of Rayyan software to help keep Guidelines writing moving through the development process.

The Joint Tumor Section Guidelines Leadership also wants to thank Trish Rehring and Kirsten Aquino of the CNS Guidelines Office who have provided key logistical, reference librarian and proofreading expertise for our projects.

JOURNAL OF NEURO-ONCOLOGY

Chair: Jason Sheehan, MD

JNO recently aligned its popular Tumor Talk Series with the Seattle Science Foundation (SSF). The SSF has a broad following on Youtube and its social media channels. This collaboration between JNO's Tumor Talk and the SSF helps to broaden the reach of JNO and better fulfill its mission.



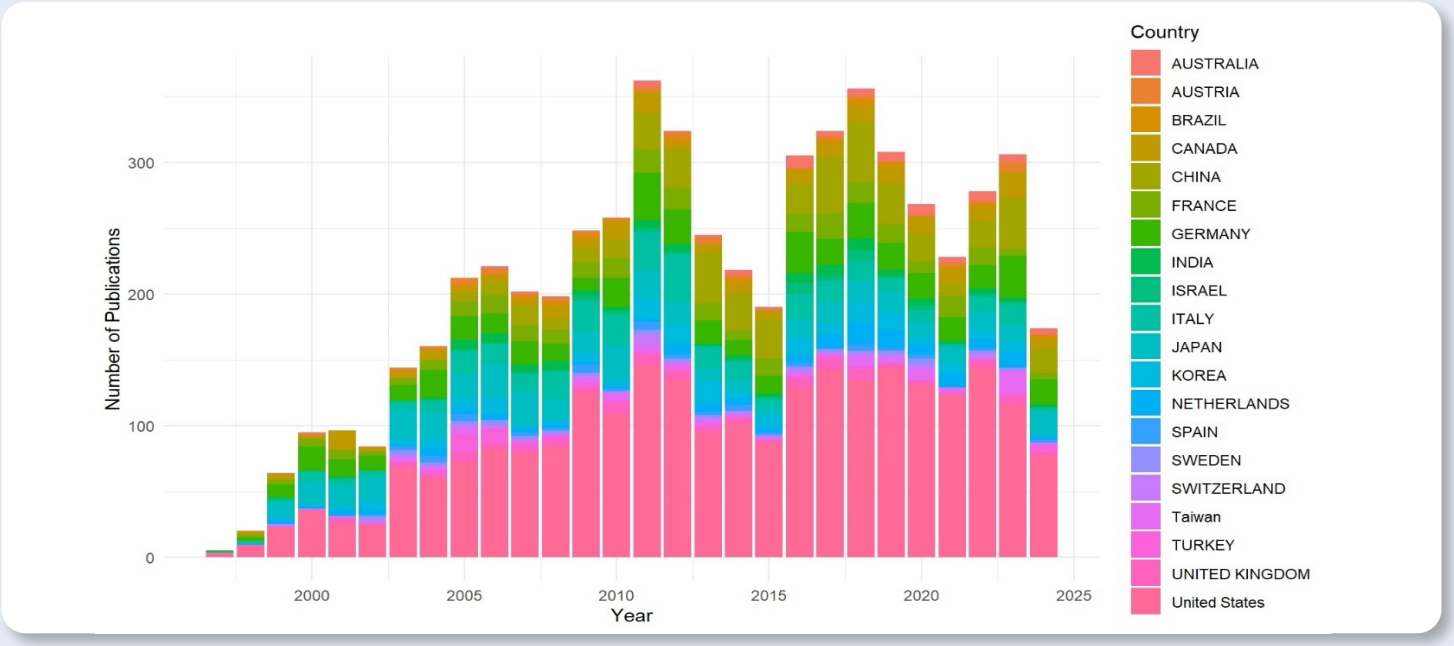
The JNO team recently looked at publication trends in JNO. I am pleased to report that JNO continues to represent a forum for U.S. but also international researchers in the field of neuro-oncology. We receive some of the best works from across the globe. The diverse pool of contributors has likely been augmented by Springer's increasing open access agreements (OA) that allow many centers, systems, and countries to publish OA without a direct charge to investigators.

A new special collection on craniopharyngiomas is well underway by Drs. Barkhoudarian and Schwartz. Dr. Shepard and Dr. Cifarelli will also lead a special collection on cutting edge approaches for glioblastoma management.

In addition, I am pleased to announce that the Dutch Neuro-Oncology Working Group (LMNO) has become a sponsoring organization for JNO. Dr. Dieta Bransma, chair of LMNO, is already on the JNO Editorial Board. LMNO colleagues Dr. Mark ter Laan, a neurosurgeon from Radbound University Medical Center, and Dr. Joost Jongen, a neurologist from Erasmus Medical Center, will also join the JNO Editorial Board.

Also, the Tumor Section and the JNO have renewed their partnership. Thus, access to the journal, section led special collections, and support for awards will continue. JNO and more broadly Springer Nature value the support from and relationship with the Tumor Section.

Please contact me with your recommendations and suggestions for JNO. Involvement as a reviewer or special collection editor are always welcomed. I can be reached at jsheehan@virginia.edu.



NONPROFITS SUB-COMMITTEE

Co-chairs: Mahua Dey, MD and Shawn Hervey-Jumper, MD

The Non-profit Subcommittee remains committed to building bridges between the Tumor Section and non-profit brain tumor groups to promote research, clinical care, and advocacy.

The committee members work with groups such as NBTS (National Brain Tumor Society) to raise awareness for brain tumors, with Tumor Section Executive committee members serving in the organization's leadership. Join NBTS for Head to the Hill and advocacy on behalf of the brain tumor community on May 4-6, 2025, with bipartisan representation from Congress to discuss ongoing efforts to improve Brain tumor funding. The American Brain Tumor Association (ABTA) continues to provide top-notch patient-facing education and research funding to brain tumor investigators. Early career investigator awards include the ABTA Young Investigator Award, Brain Tumor Epidemiology Consortium Junior Investigator Award, and AACR-ABTA Scholar in Training Award. The annual ABTA Alumni Research Network meeting is being held from September 14-16, 2025 in Schaumburg, IL, and many tumor section members will be in attendance. ABTA National Conference follows this meeting for patients with brain tumors and family members and will take place September 12-14, 2025 in Chicago, IL. The Brain Tumor Funders Collaborative, known as the BTFC, continues to provide research grant funding to promising brain tumor studies including a new RFA for Liquid Biopsy Proposals. The BTFC is a consortium comprising the American Brain Tumor Association (ABTA), Brain Tumor Foundation of Canada, National Brain Tumor Society (NBTS), Pediatric Brain Tumor Foundation, StacheStrong, and the Southeastern Brain Tumor Foundation (SBTF).

List of Non-Profit Brain Tumor Groups:

National Brain Tumor Society: braintumor.org

Brain Tumor Funders Collaborative: braintumorfunders.org

American Brain Tumor Association: abta.org

Pediatric Brain tumor foundation: curethekids.org

Stache Strong: stachestrong.org

Southeastern Brain Tumor Foundation: sbtf.org

SCIENTIFIC PROGRAMS SUB-COMMITTEE ON 2024 CNS ANNUAL MEETING

Co-chairs: Kalil Abdullah, MD and Shawn Hervey-Jumper, MD

At the **2024 CNS Annual Meeting in Houston**, our Tumor Section gathered for a dynamic exchange of ideas focused on refining brain tumor management. On Day 1, our speakers examined the expanding role of targeted molecular therapies in treating brain tumors. Discussions covered the use of IDH inhibitors for diffuse gliomas, advancements in targeted treatments for skull base tumors, and strategies for managing spine metastases. Experts including Daniel Cahill, MD, PhD (Massachusetts General Hospital), Analiz Rodriguez, MD, PhD (University of Arkansas Medical Center), and W. Christopher Newman, MD (Memorial Sloan Kettering Cancer Center) led the session, which was exceptionally well attended by our colleagues eager to integrate these innovations into clinical practice.

Day 2 shifted focus to intraoperative innovations designed to enhance tumor visualization and optimize the delivery of cancer-directed therapies during surgery. The session featured in-depth case studies and didactic presentations on photodynamic therapy for malignant glioma, as well as focused ultrasound applications for both gliomas and brain metastases. Led by Nicolas Reyns, MD, PhD (University Hospital of Lille) and Nir Lipsman, MD, PhD (University of Toronto), similarly to Day 1, the session attracted a robust audience, reflecting a strong commitment within the neurosurgical community to adopt emerging technologies and refine surgical techniques.

PEDIATRICS SUB-COMMITTEE

Chairs: Amy Lee, MD and Anthony Wang, MD

The Executive Committee of the AANS/CNS Section on Pediatric Neurological Surgery met in New York, NY on December 14, 2024. An update on tumor-related concerns was provided by Anthony Wang.

- Researchers at Stanford University published the results of an early-phase trial of a GD2 CAR T-cell therapy in diffuse midline glioma, H3 K27-altered in the journal, Nature.
- Two specifically pediatric CNS tumor consortia are currently running clinical trials in the United States (PNOC and Connect), as well as two broader pediatric oncology consortia (COG and SIOPE). Each has opened new pediatric neuro-oncology trials in the past year. These include NCT05887882, an intratumoral NK cell therapy, as well as NCT04573140, a personalized RNA vaccine in gliomas.
- Other immunotherapy-focused clinical trials initiated in 2024 include NCT03988283, a personalized neoantigen-targeted vaccine, NCT06193759, a personalized engineered T cell therapy in embryonal tumors, NCT05660408, a personalized RNA vaccine, NCT05096481, a CMV antigen-targeted vaccine, and NCT06342908, a neoantigen-targeted DC vaccine in H3 G34-mutant gliomas.
- NCCN pediatric glioma management guidelines were released in 2024, and medulloblastoma guidelines were revised. Anthony Wang and Renee Reynolds represented neurosurgery in the development of these guidelines.
- The NCI Cancer Moonshot Research Initiative announced its new cohort of early career researcher funding. Three of the 11 grants were awarded to investigators studying pediatric brain cancer.
- Pediatric and AYA cancers, as well as brain tumors, continue to receive priority status in research funding from the DOD CDMRP, and this is expected to continue when the next funding priority determination is released.

The field of pediatric neuro-oncology continues to expand at a rapid pace even relative to neuro-oncology in general, and pediatric neurosurgeons with interest and expertise in clinical trials, translational development, pharmaceutical discovery, and data science surrounding CNS tumors are needed to help drive the clinical aspects of the field forward. We continue to advocate for separate pediatric/adolescent/young adult tumor consideration in resource allocation and prioritization, due to the relative rarity of these conditions, but the potentially greater impact of these initiatives.

MEDICAL NEURO-ONCOLOGY SUB-COMMITTEE

Chairs: Soma Sengupta, MD, PhD, MBA, and Jan Drappatz, MD

Due to the INDIGO trial data, August 2024 saw the FDA approval of vorasidenib (Voranigo, Servier Pharmaceuticals LLC), an isocitrate dehydrogenase-1 (IDH1) and isocitrate dehydrogenase-2 (IDH2) inhibitor, for adult and pediatric patients 12 years and older with Grade 2 astrocytoma or oligodendroglioma with a susceptible IDH1 or IDH2 mutation, following surgery including biopsy, sub-total resection, or gross total resection. Clinical trials are planned by Dr. P. Wen and colleagues to evaluate the role of vorasidenib in combination with radiation and chemotherapy for higher grade IDH tumors.

We now have FDA approval of the SpringWorks drug, Gomekli (mirdametinib) in neurofibromatosis type 1 patients, a drug that brings much hope to the population. Efficacy was evaluated in ReNeu (NCT03962543), a multicenter, single-arm trial in 114 patients ≥2 years of age (58 adults, 56 pediatric patients) with symptomatic, inoperable NF1-associated PN causing significant morbidity. The major efficacy outcome measure was confirmed overall response rate (ORR), defined as the percentage of patients with complete response (disappearance of the target PN) or partial response (≥20% reduction in PN volume). Responses were assessed by blinded independent central review using volumetric MRI analysis per Response Evaluation in Neurofibromatosis and Schwannomatosis criteria, modified to require confirmation of responses within 2 to 6 months during the 24-cycle treatment phase. Confirmed ORR was 41% for adults (95% CI: 29, 55) and 52% in the pediatric cohort (95% CI: 38, 65).

The U.S. Food and Drug Administration has accepted radiopharma company Telix's new drug application for TLX101-CDx (Pixclara).Pixclara (F-18 floretyrosine or F-18 FET), a PET agent able to distinguish recurrent glioma from treatment-related changes. We anticipate that TLX101 will be commercially available later this year. FET PET is already included in clinical practice guidelines for the imaging of gliomas.

Trial & Expanded Access Updates

Meningioma: RTOG-3523/CAAA601A1US13R: A Multicenter, Randomized, Open-Label, Phase II Study of 177Lu-DOTATATE (Lutathera) in Adults with Progressive Intracranial Grade 1-3 Meningioma should be opening soon.

GBM: Diakonos' Oncology is launching a phase 2 clinical trial of a dendritic cell vaccine in newly diagnosed GBM (DOC 1021). While early clinical studies of dendritic cell (DC) vaccination for the adjuvant treatment of GBM previously suggested limited clinical benefit, results were inconclusive. DOC 1021 is prepared through homologous antigenic loading and may have advantages over prior approaches. A phase I study of DOC 1021 suggested improved survival over historic controls.

In the UK, a phase II trial of cannabis-based drug Sativex in treating GBM known as ARISTOCRAT is underway.

- The Musella Foundation through xCURES, sponsored through Imaging Biometrics have backed the opening of the Gallium Maltolate expanded access program for GBM refractory to treatment. Of note, the FDA had awarded the orphan drug designation for pediatric GBM in 2023.

Leptomeningeal disease: PLUS Therapeutics has just secured $5.7 million to support their leptomeningeal disease program. Plus Therapeutics is developing Rhenium (186Re) obisbemeda, a novel injectable radiotherapy in the ReSPECT-LM clinical trial.

Clinical Research Updates

NIH/NCI: There has been significant turmoil through the NIH with funding being delayed to many investigators, and NCI-funded trial opportunities are unclear at this time. How this might impact the cooperative groups (NRG, RTOG, Alliance) that collaborate with CTEP through the NCI is unclear. We remain hopeful, for the sake of our patients and their families that things will become clearer in due course. Dr. S. Grossman and other brain tumor neurosurgeons have formed a mid-Atlantic collaborative and they will have their first meeting in May 2025, the hope is to fund promising research and trials.

Diffuse Midline Gliomas: The Stanford group showed that in pediatric H3K27M-mutant diffuse midline gliomas, 9 of 11 patients who received the GD2 CAR T-cell therapy had neurological improvement. Of those, seven had dramatic tumor shrinkage. As patients' tumors shrank, their symptoms improved and many regained physical functions they had lost from the disease, such as hearing, walking, and taste sensation.

Dordaviprone (ONC201), a highly selective antagonist of the dopamine receptor has recently been subject to a New Drug Application (NDA) for accelerated approval (ONC201) for the treatment of patients with recurrent H3 K27M-mutant diffuse glioma. The drug is being studied in ACTION (NCT05580562), a randomized, double-blind, placebo-controlled, parallel-group, international phase 3 study of ONC201 in newly diagnosed H3 K27M-mutant diffuse glioma.

Radiation Necrosis: Boswellia serrata has been used successfully for patients to alleviate symptoms in radiation necrosis (multi-institutional study, accepted for publication in the International Journal of Radiation Oncology by Dr. Joshua Palmer and colleagues).

Neuro-Oncology Conferences

SNO/ASCO Brain Metastasis Conference is August 14–16, in Baltimore.

EANO October 16–19 is in Prague, Czech Republic.

The World Federation of Neuro-oncology Societies Meeting in conjunction with SNO is November 19–23 in Hawaii.

RADIATION ONCOLOGY SUB-COMMITTEE

Chairs: Serah Choi, MD, PhD and Daniel Trifiletti, MD

There have been several advances in radiation oncology for patients with meningiomas. As meningiomas universally express somatostatin receptor 2 (SSTR2), SSTR2-based DOTATATE positron emission tomography (PET) imaging can detect meningiomas that may not be apparent on magnetic resonance imaging, especially in the post-operative setting. Consensus guidelines were recently published on the use of Ga68 DOTATATE PET/CT for target delineation for radiotherapy treatment planning for patients with resected meningiomas (Perlow H et. al., IJROBP, December 2024). In addition, novel radiopharmaceutical approaches for the treatment of meningiomas are in development. At the 2024 ASTRO Annual Meeting, Dr. Kenneth Merrell (Mayo Clinic) presented the results of the single-arm, phase II clinical trial of 20 patients with enlarging WHO grade 2 (95%) or grade 3 meningioma refractory to surgery or radiation who were treated with 177Lu-Dotatate, a radiopharmaceutical therapy that targets SSTR2. The 6 month PFS which was 77.8%, median PFS was 10.7 months and overall survival at 1 year was 88.1%. The most common grade 3 adverse events were hematologic and occurred in ~50% of patients. The RTOG Foundation, in collaboration with Novartis, will be opening RTOG-3523, a multicenter, randomized, open-label, phase II clinical trial of 177Lu-DOTATATE (Lutathera) in adults with progressive intracranial grade 1-3 meningioma. The primary objective of the study will be to evaluate the efficacy of 177Lu-DOTATATE compared to local standard of care therapy.

Pre-operative stereotactic radiosurgery (SRS) is an attractive paradigm for brain metastases that aims to reduce the risk of nodular leptomeningeal disease and radiation necrosis that can be seen with post-operative SRS. The international collaboration of neoadjuvant stereotactic radiosurgery for brain metastases (INTERNEO) provides global data on a cohort of 179 patients who received preoperative SRS for 189 brain metastases from 9 institutions in 5 countries (Udovicich C et al, Radiotherapy and Oncology, 2025). INTERNEO expands on the prior studies which showed favorable outcomes of pre-operative SRS. Outcomes in INTERNEO were brain metastasis local control >95% at one year, grade 2+ radiation necrosis 1.8% and 1.2% rate of nodular leptomeningeal disease. NRG-BN012 is a phase III randomized controlled clinical trial currently open for accruals that is comparing pre-operative versus post-operative SRS for patients with brain metastases. The primary outcomes will be time to composite adverse endpoint defined as: 1) local tumor progression within the surgical bed; and/or 2) adverse radiation effect (ARE); and/or 3) nodular meningeal disease.

With newer CNS penetrant systemic therapies targeting EGFR and ALK with effective response rates, the role of upfront SRS for patients with brain metastases harboring EGFR and ALK alterations is unclear. The TURBO-NSCLC study (Pike L et al, J Clin Oncol, 2024) addressed this question. This was a retrospective study from 317 patients who were treated with EGFR or ALK tyrosine kinase inhibitors (TKIs) for brain metastases across 7 centers. The study showed 37% of patients received SRS in addition to TKIs and the rest of the patients received TKIs alone. At 12 months, the incidence of CNS progression was 17% with SRS and 29% without SRS. At 12 months, the rate of intracranial progression at existing brain metastases was 5% with SRS compared to 21% without. There was no difference in overall survival between the groups. Thus, the addition of upfront SRS to CNS-penetrant TKI improved CNS local control and time-to-CNS progression. Subgroup analysis suggested that patients with brain metastases ≥1cm may benefit the most from upfront SRS.

RESEARCH AND NEUROSURGERY RESEARCH EDUCATION FOUNDATION (NREF)

Co-Chairs: Gelareh Zadeh, MD PhD and Dan Cahill, MD PhD

Dr Gelareh Zadeh together with co-Chair Dr Dan Cahill present “Limelight Research Webinars” The series is intended to promote research education through the tumor section. Limelight will be held quarterly and aims to highlight neuro-oncology research conducted by medical students, residents, and fellows in Neurosurgery, showcasing the future of the field. Each webinar will be hosted by faculty discussant and two resident representatives. Medical students, residents, and fellows within Neurosurgery will be invited to submit abstracts showcasing their basic, translational, or clinical research. The faculty discussant, resident hosts, and other AANS/CNS tumor section research committee members will participate in peer-review and selection of abstracts for presentation at the webinar. The abstract format will be a maximum 300 words formatted into pre-defined sections of background, methods, results, and conclusion.

Each session will feature one faculty discussant and four trainee oral presentations. The session will begin with a 15-minute presentation from the faculty discussant, highlighting their research. This will be followed by four trainee oral presentations. Each presentation will be 10-minutes long, followed by 5-minute discussion moderated by the faculty discussant and resident hosts.

The goal of the webinar is to provide a forum that highlights research being done by Neurosurgical trainees and support early-career faculty in neuro-oncology neurosurgery. This event will also foster collaboration across institutions and provide invaluable discussion and feedback from faculty, enhancing the quality of research by AANS/CNS student members.

The trainees will be invited to participate in organization of the session. The first neurosurgery trainee participating is Dr Yosef Ellenbogen, from University of Toronto.

Limelight Research Webinar

Presented by the CNS/AANS Joint Tumor Section Research Committee

Research Committee Co-Chairs: Gelareh Zadeh and Dan Cahill

Neurosurgery Resident Facilitator: Yosef Ellenbogen

The CNS/AANS joint section is excited to announce the inaugural Limelight Research Lab Webinar aimed at highlighting neuro-oncology research conducted by medical students, residents, fellows, and early career faculty neurosurgeons.

Each webinar will selected research presentations by 2-4 trainee/early career investigators that will have input from faculty discussant (invited from members of the Tumor Section).

We ask that you share this opportunity broadly with your students, colleagues, and Department. The deadline for submission of research abstracts is **February 28, 2025**.

The deadline to indicate your interest in participating as a faculty discussant is **March 15, 2025**.

Abstract format: Maximum 300 words formatted background, methods, results, and conclusion.

Please submit abstracts as a pdf or word document to: limelight.webinar@gmail.com

SKULL BASE SUB-COMMITTEE

Co-chairs: Paul Gardner, MD and Daniel Prevedello, MD

The 34th Annual Meeting of the North American Skull Base Society (NASBS) & 9th World Congress of the World Federation of Skull Base Societies (WFSBS) in New Orleans was a resounding success, drawing a final count of over 1,500 participants from 55 countries. This robust turnout included 1,046 attendees from the United States and 431 international attendees, reflecting a strong global interest and collaboration in the field. In total, 1,060 abstracts were submitted—70% from North America and 30% from other regions—showcasing an impressive breadth of research and highlighting the meeting's status as a premier venue for skull base science. Faculty representation was also substantial, with 597 faculty members leading sessions, while 881 non-faculty participants brought fresh perspectives and engaged in vibrant discussions. It was gratifying to see both NASBS members (624) and non-members (854) share equally in the meeting's rich program and networking opportunities.

The content itself was both diverse and deeply specialized, featuring 103 sessions organized by topic or focus area. Attendees had the benefit of a two-day Pre-Meeting Course, along with dedicated tracks for Advanced Neuroradiology (including the renowned Curtin Call lecture), Orbit Education Day, Pediatric applications, Chordoma, Craniopharyngioma, Vestibular Schwannoma, Nasopharynx Cancer, Survivorship, and Functional PitNET. Special collaborations with SHANA and EUSICA/INSICA enriched the agenda even further, while the "Women in Skull Base" session represented a notable highlight, celebrating and supporting the contributions of women in the field. Meanwhile, the Rhoton Room hosted four sessions that provided a deep dive into advanced anatomical approaches. Altogether, the meeting showcased the latest innovations in skull base surgery and fostered an invigorating sense of community and progress among its global attendees.

Upcoming Skull Base meetings include the ESBS (European Skull Base Society) meeting from December 4-7, 2025, in Zagreb, Croatia. A premeeting practical course is planned for the 2 days prior to the meeting. Already with the largest confirmed international faculty in recent years, this should prove to be another sign of the growth of our subspecialty and will feature a significant contribution by surgeons from the US and members of the Tumor Section.

This year marks the second year for a successful skull base fellowship match through the NASBS. The process has provided a stable and consistent format for matching of the multitude of trainees seeking advanced training post-residency.

Finally, the Tumor Section is launching a webinar series in collaboration with the NASBS. Covering a wide range of skull base tumor topics, including a series on endoscopy in skull base surgery and webinars on rare tumors, acoustic neuroma management and updates on meningioma, these webinars are a great example of the Tumor Section Sub-Committee organization at work.

SPINAL ONCOLOGY SUB-COMMITTEE

Chairs: Chris Newman, MD, MPH and Pascal Zinn, MD, PhD

Spine oncology is growing as its own important space within neuro-oncology. Numerous advances in surgical techniques, radiation oncology, and medical oncology combined with the unique considerations of spinal instrumentation in the oncologic population as well as advanced surgical approaches to lesions within the spinal cord and/or intradural spaces have created a field in which advanced study has become increasingly important to deliver high-quality care. To meet the demands of this growing patient population, we plan to build on the efforts of the previous Co-chairs of the Spine Committee and work to find sustainable funding for awards recognizing research within the spine oncology space at the CNS and AANS meetings for research submitted to the Tumor Section. This will help to foster and recognize meaningful research in the field of spine oncology.

We recognize that building a practice focused on spine oncology requires specialized training. To this end, we plan to develop a webinar series to help potential applicants understand the programs with a focus on spine oncology, what they offer, and what residents can expect to learn from additional time spent in these fellowships. We also plan to create a webinar series of interviews with spine oncologists discussing how to navigate building a clinical and academic practice, navigating organized neurosurgical opportunities, and other issues pertinent to those considering a career focused on spine oncology.

In addition to these efforts, we acknowledge the importance of multidisciplinary collaboration in spine oncology. We intend to promote cross-disciplinary partnerships between spine surgeons, oncologists, radiation oncologists, radiologists, electrophysiologists, and rehabilitation experts for spinal and spinal cord related advanced recovery. This all to ensure a holistic approach to patient care. By fostering these collaborations, we hope to enhance treatment outcomes and provide comprehensive care tailored to the complex needs of our spine oncology patients.

Finally, we recognize the necessity of patient-centered care in this growing field. As we move forward, our efforts will also include initiatives aimed at improving patient education and support, ensuring that those diagnosed with spinal tumors have access to the best possible information, treatment options, and resources to support them throughout their care journey.

TECHNOLOGY AND INNOVATION SUB-COMMITTEE

Co-chairs: Kimberly Hoang, MD and Michael Ivan, MD

The technology and innovation committee continues its work to inform, study, and highlight emerging innovation in neurosurgical oncology for the Tumor Section members and general neurosurgery population.

We have begun a new “Time to Adoption” project to evaluate the trajectory and timeline of recent major innovations in neurosurgical oncology. This initiative will better inform the literature and members about the timeline and resource intensive process of technology and innovation in our space and we look forward to presenting and publishing our findings in the near future.

Please reach out with any innovations or technology initiatives you would like us to champion or investigate on your behalf, as we here to support our members’ needs.

WASHINGTON SUB-COMMITTEE UPDATE FALL 2024

Co-chairs: Tiffany R. Hodges, MD and Andrew Sloan, MD

A major update for the Washington Committee is the addition of Charlotte Pineda as the new head of the AANS/CNS Washington Office, which was effective July 1, 2024. As Katie Orrico is transitioning to her new role as AANS CEO, Charlotte brings a wealth of knowledge and experience in health policy and advocacy, spending the last 8 years on Capitol Hill and holding positions in the U.S. House of Representatives. She holds a Master of Public Policy in science and technology from George Mason University, a business certificate in finance and marketing from Columbia University and a Bachelor of Arts in political science and international affairs from the University of South Florida.

As an update to prior authorization reform legislation, the Centers for Medicare & Medicaid Services published the second rule to improve the prior authorization process in Medicare Advantage, CHIP, Medicaid managed care and ACA-established Qualified Health Plans. This rule is being analyzed and compared to provisions of the Improving Seniors' Timely Access to Care Act (H.R. 3173/S. 3018) to assign how well the final rule aligns with our signature legislation to improve prior authorization. Given the Congressional Budget Office's previous cost estimate, some adjustments to the legislation may need to be made to lower the cost, getting it as close to zero as possible.

In addition the National Comprehensive Cancer Center Network (NCCN) has updated the NCCN Guidelines to include LITT as an option for "patients who are poor surgical candidates (craniotomy or resection). Potential indications include relapsed brain metastases, radiation necrosis, glioblastomas, and other gliomas." The established LITT clinical evidence has driven this expansion and lead to the updated Clinical Practice Guidelines in Oncology for Central Nervous System Cancers. Please refer to nccn.org for further details.

With a rapidly changing and challenging health care climate, the Washington Committee will remain steadfast in engaging our policymakers on the issues that affect neurosurgeons and our patients. Members of the AANS/CNS Tumor Section are encouraged to communicate with Tiffany R. Hodges, MD, FAANS, FCNS and Andrew Sloan, MD, FAANS who serve as your tumor section liaisons to bring issues or concerns to our Washington Committee. You can stay informed on health care policy topics by subscribing to Neurosurgery Blog at neurosurgeryblog.org and following the Washington Committee on Twitter @neurosurgery and also on their website neurosurgery.org. Finally, periodic updates are available via AANS and CNS publications and through presentations at neurosurgery meetings.