# congressquarterly



# BUILDING Community



**4** Building a Collaborative and Connected Community Through Guideline Development: How CNS Guidelines Strengthen Neurosurgical Practice **10** Building Equity and Inclusion in Neurosurgery: Addressing Systemic Barriers and Paving Pathways for Black Providers and Patients

### congressquarterly

#### cnsq

Winter 2025 Volume 25, Number 4

#### EDITOR

Theresa Williamson, MD, MPH EDITORIAL BOARD:

Rushna Ali, MD Hoon Choi, MD, PhD Rimal Dossani, MD Aladine Elsamadicy, MD Jeremy Hosein, MD Rosalind Lai, MD Michael Lawton, MD Grace Ng, MD Khoi D. Than, MD Scott D. Wait, MD

MANAGING EDITOR: Julie L Chan, MD, PhD

EDITORIAL STAFF: Michele Hilgart Erica L. Bryant

DESIGNER: Steer.Design

CONGRESS OF NEUROLOGICAL SURGEONS 2024-2025 OFFICERS

PRESIDENT Daniel J. Hoh, MD, MBA

PRESIDENT-ELECT: Martina Stippler, MD

VICE-PRESIDENT Brian V. Nahed, MD

SECRETARY (21-24): Lola B. Chambless, MD

TREASURER (23-26):

Ashok R. Asthagiri, MD PAST-PRESIDENT: Alexander A. Khalessi, MD, MBA

CEO Regina Shupak contact: 847-240-2500 or info@cns.org

CONGRESS OF NEUROLOGICAL SURGEONS MISSION STATEMENT: The Congress of Neurological Surgeons exists to enhance health and improve lives through innovative neurosurgical education, advancement of clinical practice & scientific exchange.

Congress Quarterly is the official newsmagazine of the Congress of Neurological Surgeons, located at 10 North Martingale Road, Suite 190, Schaumburg, IL 60173. Members of the Congress of Neurological Surgeons may call 847.240.2500 with inquiries regarding their subscription to Congress Quarterly.

© 2025 by the Congress of Neurological Surgeons. No part of this publication may be reproduced in any form or language without written permission from the publisher. Published free of charge for the Congress membership with additional distribution. Send address changes to Congress Quarterly, 10 N. Martingale Road, Suite 190, Schaumburg, IL 60173.

### EDITOR'S NOTE



Editor



Theresa Williamson

Julie L. Chan Managing Editor This year we look forward to embracing our Neurosurgery community as we expand our membership and develop our impact on society. In this issue of Congress Quarterly, we focus on the multitude of platforms and efforts which allow us to reach our colleagues both in work and in life more broadly. Further, we reflect on the historical aspects of the neurosurgical community and review its growth into who we are today.

We celebrate the depth and breadth of our neurosurgical community through our growing accomplishments in inclusiveness. Tiffany Hodges, Rushna Ali, and Sanjeev Herr focus on embracing diversity by creating a space for the LGBTQIA community within neurosurgery. Jean-Luc K. Kabangu and Sonia Eden discuss how our Black community has flourished by addressing systemic barriers. Corinna Zygourakis and Maryam Rahman review Dr. Frances Conley's legacy and discuss how her advocacy and perseverance impacted the history of women in spine and vascular surgery. In keeping with the theme of women leaders in neurosurgery and across the globe, Laura Snyder delves into Right Honorable Jacinda Arden's 2024 Dorothy Nash Lecture. She emphasizes the impact that empathy and embracing family can have in both our personal and professional lives.

How we present ourselves to the greater community is equally important as our representation among ourselves. We are first and foremost guided by our commitment to clinical excellence and share our dedication through evidence-based guidelines. Anand Veeravagu, Joseph Osorio, and Tiffany Hodges discuss guidelines and how they hold our community to a standard of excellence. Furthering the importance of community representation, Brain Gantwerker and Arvind Ahuja discuss key qualities which allow patients to relate to us while still maintaining respect within the public eye. Betsy Grunch encourages the use of social media and provides advice on developing our public profiles to garner authentic engagement with the community.

As we broaden our connections with our international partners, Garni Barkhoudarian, Kunal Vakharia, and Peter Nakaji discuss current collaborations from the perspective of the broader neurosurgical community, highlighting collaborations with our international colleagues. Tapping into the future of the neurosurgery community, Julie Chan and Emal Lesha emphasize the importance of the Resident Committee in the future of neurosurgery and its historical inception to its current state.

Finally, in this issue of the Congress Quarterly, Georgios A. Maragkos and Doug Kondziolka discuss how early career development and inclusivity are key elements necessary to continue to evolve as neurosurgeons both inwardly and from a publicfacing perspective.

We hope you find these comments useful in your practice as we work together in our continued effort to break barriers and grow as a neurosurgical community.





Editor's Note Theresa Williamson, Julie Chang

President's Message Daniel Hoh

#### **PROFILES IN INNOVATION**

- 4 Building a Collaborative and Connected Community Through Guideline Development: How CNS Guidelines Strengthen Neurosurgical Practice Anand Veeravagu, Tiffany R. Hodges, Joseph Osorio,
- 6 A Conversation with the Right Honorable Dame Jacinda Ardern Laura Snyder
- 8 Women in Neurosurgery: Celebrating the Legacy of Dr. Frances Conley and Women in Spine and Vascular Surgery Erin N. Walker, Corinna Zygourakis, Maryam Rahman



**10** Building Equity and Inclusion in Neurosurgery: Addressing Systemic Barriers and Paving Pathways for Black Providers and Patients

Jean-Luc K. Kabangu, Sonia V. Eden

- 12 Embracing Diversity: Creating a Space for the LGBTQIA+ Community in Neurosurgery Tiffany R. Hodges, Rushna Ali, Sanjeev Herr
- 14 Building, Enriching, and Maintaining Standing in the Community: Leaning Into Our Identities as Neurosurgeons Brian Gantwerker, Arvind Ahuja
- **16** Building a Neurosurgical Community on Social Media Betsy Grunch
- **18** Building Community at the CNS: the CNS International Committee

Garni Barkhoudarian, Kunal Vakharia, Peter Nakaji



- **20** CNS Resident Committee: Expanding the Future of Neurosurgery Emal Lesha, Julie L. Chan
- 22 Community Building in Neurosurgery: A Collective Effort for the Future Georgios A. Maragkos, Douglas Kondziolka

#### FOUNDATION UPDATE

24 CNS Foundation Update Lola B. Chambless

#### **INSIDE THE CNS**

**26** Washington Committee Report Russell R. Lonser, Charlotte Pineda

#### **CNSQ INSIDE BACK COVER**

Images in Neurosurgery

## PRESIDENT'S MESSAGE

CNS



Daniel J. Hoh, MD, MBA President, Congress of Neurological Surgeons

#### Dear Colleagues,

R eflecting on the incredible recent 2024 CNS Annual Meeting in Houston, I am inspired by the diversity, creativity, innovation, leadership and engagement of our neurosurgical community. Community – a group of individuals with shared experience, purpose, or vision – is represented in many ways. We are a community bound by our shared experience of neurosurgical training as students and residents. We are a community of our neurosurgery colleagues in our institutions, and specialty areas of practice. Looking deeper we have broader inter-connected communities. Multi-generational communities connected through common mentors and mentees. Communities with shared experience characterized by gender, sexual orientation, ethnicity, nationality, and beliefs.

Perhaps most inspiring, however, are our communities formed by shared purpose and vision. At the CNS Annual Meeting, our community celebrated Gail Rousseau with the WINS Trailblazer award, presented by WINS chair Maryam Rahman. The importance of women leaders was front and center with the Dorothy Nash lecture by former New Zealand prime minister, Jacinda Ardern. I am incredibly inspired by our newly elected CNS president-elect, Martina Stippler – a woman neurosurgeon trailblazer and leader in her own right. Sonia Eden, chair of ASBN, gave an energizing presentation on the current state of the organization and community. The Neurological Surgeons Pride Alliance led networking and mentorship events for the LGBTQ+ community. The CNS Pathways program – now in its fourth year – is a growing community with the shared purpose of cultivating the next generation neurosurgeons, so that our field better reflects the diversity of our global community.

Looking ahead to 2025, I am excited for our community to connect around shared purpose to improve lives through innovative

neurosurgical education, advancement of clinical practice and scientific exchange. This year, the CNS Leadership Institute will celebrate 10 years as the industry leader in providing leadership skills and training - with offerings for early career and executive level neurosurgeons. This year we will expand with new leadership tracts for residents in training, and for system and enterprise level senior executives. The CNS Education committee offers an array of community building education, such as the Spine and Tumor Complication courses, the Skull Base course for fellows, and a three-part webinar on Neurosurgical Emergencies. A new town hall webinar will bring together leaders in our practice-based neurosurgery community to share experiences and mentorship for residents looking to non-academic and hybrid academic employment. The CNS Innovation Institute serves our community of scientists, inventors, and entrepreneurs with opportunities to showcase their innovations at our Data Science course, and culminating at the Annual Meeting with the Innovator of the Year award. Our CNS Wellness committee continues to expand offerings at the CNS Annual Meeting to recharge, activate, and drive peak performance. Creativity and expression (CNS Art of Neurosurgery), experiential self-care (CNS Wellness Retreat with Pilin Anice), and movement and activity (CNS 5k, yoga) are among the many ways we envision a stronger, healthier, and more resilient community.

This issue of *CNSQ* dives into different ways we embrace community through the CNS. Hodges, Ali and Herr provide a vital perspective on the LGBTQIA+ community. Kabangu and Eden identify barriers for black neurosurgeons and patients – and offer a pathway for equity and inclusion. Zygourakis and Rahman celebrate the legacy of Frances Conley – a woman neurosurgeon pioneer. Veeravagu, Osorio, and Hodges explore the impact of guidelines and evidencebased medicine to establish standards of practice for our community. LOOKING AHEAD TO 2025, I AM EXCITED FOR OUR COMMUNITY TO CONNECT AROUND SHARED PURPOSE TO IMPROVE LIVES THROUGH INNOVATIVE NEUROSURGICAL EDUCATION, ADVANCEMENT OF CLINICAL PRACTICE AND SCIENTIFIC EXCHANGE.

Barkhoudarian, Vakharia, and Nakaji open our doors to our broader international neurosurgical community. Washington Committee director Charlotte Pineda provides an update on our national and governmental advocacy efforts to better serve our patients, neurosurgeons and health systems. Neurosurgery Publications Editor in Chief, Douglas Kondziolka shares his vision of the future landscape of scientific exchange through both traditional and innovative formats. And guest contributor Betsy Grunch shares her experience building extensive community networks through social media.

It is an incredible honor to serve as president of the Congress of Neurological Surgeons. One of our priorities this year is to broaden and deepen our sense of community. I am humbled by the many ways in which the CNS connects us through shared experience, purpose and vision. And I know that we will all continue to be inspired by the diversity, creativity, innovation, leadership and engagement of our neurosurgical community. Last, I am excited to celebrate our community at the 75th Annual Meeting of the Congress of Neurological Surgeons in Los Angeles, California, October 11-15, 2025. We have many engaging speakers, programs, and events – which I am thrilled to share with you over the coming year. Thank you for being a CNS member and a vital member of our global neurosurgical community. I hope you enjoy this first of the year issue of the CNSQ – as the CNS connects us in 2025.

Sincerely,

Daniel J. Hoh, MD, MBA President, Congress of Neurological Surgeons



#### STAY CONNECTED



https://twitter.com/CNS\_Update

fĽ

https://www.facebook.com/cns.update

https://www.instagram.com/cns\_update

https://www.youtube.com/user/cnsvideolibrary











Anand Veeravagu, MD

# Building a Collaborative and Connected Community Through Guideline Development: How CNS Guidelines Strengthen Neurosurgical Practice

he Congress of Neurological Surgeons (CNS) plays a pivotal role in fostering a unified, collaborative, and effective community. A cornerstone of this mission is the development of clinical guidelines—the comprehensive synthesis of evidence tailored to specific neurosurgical diagnoses.

These guidelines provide a solid foundation for high-quality patient care, based on the latest research and shared expertise within the field. By investing in guidelines, the CNS strengthens the neurosurgical community, equipping practitioners to deliver exceptional care while building stronger connections within the profession.

#### **Guidelines as Best Practices for Patient Care**

CNS guidelines act as roadmaps for neurosurgeons, offering evidence-based best practices for treating complex conditions, from brain tumors to spinal disorders. These guidelines allow neurosurgeons to draw on the collective knowledge of the CNS community, translating insights into actionable practices that maximize efficacy. By setting a standard for treatment approaches, guidelines reduce variability in care, ensuring that patients receive consistent, high-quality treatment across regions and providers. For neurosurgeons, these guidelines become trusted resources that streamline their work and inspire confidence in their approach.

Developed through rigorous processes involving comprehensive systematic review and data analysis, with input from neurosurgeons across diverse backgrounds, specialties, and experience levels, guidelines establish a strong scientific foundation for patient care. Guideline development is quite rigorous (https://www.cns.org/ guidelines/guideline-development-methodology), validated with strict evidence based methodology, and is updated at reasonable time intervals. This foundation empowers neurosurgeons to make informed, effective decisions, ultimately elevating the entire field and providing excellent clinical care. We are proud to say that through the dedicated efforts of members of the guidelines committee, guidelines for spine metastases, epilepsy, spinal cord stimulation, cervical degenerative disease, perioperative and intraoperative spine management, ulnar nerve disorder, functioning and nonfunctioning pituitary adenoma, low grade glioma, brain metastases, chiari malformation, and vestibular schwannoma have all been published and/or are being developed/updated. This was an amazing feat fostered by our own neurosurgical community.

Of course, many more guidelines are underway and in process. In addition to guidelines, the CNS now offers another essential tool for practicing neurosurgeons—practice parameters. Practice Parameters are the synthesis of the best available information, supplemented by expert opinion on focused clinical topics. These come into application where there is not enough high-quality published evidence to develop an evidence-based guideline as defined by CNS methodology.

One practice parameter that has been of interest is parental leave for trainees and faculty in the neurosurgery setting. The parental leave practice parameter is developed through thoughtful dialogue with neurosurgeons at different career stages, embodying CNS's collaborative ethos. By addressing the need for personal time without compromising patient care, the guideline will help to foster a supportive and inclusive culture within neurosurgery. It shows that CNS values its members not only as professionals but as individuals with personal lives and responsibilities. This focus on holistic wellbeing helps strengthen ties within the CNS community, ensuring that practitioners feel supported both personally and professionally. Recognizing the demanding nature of neurosurgery, the parental leave

cnsq

guideline task force will explore unique challenges neurosurgeons face when balancing personal and professional responsibilities. This future practice parameter exemplifies CNS's commitment to the well-being of its members, supporting a healthier, more supportive work environment.

CNS's clinical guidance resources do more than enhance efficiency and consistency; they reinforce a commitment to scientific rigor and efficacy in neurosurgery. Rooted in the latest research and clinical data, guidelines and practice parameters ensure that neurosurgeons are consistently working with the best available information. This scientific foundation promotes a culture of continuous learning and adaptation within the neurosurgical community. As new studies emerge and technologies evolve, CNS updates its guidelines to reflect the latest findings, helping neurosurgeons stay current and well-prepared to provide evidence-based, cutting-edge care. We encourage our neurosurgical community to remain up-to-date on CNS Guidelines (https://www.cns.org/guidelines/guidelines-overview), browse Guidelines summaries in the new CNS+ app, and listen to CNS Guidelines Podcasts (https://www.cns.org/guidelines/gui



# Your Ultimate Neurosurgical Assistant is Here with the New CNS+



CNS is revolutionizing neurological practice with a groundbreaking AI-enhanced interface integrated into the new CNS+ app.

### Tailored education, and exclusive tools at your fingertips—whether you're in the operating room, clinic, or on the go!

- Gain Instant Answers: Boost your efficiency with our AI-enhanced search engine, delivering results 90% faster.
- Personalized Education: Receive recommendations tailored to your needs.
- Exclusive CNS Member Access: Leverage cutting-edge AI to unlock CNS Guidelines, Nexus, Neurosurgery, and more!
- Transform your practice: Access critical information anytime, anywhere.







CNS+ Hi Jamie Smith Q Ask CNS Chatbot Anything • ( <del>-</del> My CNS For You CNS | 224 ANN HOUSTON TEXAS . SEPTEMBER 28-OCTOBER 2, 2024 REGISTER NOW Recommended for Yo **W** CNS CNS Course Guidelines Resuming Anticoagulants in Guidelines for the Management of Severe Trauma ... Patients With ... Top 10 Things Your Colleagu 1 r 俞 ٢





Laura Snyder, MD

# A Conversation with the Right Honorable Dame Jacinda Ardern

s neurosurgeons, we often find ourselves in leadership positions, whether we want them or not. Management of complex cases inside and outside the OR, as well as managing personalities in our practices and hospital, may require leadership skills that we were not trained to perform. Crises arise, and how we deal with these crises may change ourselves and those around us. Sitting down with Dame Jacinda Ardern at the 2024 CNS Annual Meeting in Houston, Texas was an educational opportunity to discuss leadership styles and overcoming crises.

Dame Ardern has been known for her compassionate leadership style, but when asked about her style, she focused on how she started as a reluctant leader. She discussed that although she surrounded herself with others who knew more than she did about event details and those who could help her make decisions, she still had to educate herself as much as possible. Ultimately, the final decisions in complex situations were still her full responsibility. The magnitude of this responsibility became very challenging in certain situations where there was no clear answer, but constituents expect leadership to have all the answers. Dame Ardern emphasized that as leaders there may be power in recognizing that we do not necessarily have the answers, and sharing this with our constituents may be the best action that we can perform, even though uncomfortable. There may be power in saying, "I don't know, and I'm working on finding this out."

We talked further about how her empathy led her and her country through crises in which lives were at stake and taken. She discussed





Members of the CNS Executive Committee meet with Dame Jacinda Ardern after her Tuesday presentation.

how, at these times, she wanted to be with the families of those who had lost loved ones, and she wanted to be at the site of disaster; however, she had to be told that it might not be the safest to go to the site, and she had to realize that she may not be able to help if she was actually there physically. She highlighted the weight that we all feel when we see suffering, and in our jobs as neurosurgeons, we see suffering routinely. We ourselves must recognize the weight this brings into our own personal and professional lives, and we must not let the weight of sadness and suffering cloud our ability to make rational decisions.

Beyond her responsibilities during her time Prime Minister of New Zealand, Dame Ardern is now on the Board of Trustees of Prince William's Earthshot Prize. She has dedicated a significant amount of time in her career to improving the environment. Under her leadership, New Zealand introduced a Zero Carbon Act, established a Centre for Climate Action on Agricultural Emissions, and produced the nation's first Emissions Reduction Plan. I was interested in hearing how she thought we, as physicians, could help with environmental action and change. She stated that even if we can vocalize to the world that we recognize that there is a problem and that change needs to occur, this is helpful for the world. As physicians, we are recognized for our intelligence and commitment to people, and our voices regarding caring for the environment will be well-respected.

In our discussion, I appreciated her thoughts on creating an environment where both men and women can embrace taking time for their families. Routinely, this may be seen as only a women's issue, as we encourage women to take time for maternity leave and time with their families, in order create an environment that allows more women to enter the neurosurgical workforce. In reality, we must recognize that both men and women may want to take more time with their families—whatever that family may look like, whether that be children, partners, elderly parents, extended family, or others. She emphasized that we need to create an environment where everyone, regardless of gender, feels comfortable supporting each other in these needs. One of her most poignant comments during the discussion was when she stated, "No one ever says at the end of their life, I wish I had worked more, but they do say I wish I had spent more time with my family."

I believe that many of us, after our discussion with Dame Ardern, felt an extreme sense of gratitude for our current lives and the blessings we experience. As we remembered those who were affected by COVID, the terrorist attack in Christchurch, and other international tragedies, we remembered how grateful we our for our health and safety on a daily basis. Furthermore, we felt grateful that the crises we manage on a day-to-day basis in the hospital and clinic seem relatively small in comparison to those of international leaders. In listening to her describe how she did everything she could to keep one hour in her schedule every day for bathtime with her child, we felt grateful for the time we have every day with our children. As we go forward, I hope we can continue to keep this sense of gratitude for our lives, our families, and our professions, as well as maintain the empathy and leadership that the Neurosurgical profession requires.





**cns**q

Erin N. Walker, BS





Maryam Rahman, MD

# Women in Neurosurgery: Celebrating the Legacy of Dr. Frances Conley and Women in Spine and Vascular Surgery

The late Dr. Frances K. Conley was a pioneering leader in neurosurgery and a fierce advocate for women in medicine. Her career marked a time when the professional advancement of women was often met with resistance and societal bias. Raised in an academic environment by educators, Conley began her higher education journey at Bryn Mawr College before transferring to Stanford University, where she completed her undergraduate degree. In 1961, she was one of only 12 women accepted into Stanford's School of Medicine. Even as a medical student, Conley was outspoken about the blatant exclusion of women from medical education curricula and other professional spaces. Despite these challenges, she persevered, graduating and earning a position as Stanford University Hospital's first female surgical resident. By 1975, she had completed her neurosurgical training, and in 1977, she became only the fifth board-certified female neurosurgeon in the United States.<sup>1</sup>

From an early age, Conley had envisioned a life beyond traditional gender roles and was determined to advance her career in neurosurgery. Her resilience and commitment to her field led her to become the first woman to achieve tenure as a full professor of neurosurgery at Stanford in 1986. Despite her professional successes, Conley continued to face harassment and inappropriate comments from male colleagues and leaders within her department.

In a defining moment of her career, Dr. Conley publicly threatened to resign from her tenure-track position at Stanford in 1991 to protest the unresolved issues of sexism within her department. This bold act became a catalyst for institutional change, drawing national attention to the issues of gender discrimination and harassment in medical education and clinical environment.<sup>2</sup> Her stand encouraged broader conversations about these issues across the country, leading to shifts in institutional policies and attitudes. Conley continued to make significant contributions to neurosurgery, guiding the next generation of women in medicine through teaching and mentorship. She also advanced neurosurgical research and served as the head of the Veterans Affairs Palo Alto Health Care System.

The legacy of Dr. Frances K. Conley's advocacy and perseverance is seen in the increasing presence of women in neurosurgery, with more



Early members of Women in Neurosurgery (WINS). From left to right Karin Muraszko (president 1992), Deborah Benzil (president 1990), Edie Zusman (president 2000), Gail Rosseau (president 1994).

women now assuming leadership roles as department chairs, program directors, and tenured faculty nationwide. However, with women still making up only 8% of all neurosurgeons in the United States, the path toward an equitable workforce in this field is ongoing.

To address this disparity and provide support for women pursuing neurosurgery, Women in Neurosurgery (WINS) was established in 1990 by Drs. Deborah Benzil, Karin Muraszko, and Gail Rousseau.<sup>3</sup> It became an official section of the CNS and AANS many years later. Since its inception, WINS has grown from a small organization providing support, camaraderie, and leadership opportunities for female neurosurgeons into a robust group of women and male allies that supports female neurosurgeons, residents, and medical students by offering resources for education, leadership, and scholarship across all stages of training.<sup>4</sup>

WINS provides a platform for addressing issues that other organizations may not be well positioned to address. For example, in 2021, WINS leadership published a professionalism and harassment policy in response to accumulated sexual harassment reports in order to protect all those who are involved in organized neurosurgery meetings and events.<sup>5</sup>

WWW.CNS.ORG

**cns**a

#### Member Spotlight / Angela M. Richardson, MD, PhD

Assistant Professor, Indiana University Department of Neurosurgery

#### Why did you join the CNS?

I joined the CNS because it fosters a sense of camaraderie while working to improve neurosurgical knowledge and the application of this knowledge through education.

### What are you looking forward to in working with the CNS and WINS this year?

I am excited to work more with medical students interested in neurosurgery. The passion and excitement of the medical students and residents who are involved in WINS and leading the educational programming that has expanded over the past couple years is inspiring and their excitement always motivates me.



In addition to advocacy and education, WINS serves as a platform for recognizing female neurosurgeons' contributions to the field through multiple awards. This past year, WINS collaborated with Mission:Brain to create an international observership for two early career female neurosurgeons. Mabel Banson (Ghana) and Winny Costa (South Sudan) will be coming to the U.S. this year to share ideas and foster continued collaboration among female neurosurgeons globally.

In summary, Dr. Frances Conley's determination laid the groundwork for a more inclusive field of neurosurgery, paving the way for organizations like WINS that continue to build momentum toward a future of true gender equity. The success of WINS demonstrates the power of women and how a dedicated organization can support underrepresented groups and create a more inclusive professional community. In this way, WINS serves as a model for other groups who face similar challenges in neurosurgery, including racial and ethnic minorities, LGBTQ+ individuals, and people with disabilities. By fostering a sense of community, providing mentorship, and advocating for equity in training, research, and leadership opportunities, WINS has demonstrated how targeted initiatives can

dismantle barriers and promote diversity. For other underrepresented groups, establishing similar support networks may help address unique challenges, improve representation, and drive policy changes. Creating parallel organizations with structures inspired by WINS may lead to a more equitable neurosurgical workforce, where diverse perspectives and backgrounds are valued and celebrated.

#### **References:**

- 1. Medicine USNLo. Dr. Frances K. Conley. 2003.
- 2. Conley, FK. Walking Out on the Boys. 1998.
- Hdeib A, Elder T, Krivosheya D, Ojukwu DI, Wijesekera O, Defta D, et al. History of Women in Neurosurgery (WINS). Neurosurg Focus. 2021;50(3):E16.
- Benzil DL, Abosch A, Germano I, Gilmer H, Maraire JN, Muraszko K, et al. The future of neurosurgery: a white paper on the recruitment and retention of women in neurosurgery. J Neurosurg. 2008;109(3):378-86.
- Air EL, Orrico KO, Benzil DL, Scarrow AM, Bean JR, Mazzola CA, et al. Developing a Professionalism and Harassment Policy for Organized Neurosurgery. *Neurosurgery*. 2021;88(5):1038-9.





Jean-Luc K. Kabangu, MD

#### Sonia V. Eden, MD

## Building Equity and Inclusion in Neurosurgery: Addressing Systemic Barriers and Paving Pathways for Black Providers and Patients

n neurosurgery, fostering a community of inclusion is not merely aspirationalit is essential. For Black patients and providers, a sense of belonging within this specialized field addresses more than medical needs; it challenges systemic barriers and paves the way for equitable care. Too often, these patients and providers are rendered "invisible" within health care settings, a concept poignantly illustrated in Ralph Ellison's Invisible Man. This metaphor reflects the reality that Black patients and neurosurgeons face: biases that obscure their experiences and contributions, leading to exclusion and limited access. This invisibility is not new but rooted in historical injustices, including the exploitation seen in the Tuskegee Syphilis Study and the unauthorized use of Henrietta Lacks' cells.<sup>1,2</sup> These events have created deep mistrust within Black communities, underscoring the need for a neurosurgical community that prioritizes visibility and inclusion.

Amid these challenges, the efforts of the Congress of Neurological Surgeons (CNS) and the American Society of Black Neurosurgeons (ASBN) represent significant strides toward building a more inclusive neurosurgical community.<sup>3</sup> While ASBN has led initiatives providing mentorship, scholarships, and resources tailored to support Black neurosurgeons and aspiring students, the CNS Foundation has developed its own programs, including diversity scholarships and the Pathways to Neurosurgery program.<sup>3</sup> Together, these distinct efforts reflect a commitment to a shared goal: creating a future where diversity, equity, and excellence are foundational values in neurosurgery, fostering a field that truly serves the breadth of our communities.

A visible, inclusive neurosurgical community for Black patients and providers is essential to address the deepseated mistrust that stems from historical exploitation in health care. The Tuskegee Syphilis Study, for example, illustrates systemic disregard for Black lives: Black men were promised health care but left untreated so researchers could study the progression of syphilis, allowing the disease to devastate their health over four decades.<sup>1</sup> Similarly, the case of Henrietta Lacks-whose cells were taken without consent and used for scientific advancements without compensationexemplifies the lack of agency afforded to Black patients in medical research.<sup>2</sup> These examples contribute to a legacy of mistrust, underscoring the need for health care spaces where equity, respect, and visibility are foundational.

Systemic racism has also limited opportunities for Black providers. The 1910 Flexner Report, funded by the Carnegie Foundation and led by Abraham Flexner, aimed to standardize medical education but was shaped by the racial biases of the time, recommending that Black physicians be trained only for limited, supportive roles within Black communities.<sup>4</sup> This bias led to the closure of five of the seven Black medical schools then in existence, leaving only Howard University College of Medicine and Meharry Medical College. The closures of Flint Medical College, Knoxville Medical College, Leonard Medical School, Louisville National Medical College, and the University of West Tennessee College of Medicine and Surgery drastically reduced the number of Black physicians.<sup>4</sup> An analysis on the Flexner Report's lasting impact found that if these schools had remained open, they could have produced an additional 27,773 to 35,315 Black medical graduates by 2019, with approximately 355 more in 2019 alone.<sup>4</sup> This long-term impact underscores the need for systemic reforms that prioritize diversity and equitable access within medical education.

These inequities extend to neurosurgery, where Black providers have long faced barriers to training and advancement. Dr. Clarence Sumner Greene Sr., despite his qualifications, was denied the chance to complete his training in the U.S. solely due to his race, leading him to Canada, where he trained under Dr. Wilder Penfield and became the first Black neurosurgeon certified by the American Board of Neurological Surgeons in 1953.<sup>3</sup> Upon returning to the U.S., Greene joined Howard University, a Historically Black College and University (HBCU), where he fostered a supportive environment for Black neurosurgeons.<sup>3</sup> Dr. Alexa Irene Canady faced similar challenges related to both race and gender but persevered to become the first Black woman certified in neurosurgery in 1984, establishing a powerful legacy of resilience and representation.<sup>3</sup>

ASBN builds on this legacy, providing concrete support for Black neurosurgeons within the field. At the recent CNS Annual Meeting, ASBN presented two inaugural awards in honor of Dr. Greene and Dr. Canady, recognizing Black medical students committed to Diversity, Equity, and Inclusion (DEI) in neurosurgery. ASBN also hosted a breakfast session as part of the CNS meeting, providing a forum to discuss the unique challenges Black neurosurgeons face. These initiatives reflect a commitment not only to acknowledge past barriers but also to create an empowering future, where Black neurosurgeons and patients are visible, valued, and supported.

Year	Male			Female				Black			Non-Black			
	Applicants	Match	Rate	Applicants	Match	Rate	P value	Applicants	Match	Rate	Applicants	Match	Rate	P value
2017	327	174	53.2	88	45	51.1	.73	25	11	44.0	390	208	53.3	.36
2018	332	176	53.0	91	49	53.8	.89	22	10	45.5	401	216	53.9	.44
2019	317	167	52.8	133	65	48.9	.5	39	13	33.3	411	219	53.4	.0172
2020	365	170	46.5	127	62	48.8	.66	42	13	30.9	450	219	48.7	.0278
Total	1341	687	51.3	439	221	50.3		128	35	27.3	1652	862	52.2	

Match refers to number of successful match candidates from cohort of applicants. All P values resulted from the use of the  $\chi^{z}$  test comparing rates of match for each group. Rates displayed are percentages.

**Table 1:** Match Statistics for n = 908, Statified by Sex and Race for Each Year, 2017-2020

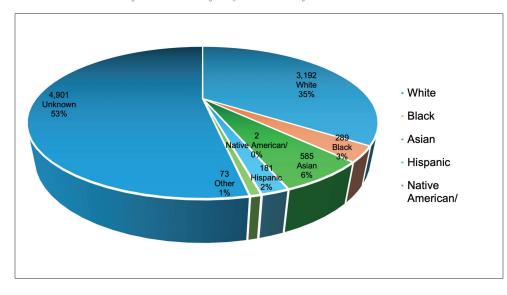


Figure 1: Demographic Composition of U.S. Neurosurgeons by Race, Ethnicity, (Inception to 08/12/2024)

Systemic inequities continue to impact Black medical students entering neurosurgery, with disparities evident from the earliest stages of training. From 2017 to 2020, a study found that Black applicants matched to neurosurgery residency programs at only 27.3%, compared to 52.2% for non-Black applicants (P<.010) (Table 1).5 Additionally, data from NeurosurGen LLC, which has tracked the professional lineage of neurosurgeons in the United States since Harvey Cushing, underscores the significant underrepresentation of Black neurosurgeons. Of the 9,224 neurosurgeons documented, only 289 are Black-including five who were trained in Canada—highlighting a persistent gap within the field (Figure 1).6

NeurosurGen LLC genealogy data shows that, of the 685 women who have completed neurosurgical training in the U.S., only 36 are Black—a stark indicator of ongoing racial and gender disparities.<sup>6</sup> While female representation in neurosurgery has gradually increased, progress for Black women has lagged significantly.<sup>6,7</sup> This disparity recalls Sojourner Truth's 1851 speech, "Ain't I a Woman?," which challenged the exclusion of Black women from the women's rights movement. Today, her words underscore how DEI efforts in neurosurgery often overlook the unique challenges Black women face at the intersection of race and gender.<sup>3,7</sup>

HBCUs are instrumental in addressing these disparities. Though representing only 2.4% of U.S. medical schools, HBCU medical schools produced 9.8% of Black medical graduates in 2019.<sup>8</sup> Graduates from HBCUs frequently become leaders in academic medicine, making up 31% of Black department chairs, 10% of Black academic faculty, and 10% of all Black medical students.<sup>8</sup> These statistics underscore the vital role of HBCUs as pipelines for Black physicians, especially in specialties like neurosurgery where representation remains low.











Tiffany R. Hodges, MD

# Embracing Diversity: Creating a Space for the LGBTQIA+ Community in Neurosurgery

D iversity in health care is essential to ensure that all patients—regardless of race, ethnicity, gender, sexuality, and other identities—receive the highest quality of care. Quality health care is a fundamental human right that is owed to everyone. Our individual life experiences drive our ability to engage in one of the most crucial aspects of medicine—connection.

From 2012 to 2022 the number of U.S. citizens that identify as a member of the LGBTQIA+ community has more than doubled, increasing from 3.5% to 7.1%.<sup>1</sup> This rising trend can likely be attributed, in part, to increased acceptance and decreased stigma. Our shared experiences are what allow us to understand one another and look at each patient as more than just a set of symptoms or a diagnosis, but as a whole person. Diversity also gives patients the opportunity to be treated by physicians that look, speak, love, and pray like them, ultimately ensuring that they feel seen, safe and understood. Furthermore, diversity fuels innovation, pushing the boundaries of medicine and health care. Each of our unique perspectives enriches the collaborative environment, helping us examine problems from multiple angles and drive equitable access and representation in research.

As the population of our country continues to be widely diverse, so should the field of neurosurgery in order to provide the best neurosurgical care to our patients. To accomplish this, we must provide a place of increased acceptance and decreased



Attendees of the 2nd annual Neurological Surgery Pride Alliance (NSPA) reception at CNS 2024 pose for a group photo

stigma within the field of neurosurgery thus allowing others to feel safe enough to openly and proudly be themselves.

Unlike other marginalized identities that may be immediately visible, identifying as part of the LGBTQIA+ community is often not outwardly apparent. For so long, this has made it that much "easier" for these individuals to hide or downplay their identities, especially in a field that has long been dominated by a singular and exclusive demographic. Driven by a love for their work, these individuals often make sacrifices, sometimes at the expense of the fundamental aspects of their identities that make them more compassionate, unique, and skilled as neurosurgeons.

Many LGBTQIA+ neurosurgeons, like the community at large, have long felt pressured to conform, out of fear of implicit penalties or social exclusion among colleagues and peers. Even today, trainees and neurosurgical residency aspirants are advised on the risks that come with them disclosing those parts of their identity. And this conformity has led to decades spent tolerating discrimination and microaggressions, silently enduring limited opportunities for advancement paired with minimal institutional support. These years spent "masking" or trying to blend in have resulted in fewer neurosurgeons living openly and proudly which has further compounded the difficulties that individuals

**cns**q





President Maddie Mendlen (PGY-1 at University of Minnesota) and vice-president Sanjeev Herr (MS3 at Drexel University) pose outside of the CNS 2024 NSPA reception.

face in finding relatable or supportive mentors and sponsors. Without these role models, there those interested in pursuing this field become discouraged, finding it difficult to see a place that rightfully exists for them within the field.

Neurosurgery is an incredibly intense and high stress field, with one of the key aspects of endurance being a solid support system. Further compounding that burden with feelings of isolation and the work of constantly hiding one of the most foundational aspects of one's identity is a recipe for disaster. This leads to greater burnout, worse mental health outcomes, and a much higher likelihood of attrition. Having family, friends, coworkers, and support staff Collaborative and engaging discussion during the LGBTQIA+/WINS breakfast seminar.

that are there during difficult times and to celebrate your success is critical to a field as demanding as neurosurgery.

This is where building and fostering a community for LGBTQIA+ individuals in the field of neurosurgery plays a tremendous role, while highlighting the importance of allyship. The notion of speaking up and standing out becomes less daunting when one realizes that they are not alone. And once the fear of speaking up is dispelled, true change can begin. This is when people no longer feel the need to conform or suffer in silence, allowing them the opportunity to exist within one of the most incredible fields of medicine and the ability to live their life proudly.

The CNS has put in exponential effort over the past year and a half to create a space for these efforts and has made significant strides towards progress and change. The first of these steps being the unwavering support of a fourth-year medical student's dream to create an organization to advocate for and support this community. This is how Dr. Maddie Mendlen's dream of a Neurosurgical Pride Alliance came to be a reality. The organization's first event was held last year during the 2023 CNS Annual Meeting, with a kickoff LGBTQIA+ reception. This well-attended event was a wonderful evening of fellowship and community building. While serving as the first event to help spotlight the presence of LGBTQIA+ individuals within the neurosurgical community, it also allowed the group to garner support and allyship.

This Neurosurgical Pride Alliance reception was held again during the 2024 CNS Annual Meeting, further building community and fostering diversity within neurosurgery. Another incredible first-time event for the CNS was the LGBTQIA+/WINS Breakfast seminar. Women in Neurosurgery (WINS) showed true allyship and support by hosting this seminar on the challenges of being in the LGBTQIA+ community and steps to help overcome these challenges, improve delivery of care to patients, and enhance the training environment for the next generation. The seminar addressed the ways biases may affect our ability to recruit members of the LGBTQIA+ community into neurosurgery, explored methods for overcoming implicit bias against those from the LGBTQIA+ community, and outlined how fostering a more diverse neurosurgical community benefits everyone. We are excited to continue building on this incredible foundation and seeing the engagement from our LGBTQIA+ community and allies continue to be fuel that makes this fire burn brighter. 🖪

#### References

 Jones, J. M. (2022). LGBT identification in US ticks up to 7.1%. Gallup News, 17.







Arvind Ahuja, MD

# Building, Enriching, and Maintaining Standing in the Community: Leaning Into Our Identities as Neurosurgeons

n the United States, being a physician is still regarded as a noble profession.

■ There have been legion setbacks for us as physicians, from medical controversies about the COVID-19 pandemic and vaccines to the never-ending assault from health care policy wonks and insurance companies. Still, our standing in the medical community and regard for expertise, excellence, and erudite work ethic has remained strong, weathering these storms. It is important, in the face of all these changes, to lean into our identities both in the medical and lay communities.

In neurosurgery, technical excellence is the bare minimum for our training. Ability is a given, though must be continually practiced. The other two As—affability and availability—represent an opportunity to deepen our skill set of connecting with our colleagues and communities.

#### The Affable Neurosurgeon

Neurosurgery, as one of the more demanding surgical specialties, creates a natural but also difficult gap to bridge between ourselves and our colleagues and communities. People at times think of us as superhuman, which we are not, and we are sometimes regarded as aloof and disengaged. Perhaps it is deserved.

Because we are often asked to address and decide on issues that permanently affect our patients' and their families' lives, naturally we can feel alone. There is a necessary separation from those around us to stay objective and focused. Shifting gears back into "human" mode is hard.

As a resident, call was hellacious, dealing with sick patients, staff idiosyncrasies, and all the while trying to learn. As a point of training, our resident call is the physical and cognitive preparation for the demands of practice. We are taught to take the onslaught and ask for more: "a busy surgeon is a happy surgeon."

There is a point where you will degrade. You can become exhausted, depressed, angry, or just plain fed up with that next phone call. Being on call, we are all-responsible. Sometimes you are not on call and are at a social event or other non-clinical obligation and you get asked to get involved in a case. Early on in practice, we are encouraged to never say no to these. Working hard and trying to do as much as humanly possible surgically, one can find themselves slipping away from their own lives. Keep in mind that obligation is one thing and having healthy boundaries is another.

In other words, it is ok to say "no," or "I'm sorry, please ask the person on call." We are selected for this vocation knowing full well what is in store, but we have to all learn that our own internal peace and peace within our family is something to value and preserve. It helps us be better physicians and people.

There are many instances where we do not want to lead. Finding yourself as a key decision maker can be exhausting, making it attractive to defer. It may be the easy way out, and sometimes it is best to cut bait; however, when everyone keeps looking at you, it is time to fish. Finding the chutzpah to be out front is not always fun, but we are all qualified to lead and lead we should. One can lead and still be able to work with other team members and not seen as having a "God Complex" by just staying relatable.

Existing within our own neurosurgical ecosystem is important. Whether in a group or as competitors, we have to keep professionalism and collegiality as our backstop. Our practices each have their own DNA and that is a beautiful thing. There will be a day when you might to call on a competitor to cover your patient when you leave town to tend to that sick relative. Dependability, mutual regard and trust can result and you can enrich your life by having unlikely allies.

The last part of achieving affability is being connected to your community. Outside of social media, some find this in religious community such as in a house of worship. For others it's a cycling group, softball league, or yoga class. Civic engagement—such as volunteering for cleanups, soup kitchens, or political involvement—is an excellent and fulfilling way to achieve positive community visibility. Being seen (not just digitally) helps bridge the gap between being a doctor and a person, while keeping your identity as a well-regarded professional. If people see you as involved in your community, they know you are committed and care.

#### **Being Available**

Building a reputation for availability in private practice neurosurgery is crucial for establishing strong relationships with both referring physicians and patients. It requires a combination of practical systems, flexibility, and effective communication strategies that enhance patient care and collaboration, and set the foundation for success.

For referring physicians, availability begins with the most direct connection—sharing a personal cell phone number and using secure text messages. This instills referring practitioners with confidence that they have direct access in critical moments. Quick response to referrals is also essential for assuring partners of dedication to shared patients.

Establishing open and reliable communication pathways with emergency room physicians and advanced practice professionals further enhances the integration of care, promoting a smoother handoff of patient responsibilities and, ultimately, better outcomes for patients in urgent situations.<sup>1</sup> It may lead to stronger referrals. Offering in-services or topical sessions with emergency personnel reinforces one's reputation as a supportive and available partner in care.

Availability for patients is about more than just having an open schedule. A robust communication structure ensures that patient inquiries are addressed promptly, whether through phone calls, a patient portal, or other methods. Patients must be able to trust that their concerns will be addressed in a timely manner, especially when dealing with serious neurological conditions.

Telemedicine has emerged as a powerful tool for improving patient availability, particularly for those who live far from the practice or have mobility challenges. As a tool, it can significantly improve follow-up care for patients, allowing for more frequent and convenient checkins without the burden of travel. Follow-up by telephone alone has even been shown to significantly increase patient satisfaction.<sup>2</sup> It can help get urgent cases in, ensure patients adhere to their treatment plans, and allow the surgeon to catch potential issues early.

Accepting a range of insurances makes the practice available and relieves referring finding in-network physicians and makes the referral process seamless. It can also alleviate patient stress regarding costs, and improve patient engagement in care and treatment follow-through. The physician stays engaged in contracting processes and avoid becoming over leveraged with out-of-control collections as well.

Having a strong online presence is vital. A well-designed and up-to-date website serves as the first impression for many potential patients. It should clearly outline the services provided, insurances accepted, and contact information. Reputation management is a crucial aspect of a web presence. Potential patients often look at reviews when choosing a physician. Encouraging satisfied patients to leave positive reviews and addressing negative feedback professionally, helps build trust straightaway. Support staff must be well-trained to triage patient needs handling scheduling, managing follow-up inquiries, and knowing when to escalate issues. Establishing clear protocols for what can be managed by midlevel staff versus what requires direct intervention is critical to optimizing time management and ensuring patient needs and safety are met.<sup>3</sup>

It is also critical to bear in mind that when physician assistants, nurse practitioners and other clinical assistants act in our stead, we still own all the decisions and their outcomes. Personal responsibility as a neurosurgeon is one of our ethical pillars, and this should be salient to all our interactions, either through our own efforts or those who work with us or on our behalf.

As with affability, it is equally crucial to set boundaries to prevent burnout. Having a robust answering service for after-hours calls can help triage urgent versus non-urgent needs, ensuring that critical cases reach the neurosurgeon during off hours. Establishing patient expectations early regarding response times and when non-urgent concerns will be addressed can help balance availability with wellbeing, ensuring long-term sustainability.

Being available to referring physicians and patients, creating flexible and reliable communication channels, and leveraging technology like telemedicine, neurosurgeons can enhance patient care and foster stronger relationships. It is also important to manage these efforts to ensure a sustainable and balanced practice. In a field as specialized and demanding as neurosurgery, availability builds trust and also significantly impacts patient outcomes, making it an indispensable part of successful practice management.

#### Conclusion

Affability and availability are key qualities that distinguish a highly respected, successful neurosurgeon from one who is merely competent but unresponsive or unapproachable. While the latter may achieve good clinical outcomes and earn substantial income, the former not only accomplishes these but gains a substantial advantage within both the medical sphere and the broader community.

#### References

- Nanah A. and Bayoumi, A. (2018) The pros and cons of a digital health communication tools in neurosurgery: as systematic review of literature. *Neurosurgical Review* published online: Oct 2018.
- Blanco, E., Samuels, S., Kimball, R., Patel, D., Citty, S., and Spader, H. (2020) Impact of telephone follow up on patient satisfaction in a pediatric neurosurgery clinic, *Journal of Patient experience* 7(6) 1255.1259.
- Harley, B. and Elowitz, E. (2019) Barriers to Enhancement of effective communication in Neurosurgery. World neurosurgery 2019, k09.466473.



Betsy Grunch, MD

# Building a Neurosurgical Community on Social Media

s a neurosurgeon, how does one tackle the daunting task of posting on social media? It can be quite intimidating: what will your colleagues think, what will your patients think? Will I be seen as unprofessional?

BUILDING Community!

Those are certainly many of the thoughts that went through my mind as I began my journey on social media in 2021. Fast forward 4.5 million followers later (across all platforms as @ladyspinedoc), and I can now provide you with some meaningful advice on this ever-growing hot topic in health care.

Undoubtedly, social media has transformed the way information is relayed to the public, which includes medical information. As neurosurgeons, I firmly believe we need to take a better stance on relaying accurate information and dispelling misinformation on social media. As it pertains to neurological health, spine and brain problems remain large health care issues in our country.

More than 90% of Americans experience some type of spine issue in their lifetime, and cerebrovascular disease (stroke) and Alzheimer's disease remain among the top causes of death in the US. This means that more providers in neurosciences must help fill in these much-needed spaces on social media.

I have curated a platform that addresses key topics that the public wants to know about our field:

- Evidence-based education Providing accurate, research-based information on neurological diseases.
- Inspiration for future health care workers
- Encouraging the next generation, including future neurosurgeons, to pursue

careers in health care, promoting diversity, and making the field more accessible.

• Humanizing neurosurgeons - Offering a glimpse into the daily life of a neurosurgeon to help the public see us as relatable individuals.

Why should YOU consider becoming more active on social media? Not only do these platforms allow you to have a voice in the triad I mentioned above, they are FREE MARKETING for you and your practice. You can create content at your convenience and, with one click of a button, you have enabled MILLIONS of people across the world to hear what you have to say.

For your patients, they will feel more deeply connected to you. The more they connect with you, the more trust they have in you. You can connect to them on a real level and explain things in a fashion you may not typically do in the office setting. Your content will be an extension of your practice. With almost every single patient, I will forward them relevant content on their issue that can help explain things once they get home from the visit. This may be a video of me explaining a surgery, tips for recovering from surgery, or just general information on a disease that they have been diagnosed with. They can peruse this information with more attention, and they can share this with family members or others that may help them make decisions. Thus, they can be better informed patients. I can also utilize the content in a more generic fashion online that can help many more people with these same issues. Neurological conditions can be completely life changing and patients have a thirst for easy-to-understand knowledge.

This wealth of content that you create will only help enhance the patient-doctor relationship and set you apart from other surgeons. I believe that this will not only help your practice (and your patients) thrive, but it may potentially help mitigate potential legal ramifications. Patients are less likely to sue physicians with whom they have developed a trusting and mutually respectful relationship with. You can utilize APPs in a more meaningful way, as patients can have access to your explanations at the click of a button. This will allow you to extend your care to more patients.

The factors that I believe make a successful content creator are as follows:

- Confidence be comfortable with yourself, your skillset, and your explanations to share with a wealth of people online. This comes with experience and repetition. Good surgeons aren't created overnight, and neither are content creators. Social media can be very scrutinizing, and the ability to have the trust in yourself to defend your stance is quite important.
- Consistency to be successful online you must have a consistent presence. Your audience needs to be aware that they are going to get a consistent product from you to attract them to your platform. You must be able to produce, edit, and post content on a consistent basis to attract followers to engage on your platform that will allow you to grow. This means creating a schedule for yourself to be able to produce good, consistent content. Creating batches of content when you are more inspired is also helpful for sustainability.

UNDOUBTEDLY, SOCIAL MEDIA HAS TRANSFORMED THE WAY INFORMATION IS RELAYED TO THE PUBLIC, WHICH INCLUDES MEDICAL INFORMATION. AS NEUROSURGEONS, I FIRMLY BELIEVE WE NEED TO TAKE A BETTER STANCE ON RELAYING ACCURATE INFORMATION AND DISPELLING MISINFORMATION ON SOCIAL MEDIA.

- Authenticity this is quite arguably the most important factor in success. Being yourself is so important to your platform. One cannot keep up the facade of someone they are not for very long. This will lead to burnout and failure on your social media journey. Integrating information about yourself and your life will not only make you more relatable to your viewers, but it will also allow you to enjoy what you post and feel more passionate about your platform.
- **Positivity** the public wants to see the light in health care. Oftentimes in our job, we develop coping mechanisms like dark humor and pessimism; however, that isn't a quality that will make you successful online. Remember, not all engagement is good engagement.
- Being a good content consumer looking at what other physicians and professionals put on their socials can help you learn what type of content is successful. In the ever-changing

algorithms, trending sounds and content ideas can help inspire you. I often find that my most successful content is breaking down the latest news that has dropped (ie Tua Tagovailoa's concussion or Tiger Woods' back surgeries) as well as integrating the latest trending sounds/ ideas into neurosurgical themed content.

I will encourage you before posting to ensure that you read and comply with any social media policies that your health care system may have in place. No one enjoys a trip to medical staff services, so make sure you discuss any potential conflicts with your facility or employer.

My passion is to push the envelope in advancing social media. Providing good evidence-based information to the public is of critical importance, as misinformation lingers heavily. Giving the public increased knowledge of their health issues will allow them to make better and more informed choices with their health care providers.

Being active on social media also helps foster the diversity of the next generation of health care workers. Young people who have an interest in medicine often have questions of what their future may be like in their aspiring career choices. Some individuals may have questions about how they may manage their future careers and family life, for example. By showing those individuals that they can pursue their careers and have a balance in their personal life may lead them to choose career specialties they may not have originally seen possible. This will diversify our health care field tremendously and break down barriers and biases that currently exist. Ultimately, this will lead to a more inclusive and diverse workforce, fostering innovation and creativity.

In conclusion, many more neurosurgeons need to take the next step to post on social media. Our future patients and health care professionals need us.





**cns**q





Garni Barkhoudarian, MD

D Kunal Vakharia, MD

Peter Nakaji, MD

# Building Community at the CNS: The CNS International Committee

rom the perspective of the Congress of Neurological Surgeons' International Committee, the theme of this issue, "Building Community," is particularly appropriate. The International Committee's efforts are focused on nurturing a community for its membership which extends globally. Through CNS Annual Meeting and other outreach activities, we all benefit from learning about the lofty achievements of our most accomplished international colleagues as well as by gaining opportunities to support and partner with global neurosurgery efforts serving the most resource-limited parts of the world. On the former side, the CNS remains committed to its longstanding partnerships with three major societies, the Japanese Congress of Neurological Surgeons (JCNS), the Brazilian Society of Neurosurgery (SBN), and the Neurological Society of India (NSI), the leading neurosurgical society in India. All these collaborations have yielded fruitful cross-pollination between our societies. On the latter side, partnership with international efforts such as the G4 Alliance allows the CNS to contribute to developing neurosurgeons through education and outreach initiatives.

The CNS Annual Meeting remains a great focal point for international exchange. In recent years, the addition of the highly



Dr. Daniel Prevedello, Dr. Jorge Mura, and Dr. Douglas Kondziolka interact in the audience of the Meeting of the Americas at the 2024 CNS Annual Meeting in Houston.





CNS members and volunteers gather at the International Reception in Houston last fall.

#### Member Spotlight / Yunus Kuntawi Aji

National Brain Center Hospital Prof. Dr. dr. Mahar Mardjono, Jakarta, Indonesia

#### Why did you join the CNS?

The CNS is a prestigious organization for neurosurgeons, not only in the United States but also worldwide. Being a member of the CNS brings a sense of pride and provides invaluable opportunities to connect with and learn from peers across the globe. As an Indonesian neurosurgeon, I benefit greatly from staying informed about the latest advancements and trends in neurosurgery through the resources and programs offered by the CNS. The CNS Annual Meeting stands out as one of the most exceptional scientific gatherings in the field of neurosurgery that I have ever attended.



#### What are you looking forward to in working with the CNS and WINS this year?

This year, I was honored to receive the CNS Foundation International Spine Observership at Duke University under the mentorship of Prof. Khoi Than. I was privileged to be the first recipient of this award and had the opportunity to learn about the latest advancements in spine surgery during a three-month observership.

I am eagerly looking forward to participating in the 2025 CNS Annual Meeting in Los Angeles, where a new symposium, Meeting of the Pacific Rim, will be introduced. My colleagues from Indonesia and I will have the honor of speaking at this symposium.

I would like to extend my gratitude to the CNS for its commitment to supporting its international members through various impactful programs.

successful Meeting of the Americas symposium during the CNS Annual Meetings has brought the work of Latin American, Brazilian, and Caribbean neurosurgeons to the forefront. This venue allowed interested CNS members to witness the exciting work being done in this region – some presented in Spanish language. It also created a place at the CNS for this community, including many US neurosurgeons with roots in this region, to get better acquainted with each other. Based on the success of these full-day weekend sessions, the 2025 CNS Annual Meeting in Los Angeles will again feature a Meeting of the Americas.

Taking a nod to Los Angeles's strong connections to both our southern neighbors and to its Pacific-facing ones, the 2025 CNS Annual Meeting will also feature a full-day Meeting of the Pacific Rim. A huge region with a great deal of neurosurgical activity which is often not seen by US neurosurgeons, this Pacific Rim symposium will highlight prominent neurosurgical contributions from neurosurgeons of the Asian, Australasian, and the Indian regions, offering CNS members a taste of the dynamism and diversity of regional advances and practices.

Join us at the 2025 CNS Annual Meeting at the increasingly dynamic international reception, featuring exciting venues with a universal flair. This is a fantastic time to unwind ahead of the meeting with our friends and colleagues.

The CNS remains committed to bringing its members the best that neurosurgery has to offer. This includes advances, research, and educational initiatives from around the globe. As a leading neurosurgical society, the CNS strives to represent its member neurosurgeons in a manner befitting its stature. We welcome you to partake in the richness of these offerings in the name of collegiality and for the benefit of all our patients.





Emal Lesha, MD

Julie L. Chan, MD, PhD

# CNS Resident Committee: Expanding the Future of Neurosurgery

he future of neurosurgery looks bright as our neurosurgical community continues to grow. One facet that has been gaining momentum is the CNS Resident Committee (RC). The CNS RC has been a longstanding contribution to the CNS. It is comprised of neurosurgery residents and fellows who promote the development of neurosurgery trainees in the community by embodying the mission of the CNS. This committee serves as a pathway to organized neurosurgery and provides both a national and international platform for extending the mission and vision of the CNS which "enhances health and improves lives through innovative neurosurgical education, advancement of clinical practice & scientific exchange".

Today, the CNS RC includes 108 residents and fellows who oversee 22 medical students interested in pursuing neurosurgery. Over the past four years, the RC has evolved its structure, goals, and mission to strengthen its ability to serve the CNS. Currently, the RC has three tiers of administrative roles including Leadership Council, Section Liaisons, and Subcommittee Chairs. The Leadership Council includes the Chair, Vice Chair, and Secretary who are responsible for maintaining the integrity of the committee and preserving the mission of the CNS. Section Liaisons are selected to represent the RC at individual Section meetings, providing the residents with an early opportunity to engage with specific subspecialties. In addition, Subcommittee Chairs provide structured leadership and accountability for each of the initiatives the CNS RC supports. This year, the CNS RC's initiatives are Education, Global Outreach, Medical Student, Membership, Social Media, and Taskforce.

The Education subcommittee provides trainees access to neurosurgery resources. The team works with the CNS EC to generate unique content and distribute this under the CNS Education Division. Current active projects include SANS, Nexus, and CNS+. Global Outreach focuses on connecting with our international trainees. Specifically, we aim to provide translation services, and make the national guidelines available to our colleagues across the globe. Overall, we meet the needs of trainees in other countries by providing access to both written and clinical educational resources. The Global Outreach committee works in conjunction with the EANS Young Neurosurgeons and World Congress of Young Neurosurgeons to foster further international camaraderie.

The Membership subcommittee encourages residents across the nation to join the CNS. We encourage all to participate in the monthly



2024 – 2025 CNS Resident Committee at the CNS 2024 Annual Meeting in Houston, TX with current Chair Dr, Julie L. Chan, current Senior Advisor Dr. J. Nicole Bentley, and prior Co-Chair Dr. Laura A. Snyder.

meetings and attend the CNS Annual Meeting for education content and networking events. The Medical Student initiative provides a bridge between medical students and CNS opportunities. We continue to elevate medical student involvement at the CNS Annual Meeting. One example of a MS project is the "Fireside Chat" webinars fostering open discussion for those interested in entering Neurosurgery. These events, and programs such as Sergeant-at-Arms. provide a pathway for medical students to become involved with the CNS and make careerlong connections.

The Social Media initiative promotes the CNS Resident Committee and highlights the value of CNS for neurosurgery residents and medical students. The RC currently has active Instagram and X accounts with growing followings. <u>@CNSResidents</u> currently has 1,037 followers on Instagram and 574 followers on X—a number that continues to grow. The Taskforce initiative provides a direct avenue for residents to augment the CNS Executive Committee growth and accomplishments. The CNS RC supports CNS Guidelines, Legislative Affairs, and Annual Meeting development. Residents will strengthen and expedite projects that promote the value of CNS to future neurosurgeons and neurosurgeons in the community. The CNS Resident Committee set its roots over 50 years ago, and has since grown and strengthened resident involvement in organized neurosurgery under the guidance of the CNS Executive Committee. More recently, Dr. Martina Stippler was instrumental in creating a platform for the residents to actively engage with specific members of the EC. This program—CNS Resident Fellowship provided residents with specific pointed opportunity to volunteer within the CNS. During 2016-2019 this program selected 26 trainees to work directly with key leaders on the CNS EC on projects such as Nexus and the Neurosurgery Survival Guide app. In 2019, the program expanded significantly under the direction of Dr. Maya Babu and Dr. Lissa Baird who served as Chair and Vice Chair respectively. The expansion to 79 trainees ultimately required formal restructuring to incorporate the growth of the CNS Resident Committee.

Following its reorganization, the CNS EC appointed Dr. Anand Veeravagu as the Chair of the RC with 48 active members from 2020-2021. Dr. Veeravagu was then succeeded by Dr. Edjah Nduom (2021-2022) where the RC saw considerable growth in the DEI sector as well as social media presence among its 43 members. The following year (2022-2023) Dr. Nicole Bentley and Dr. Kunal Vakharia served as Chair and Vice Chair, respectively, overseeing 52 members. After three years of development, the CNS RC now had a quorum of established residents who provided continuity within the initiatives, allowing the RC to flourish further.

This hard work and perseverance ultimately led to a monumental year co-chaired by Dr. Nicole Bentley and Dr. Laura Snyder. The RC underwent tremendous growth through formal restructuring to actively

include 46 members. Specifically, the RC developed an Organizational Guide which now serves as the official document detailing the mission CNS RC and the specific roles RC members play in achieving those goals. Garnering a new-found level of structure, the presence of the RC has gained significant momentum and recognition within neurosurgery training programs. For the 2024-2025 year, the RC boasts its highest ever active membership with 108 resident and fellow trainees representing 73 training programs. In addition, 22 medical students were selected to commence the inaugural year of the medical student initiative.

This year, the CNS Resident Committee is chaired by Dr. Julie Chan with Dr. Nicole Bentley as Senior Advisor. For 2024-2025, the CNS RC's first priority is to implement the Leadership Council as described in the Organizational Guide. Elections are currently underway with the first term beginning January 2025. The Leadership Council will augment long-term stability and structure to this now very large cohort of trainees. Specifically, the Leadership Council will boost productivity and maintain the integrity of initiatives that embody the mission of the CNS. Looking ahead, the CNS RC will continue to build on the current initiatives with increased membership that reaches all 119 neurological surgery training programs. Over the next five years, our goal is a minimum of one resident representing each institution. To aid in this endeavor and reach beyond local interaction, the CNS RC will increase their social media following and generate parallel accounts on other platforms to maintain a presence in all sectors. The CNS Resident Committee and its journey to today's iteration is a testament to the excellent CNS EC leadership and promises an exciting future for the field of neurosurgery.

#### Resident Spotlight / Alon Kashanian, MD / PGY-3, Hofstra/Zucker School of Medicine, Northwell Health



#### Why did you join the CNS Resident Committee?

I have fond memories of attending CNS meetings and I am extremely grateful to the CNS for providing me with a welcoming forum to meet neurosurgical mentors and present my research as a medical student interested in neurosurgery. I want to give back to the committee and help others advance their neurosurgical careers.

#### What does serving the CNS RC mean to you?

What serving the CNS means to me is helping create a collaborative and educational environment where both neurosurgeons and those interested in neurosurgery can share ideas and bring attention to causes we care about most. I believe it is important to continuously innovate and not only serve our specialty but to also represent and lead the medical field as a whole in the highest regard.

#### What are you looking forward to this year as a member of the CNS RC?

I am looking forward to bringing enthusiasm and energy towards creating even more educational programs for our residents and medical students, both here in the USA and abroad.







Georgios A. Maragkos, MD

Douglas Kondziolka, MD

# Community Building in Neurosurgery: A Collective Effort for the Future

**cns**q

s neurosurgeons, we stand on the shoulders of giants pioneers who have pushed the boundaries of medical science, often against the odds. But as our field evolves, so does the nature of the communities that sustain it. For those of us engaged in neurosurgery, building a strong, supportive community is not just a professional obligation, it is a necessity for the growth and vitality of our discipline. In today's era of rapid technological advancement, collaboration across borders, specializations, and professional hierarchies has never been more critical. This article explores the multi-faceted concept of community building in neurosurgery, reflecting on the steps we must take to ensure the long-term sustainability of our field. This includes nurturing young neurosurgeons, promoting diversity and inclusivity, fostering inter-specialty collaboration, and engaging with patients and the public to enhance trust and understanding.

#### Fostering Early Career Development

The foundation of any strong community is its ability to nurture the next generation. In neurosurgery, residents and early career neurosurgeons need to be given the support, resources, and mentorship needed to excel. Programs such as the Congress of Neurological Surgeons (CNS) leadership initiatives,<sup>1</sup> residency mentorship programs, and cadaver dissection courses are some examples of organized neurosurgery offering invaluable experiences for young trainees, helping them acquire essential technical skills while navigating the evolving landscape of medical research and patient care. Community building starts here - with mentorship. Every senior neurosurgeon has the opportunity to shape the future of the profession by investing time in guiding junior colleagues. It is not just about teaching the latest surgical techniques but sharing the nuances of professional resilience, problem-solving, and ethical decision-making in clinical practice. Our community must continue to invest in academic and networking platforms, such as CNS Resident Committee-highlighted on page 20 of this issue—and the Early Career Neurosurgeons Committee (ECNC),<sup>2</sup> to give early career professionals the tools they need to succeed. Virtual communities, webinars, and online collaborations have also democratized access

to expert mentorship. Programs that facilitate networking between experienced neurosurgeons and those just starting in their careers should be a core component of any organized neurosurgical effort.

#### **Diversity and Inclusivity in Neurosurgery**

Neurosurgery has always had subspecialty diversity and surgeons have had diverse practice and scientific interests. The field has historically lacked diversity in terms of gender, ethnicity, and socioeconomic representation. However, recent strides have been made to broaden access and create a more inclusive environment. Programs aimed at increasing diversity within neurosurgery, such as the CNS Diversity, Equity, and Inclusion Committee,<sup>3</sup> as well as the AANS Diversity, Equity, and Inclusion Task Force,<sup>4</sup> provide opportunities for underrepresented groups to thrive. Creating a culture of inclusivity involves more than ensuring equal opportunity; it requires addressing the challenges that underrepresented neurosurgeons and trainees face. Identifying, acknowledging, and addressing these issues head-on not only strengthens our community but also improves patient care by bringing diverse perspectives to the table. As one example that began years ago, initiatives such as Women in Neurosurgery (WINS)<sup>5</sup> have been pivotal in advocating for gender equality in neurosurgery. Our publications increasingly call attention to both workforce and patient care issues both in this country and abroad. It is not enough though to call attention, we must also put forth and test possible solutions.

#### Interdisciplinary Collaboration: A Key to Innovation

Neurosurgery does not exist in a vacuum. As the complexities of patient care increase, collaboration across medical disciplines becomes crucial. Neurosurgeons work closely with neurologists, radiologists, oncologists, and rehabilitation specialists, among others. Fostering a collaborative spirit within and beyond the operating room is vital for improving patient outcomes and advancing research. Interdisciplinary conferences, joint research initiatives, and multi-specialty surgical teams represent the future of neurosurgery. As a community, we must encourage dialogue and cooperation across specialties to foster innovation. The American Board of Neurological Surgery (ABNS), for instance, has **cns**a

emphasized the need for neurosurgeons to engage with other specialists in multi-disciplinary tumor boards, stroke care teams, and trauma management.<sup>6</sup> Collaborative learning experiences should be encouraged, and neurosurgery societies must continue to invest in platforms where cross-disciplinary dialogue can occur. These partnerships not only benefit patient care but also open new avenues for research and innovation. A neurosurgeon who can seamlessly integrate advances in neuro-oncology, radiology, and minimally invasive techniques will be far more effective than one who operates in isolation.

#### **Engaging Patients and the Public**

A strong neurosurgical community is not only inward-facing but must also engage the public and patients meaningfully. Historically, the public perception of neurosurgery has been one of awe, sometimes bordering on mystique. While our field is certainly complex and technically demanding, there is a need for transparency, patient education, and community outreach to demystify neurosurgical care. Patient advocacy groups, such as the Brain Aneurysm Foundation,<sup>7</sup> have done much to raise awareness and educate the public on neurosurgical conditions. Neurosurgeons must engage in these initiatives, contribute to public discussions, and involve themselves in patient-centered care programs. A well-informed patient is an empowered one, and this can lead to better outcomes, greater satisfaction, and enhanced trust in our profession.

Public education also involves addressing misconceptions about neurosurgery. As an editorial team, Neurosurgery Publications consistently strives to provide accurate, digestible information for both professionals and the general public. We must ensure that the public sees neurosurgeons not only as skilled technicians but as compassionate advocates for their patients.

### The Community of Neurosurgical Peer-Reviewed Publications

On a global community scale, the world of neurosurgery thrives on a network of peer-reviewed publications that foster collaboration and knowledge sharing. Central to this community are influential journals like *Neurosurgery* and the *Journal of Neurosurgery*, which have garnered extensive international readership through their association with the CNS and AANS. These journals serve as essential communication hubs for neurosurgeons to present their research and findings. Additionally, *World Neurosurgery*, managed by a dedicated publishing entity, further diversifies the dialogue within our professional sphere. Regional journals, including *Acta Neurochirurgica* from the EANS, play a crucial role in disseminating localized research, available through various access channels to a worldwide audience. Some communities offer peer-review in their primary local language (*Neurochirurgie, No Shinkei Geka* as examples), highlighting the importance of linguistic inclusivity. Beyond general publications, subspecialty journals explore focused aspects of neurosurgical science, encompassing areas like oncology, spine surgery, vascular issues, pediatric concerns, neuromodulation, and imaging. Together, these diverse publications foster a robust and vibrant community dedicated to advancing neurosurgical science and practice.

#### The Future of Neurosurgical Community Building

Looking ahead, the neurosurgical community will face numerous challenges, from the growing demand for neurosurgical services to the integration of artificial intelligence and other advanced technologies in clinical practice. But these challenges can be met with collective effort. The strength of our community lies in its ability to adapt, innovate, and support its members, no matter where they are in their professional journeys. The key to future success will be continued engagement – within our ranks, across specialties, and with the public. Whether through mentorship, promoting diversity, or fostering interdisciplinary collaboration, the bonds we build today will shape the future of neurosurgery.

Let us continue to work together to strengthen our community, as we strive not just for technical excellence but for a future where every neurosurgeon feels supported, every patient feels heard, and every challenge is met with a spirit of innovation and collaboration.

#### References

- Leadership Institute Congress of Neurological Surgeons (CNS). Accessed November 4, 2024. <u>https://www.cns.org/leadership-careers/leadershipinstitute</u>
- Early Career Neurosurgeons Committee (ECNC). Tumor News. Accessed November 4, 2024. <u>https://newsletters.aans.org/tumor/tumor-news-</u> spring-2023/early-career-neurosurgeons-committee-ecnc/
- Diversity, Equity, and Inclusion Committee Congress of Neurological Surgeons (CNS). Accessed November 5, 2024. <u>https://www.cns.org/about/ diversity-equity-and-inclusion-committee</u>
- 4. Diversity, Equity and Inclusion in the Learning Environment. Accessed November 4, 2024. <u>https://neurou.aans.org/Public/Catalog/Details.aspx?id=8imZqZ8gSBx23</u> <u>PchOVO1kA%3d%3d&returnurl=%2fUsers%2fUserOnlineCourse.aspx%3f</u> <u>LearningActivityID%3d8imZqZ8gSBx23PchOVO1kA%253d%253d</u>
- WINS Women in Neurosurgery Women in Neurosurgery. Accessed November 4, 2024. <u>https://neurosurgerywins.org/</u>
- 6. ABNS Home. Accessed November 4, 2024. https://www.abns.org/
- Home. Brain Aneurysm Foundation. October 30, 2024. Accessed November 4, 2024. https://www.bafound.org/

### FOUNDATION UPDATE



### **MESSAGE FROM CHAIR:**



Lola B. Chambless, MD CNS Foundation Chair CNS Secretary

#### Dear Colleagues and Friends,

On behalf of the CNS Foundation, thank you for your support in 2024. Over the last five years, the Congress of Neurological Surgeons Foundation has provided more than \$2,500,000 of funding through grants, recognition, and educational opportunities for neurosurgeons around the world. In 2024 alone, the Foundation gave out \$748,000 in awards.

As the new Chair of the CNS Foundation, I look forward to working with the Foundation Board of Directors to continue the programs within four established pillars

 CNS Guidelines Initiative - supports CNS infrastructure in developing and disseminating high-quality, evidence-based guidelines. CNS is the only neurosurgical organization with the volunteer and staff resources to create accessible and impactful clinical guidelines.

- International Philanthropy accelerates positive global impact through observership programs, inviting neurosurgeons from low- and middleincome countries to learn practices that improve patient care at home.
- Diversity, Equity, and Inclusion supports programs that address health care disparities by developing inclusive practices, leading to structural changes in the neurosurgery workforce and patient care.
- Clinical Scientist Career Development offers early-career neurosurgeons recognition, networking, and research support, including the prestigious NIH/Getch K12 program.

Join us in 2025 as we expand the impact and reach of our work, all of which is made possible by the generosity of our donors.

With sincere regards, Lola B. Chambless, MD

#### **2025 Foundation Awards** \$748,000 in Awards for 2024 Now Open! The CNS Foundation is now accepting applications ranging from support for international observerships and women in leadership to DEI efforts in innovation, CNS International Diversity, Equity, and **Clinical Scientist** impact, and health care disparities. You can find more Guidelines Philanthropy Inclusion **Career Development** information on our awards including the application 1 9 9 3 process here- CNS Foundation Awards

#### **CNS Guidelines Initiative**

The CNS Foundation Guidelines Initiative supports the CNS infrastructure in developing and dissemination of high-quality, evidence-based, clinical practice guidelines. Donations to the CNS Foundation help maintain the exceptional infrastructure and impeccable methodology unique to the CNS, the only neurosurgical organization with the volunteer and staff resources to develop clinical guidelines, which it disseminates online and through the CNS+ app, increasing their accessibility and impact.

To date, there have been over 100,000 total online views of CNS guidelines and almost 7,000 citations and that number continues to grow as more guidelines are developed and disseminated.

to alleviating health care disparities by encouraging high school students from underrepresented groups and/or disadvantaged backgrounds to pursue a career in the medical field and potentially in neurosurgery. High school students attend a day-long program during the Annual Meeting and the onsite activities include exposure to "real-life" practices, tools and technologies which were enabled by key corporate partners and donors, Medtronic, Stryker and Olympus America.

The CNS Foundation held its fourth Pathway to Neurosurgery program at our CNS Annual Meeting in Houston. This annual event is dedicated

We look forward to offering this again at the CNS Annual Meeting in Los Angeles, CA in October 2025.

### Donate to the CNS Foundation

The CNS Foundation relies on support from individual donors throughout the world. Join the over 1,000 donors from 15+ countries who support our mission and make a positive impact on the specialty.









Learn more about being a CNS donor, including

the CNS Foundation's Lifetime Giving Circle and





#### International Philanthropy

The CNS Foundation International Philanthropy Initiative provides funding that supports opportunities for young neurosurgeons from low- and middle-income countries to take part in observership and visitorship programs within the United States where they will receive mentorship and learn practices that they can return home with to help improve patient care globally.

The goal of these opportunities is to foster clinical development, research, and networking amongst promising junior neurosurgeons who show strong leadership potential. In addition to a desire to augment their own clinical training, individuals who are selected for these observerships/visitorship show strong commitment to fostering the development of neurosurgery in their own countries as well as intent to engage with the global neurosurgery community at-large.

#### **Diversity, Equity and Inclusion**

Pathway to Neurosurgery

The CNS Foundation Diversity, Equity, and Inclusion Initiative supports programs that address health care disparities by

developing inclusive practices, leading to structural changes in the neurosurgery workforce and patient care. Through 4 award opportunities, the CNS Foundation can support projects and programs that concentrate on the enhancement of inclusivity by improving practices for diversity, equity, and inclusion (DEI) in the medical field.

cnsq

Become a Donor

Annual Donor Recognition here.

The DEI Impact Award recognizes a neurosurgeon for their outstanding work in DEI to share best practices in addressing equity and inclusion. The DEI Innovation Pilot Project award funds an active study to implement, test and report results of an intervention hypothesized to correct a known health care disparit(ies) and/ or improve diversity in the neurosurgery workforce. The DEI Scholar Project on Health care Disparities award is given to an individual to examine and understand the presence or causes of health care disparities in neurosurgery.

The Future Women Leaders in Neurosurgery Scholarship is awarded to both a domestic and an international female neurosurgeon who is early in her career to catalyze opportunities to pursue educational and enrichment opportunities to expand leadership skills.

#### **Clinical Scientist Career Development**

The CNS Foundation Clinical Scientist Career Development Initiative offers early-career neurosurgeons' recognition, networking, and research support to help advance the medical research and careers of up-and-coming clinicians and leaders in the field of neurosurgery.

To date, this initiative has awarded over \$1.5 million in funding to support research and advancement including supporting six NINDS/Getch K12 Scholars, to help scholars launch a dual, clinicalresearch career including a vibrant, wellfunded independent Research program, and 6 CV/CNSF Young Investigators, to provide valuable recognition, networking opportunities, and support for their research endeavors in the specialty.

### **ARTIS icono biplane**

# There's a better way to see the brain





#### ARTIS icono biplane expands what's possible in neurointerventions...

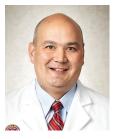
- Reduce artifacts even near bony structures with syngo DynaCT Sine Spin
- Switch seamlessly between 2D and 3D imaging with Twin Spin
- Lower dose and get constant image quality (contrast-to-noise-ratio based)

#### siemens-healthineers.us



### **INSIDE THE CNS**

### Washington Committee Report



Russell R. Lonser, MD Chair, Washington Committee



**Charlotte Pineda, MPP** Vice President, Health Policy and Advocacy

#### Legislative Affairs

#### Neurosurgery Supports Congressional Efforts to Prevent Medicare Payment Cuts

Efforts to advance legislation to reverse Medicare payment cuts and adopt longterm reforms continue and remain among neurosurgery's top advocacy priorities.

A group of 233 Representatives sent a bipartisan <u>letter</u> urging Congressional Leadership to pass a bill providing physicians and other clinicians with a payment update that takes into account the cost of actually delivering care to patients. The Washington Office issued a <u>press release</u> expressing support for the Congressional effort to prevent Medicare payment cuts. Following the press release, *Becker's Spine Review* published an <u>article</u> on Oct. 16 titled, "Spine groups urge Congress to prevent CMS pay cuts."

Subsequently, a group of bipartisan House members introduced legislation, the Medicare Patient Access and Practice

Stabilization Act of 2024 (H.R.10073), which would eliminate the upcoming 2.8% Medicare physician fee schedule (MPFS) cut and provide an inflationary update for calendar year 2025. On Oct. 30, the Washington Office issued a press release expressing support for the bill. Following the press release, Becker's Spine Review published an article on Oct. 30 titled, "Spine groups back bill for patient access, practice stabilization." The Alliance of Specialty Medicine sent a letter of support to bipartisan House sponsors of the bill. The letter highlights the importance of stabilizing Medicare reimbursements to ensure financial sustainability for medical practices, protect patient access and address systemic issues within the Medicare payment system.

On Nov. 15, 78 national medical societies and 51 state medical associations united to <u>urge</u> Congress to pass the Medicare Patient Access and Practice Stabilization Act before the conclusion of the 118th Congress. The letter emphasizes the urgency of addressing these cuts during the lame-duck session, noting that failure to act will exacerbate financial pressures on already strained practices. The proposed legislation, supported by bipartisan lawmakers, offers a temporary solution by providing modest inflationary adjustments and creating a pathway for broader Medicare payment reforms in the next Congress. On Nov. 27, the Washington Office issued a press release urging Congress to pass the legislation and protect Medicare patients and physician practices before year-end. Following the press release, Becker's Spine Review published an article on Nov. 27 highlighting the CNS and the AANS support for the bill that would halt the scheduled physician payment cut.

Thanks to pressure from both House and Senate chambers, congressional leaders expedited the Congressional Budget Office (CBO) to provide a preliminary estimate of the Medicare Patient Access and Practice



Stabilization Act. According to CBO, the temporary fix would cost \$2.163 billion over 10 years to eliminate the 2.8% cut. It is currently being considered for an anticipated end-of-year temporary spending bill.

On Nov. 21, a group of 41 Senators sent a bipartisan <u>letter</u> to leadership urging them to address the 2.8% cut in the MPFS and pass long-term bipartisan solutions to the beleaguered payment system.

#### Efforts to Reform Prior Authorization Continue

The Regulatory Relief Coalition sent a <u>letter</u> to House and Senate leadership urging them to pass the Improving Seniors' Timely Access to Care Act (<u>S.4532/H.R. 8702</u>) by the end of the 118<sup>th</sup> Congress. The stakeholders emphasized how current prior authorization practices delay patient care, impose unnecessary costs and burden health care providers with excessive red tape.

On Oct. 17, the Senate Permanent Subcommittee on Investigations Majority Staff released a <u>report</u> exposing Medicare Advantage insurers' refusal of care for vulnerable seniors. The full report, available here, details how certain MA plans overuse risk adjustment coding and use prior authorization to delay or deny medically necessary care, impacting patient outcomes. It calls for enhanced oversight to ensure that the program fulfills its promise of providing high-quality, cost-effective care to seniors rather than prioritizing insurer profits. The report further evidences the need to pass the Improving Seniors' Timely Access to Care Act as well as other reform measures.

#### **Coding and Reimbursement**

#### CMS Releases 2025 Medicare Physician Fee Schedule Final Rule

On Nov. 1, the <u>U.S. Centers for Medicare</u> <u>& Medicaid Services</u> (CMS) released the 2025 Medicare Physician Fee Schedule (MPFS) final rule. CMS finalized a calendar year (CY) 2025 MPFS conversion factor of \$32.35, representing a 2.83% decrease (or \$0.94) from the current conversion factor. This cut is a result of the expiration of a 2.93% temporary update to the conversion factor at the end of 2024 and a 0% baseline update for 2025 under the Medicare Access and Children's Health Insurance Program (CHIP) Reauthorization Act. Eligible physicians who fail to comply with the requirements of the Merit-based Incentive Payment System (MIPS) in 2025 will also be subject to a penalty of up to 9% of their Part B Medicare payments. The CNS and the AANS provided detailed comments on the CMS 2025 MPFS proposed rule on Sept. 9. A summary of issues of interest to neurosurgeons prepared by Washington Office staff is available here.

### CMS CY 2025 Medicare Hospital OPPS and ASC Final Rule

On Nov. 1, CMS released the final rule for the CY 2025 Hospital Outpatient and Prospective Payment System (OPPS) and Ambulatory Surgery Center (ACS) Payment System. CMS finalized an update to OPPS payment rates of 2.9% for hospitals that meet applicable quality reporting requirements. On Sept. 9, the CNS and the AANS sent a <u>letter</u> to CMS responding to several issues in the proposed rule.

#### **Drugs and Devices**

#### Neurosurgery Issues Position Statement on Intracranial Neuromodulation for Drug-Resistant Epilepsy in Pediatric Patients

The CNS, AANS, and Section on Pediatric Neurological Surgery issued a Position Statement on Intracranial Neuromodulation for Drug-Resistant Epilepsy in Pediatric Patients. The statement urges government, private payers and health systems to support the use of intracranial neuromodulation devices for patients, regardless of their age, in cases deemed appropriate by the patient's multidisciplinary treatment team.

Click <u>here</u> to read neurosurgery's Position Statement.

#### Communications

#### Elad I. Levy, MD, MBA Pens Article on the Passing of Nelson "Nick" Hopkins, III, MD

Elad I. Levy, MD, MBA, FAHA, FACS authored a touching tribute on the Neurosurgery Blog highlighting the life and accomplishments of his mentor, Nelson "Nick" Hopkins, III, MD, who recently passed away. Known as the father of endovascular neurosurgery, Dr. Hopkins innovated catheter-based minimally invasive treatment of vascular diseases in the brain and spine. He trained countless neurosurgeons throughout his career, many of whom have held the highest leadership positions in departments and academic organizations nationally and worldwide. Dr. Levy concludes the piece by stating, "Our specialty lost a titan, and while we are greatly saddened, his legacy gift of endovascular neurosurgery will persist in perpetuity through his many devoted disciples in academic neurosurgery."

### Neurosurgeon Authors Op-Ed on Prior Authorization

On Oct. 3, *Forbes* published an op-ed by neurosurgeon **Richard P. Menger**, MD, MPA, titled, <u>1 In 4 Physicians Say Prior Authorization</u> <u>Harms Patients. Reform Is Coming.</u> Prior authorization is a tactic used by insurance companies to reduce the costs of what they believe to be potentially unnecessary treatments. However, nearly a quarter — 24% — of physicians report that such delays resulted in direct harm to patients. Dr. Menger concludes the op-ed by promoting the bipartisan Improving Seniors' Timely Access to Care Act (<u>H.R. 8702/S. 4532</u>).

### Washington Office VP Featured in Article on Prior Authorization

On Oct. 30, *MedPage Today* published an article titled, <u>Backers of Prior Authorization</u> <u>Bill Hopeful for Passage by End of the Year</u>. The article features **Charlotte Pineda**, MPP, vice president of Health Policy and Advocacy for the Washington Office. "We commend the efforts of the Senate and House sponsors. They showcase the best of bipartisan, bicameral teamwork and proactive engagement in working with all stakeholders impacted by prior authorization," stated Ms. Pineda.

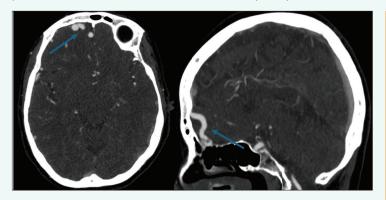
#### Neurosurgery Delegate Advocates for Improved PPE for Radiation Protection

On Nov. 12, *MedPage Today* published an article titled, <u>AMA Delegates Want</u> <u>Better Protection From Ionizing Radiation</u> <u>Exposure</u>. The article features **Laura Stone McGuire**, MD, an alternate delegate for the CNS. Dr. McGuire highlighted the risks that standard PPE, such as lead aprons, pose for neurosurgeons, noting gaps in coverage that leave areas like the upper body exposed, especially during complex procedures. "Institution-standard lead aprons may not always offer the best available protection," Dr. McGuire stated, underscoring the need for PPE that better accommodates different body types and pregnancy status.

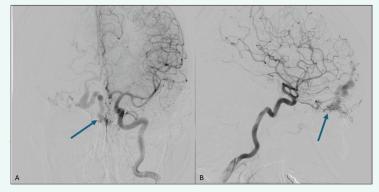
## **IMAGES IN NEUROSURGERY**

#### Ethmoidal dural arteriovenous fistula

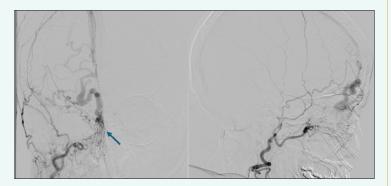
We present a 65-year-old female who presented with throbbing headaches and underwent outpatient CT angiogram of the head demonstrating a right-sided ectatic cortical vein emerging from the cribiform plate (**Figure 1**). A diagnostic cerebral angiogram demonstrated a Cognard Type IV dural arteriovenous fistula (dAVF) with feeders from bilateral ethmoidal arteries and retrograde cortical venous drainage (**Figure 2** and **Figure 3**). Ethmoidal dAVFs are rare intracranial lesions with a high risk of intracranial hemorrhage. Options for management include endovascular transvenous embolization versus craniotomy for microsurgical clipping of draining vein. Patient underwent a right-sided craniotomy sparing the frontal sinus through a bicoronal skin incision for microsurgical clipping of the draining vein. Postoperative angiogram (**Figure 4**) demonstrated successful clipping of the draining vein with no residual filling of the ethmoidal dAVF. The patient tolerated the procedure well and was discharged home on postoperative day 3.



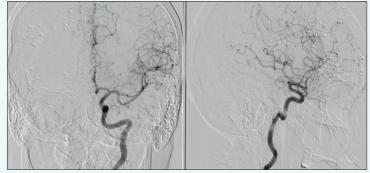
**Figure 1:** CT angiogram of the head axial (A) and sagittal (B) sections demonstrating a right-sided ectatic vein (arrow) emerging from the cribiform plate



**Figure 2:** Selective injection of the left internal carotid artery AP (A) and lateral (B) projections demonstrating Cognard Type IV dural arteriovenous fistula with feeders from the left ethmoidal arteries with retrograde cortical venous drainage (arrow)



**Figure 3:** Selective injection of the right external carotid artery AP (A) and lateral (B) projections demonstrating Cognard Type IV dural arteriovenous fistula with feeders from the right ethmoidal arteries (arrow) with retrograde cortical venous drainage.



**Figure 4:** Postoperative selective injection of the left internal carotid artery AP (A) and lateral (B) projections demonstrating clipping of the draining vein and no residual filling of the ethmoidal dural arteriovenous fistula.

Submitted by: Rimal H. Dossani MD and Stephanie Adamczak MD PhD Author Affiliations: Lee Physician Group Neurosurgery, Fort Myers, Florida



Congress Quarterly, 10 N. Martingale Road, Suite 190, Schaumburg, IL 60173.

Care the Pate

## CONGRESS OF NEUROLOGICAL SURGEONS 75<sup>TH</sup> ANNUAL MEETING



Registration Open January 2025 • cns.org/2025



#### Continued from page 11

ASBN recognizes the importance of HBCUs in fostering diversity within neurosurgery. Since its inception, ASBN has hosted yearly neurosurgery immersion events in partnership with HBCUs to inspire and recruit Black medical students into neurosurgery. These initiatives address the mentorship gap by connecting students directly with neurosurgeons-an invaluable resource given that none of the current HBCU medical schools have affiliated neurosurgery residency programs. Research has shown that applicants with a 'home' neurosurgery residency training program are more likely to match successfully, benefiting from mentorship, research opportunities, and institutional support throughout the competitive process.9 ASBN serves as a 'national home program,' linking students with neurosurgeons across its network for guidance and research. Additionally, its Neuro Mentoring Matters program establishes mentorship pods with attending neurosurgeons, residents, and students, supporting participants at every career stage. ASBN also engages primary school students through outreach events, sparking interest in the sciences and broadening the path for future generations.

The mission to improve visibility and representation for Black patients and providers in neurosurgery is a shared responsibility. While HBCUs are pivotal in training Black physicians, they alone cannot bridge the representation gap. Similarly, Black neurosurgeons cannot singlehandedly mentor all aspiring Black candidates. This underscores the need for support from the broader neurosurgical community. The ASBN-CNS partnership is a powerful step forward. At its annual conference this fall, CNS hosted ASBN, featuring a dedicated session to address the key challenges affecting Black representation and patient care. By formally welcoming ASBN as a partner organization, CNS amplifies ASBN's voice in advocating for systemic change across the field.

Recent Supreme Court rulings on affirmative action may further challenge diversity efforts, potentially reducing the number of underrepresented applicants in medical and neurosurgical programs. This shift underscores the importance of ASBN and CNS initiatives, which provide communitydriven pathways to support Black neurosurgery applicants. Through continued collaborations, ASBN and CNS hope to dismantle systemic barriers to create a neurosurgical community where Black providers and patients are empowered and equipped to thrive.

#### **References:**

- Brandon DT, Isaac LA, LaVeist TA. The legacy of Tuskegee and trust in medical care: is Tuskegee responsible for race differences in mistrust of medical care? J Natl Med Assoc. 2005 Jul;97(7):951-6. PMID: 16080664; PMCID: PMC2569322.
- Jones BL, Vyhlidal CA, Bradley-Ewing A, Sherman A, Goggin K. If We Would Only Ask: How Henrietta Lacks Continues to Teach Us About Perceptions of Research and Genetic Research Among African Americans Today. J Racial Ethn Health Disparities. 2017 Aug;4(4):735-745. doi: 10.1007/s40615-016-0277-1. Epub 2016 Sep 23. PMID: 27664025.
- Kabangu JK, Amadi I, Adjei J, Eden SV. Advancing diversity in spine surgery: the critical role of professional societies and foundations. Spine J. 2024 Jul 25:S1529-9430(24)00887-8. doi: 10.1016/j. spinee.2024.06.569. Epub ahead of print. PMID: 39059677.

- Campbell KM, Corral I, Infante Linares JL, Tumin D. Projected Estimates of African American Medical Graduates of Closed Historically Black Medical Schools. JAMA Netw Open. 2020 Aug 3;3(8):e2015220. doi: 10.1001/ jamanetworkopen.2020.15220. PMID: 32816033; PMCID: PMC7441360.
- Kabangu JK, Heskett CA, Bhargav AG, Yekzaman BR, Morey K, Rouse AG, Chamoun RB. Evaluating Match and Attrition Rates for Women and African Americans in Neurosurgery. *Neurosurgery*. 2023 Apr 1;92(4):695-702. doi: 10.1227/neu.00000000002257. Epub 2022 Nov 25. PMID: 36700685.
- NeurosurGen. (n.d.). Genealogy. Retrieved November 3, 2024, from <u>https://www.neurosurgen.</u> <u>com/genealogy</u>
- Kabangu JL, Lei C, Yekzaman B, Minchew H, Birney J, Heskett C, Lundy P, Miller C. Gender parity in neurosurgery residencies: an analysis. *J Neurosurg.* 2024 Feb 2;141(1):48-54. doi: 10.3171/2023.11. JNS231152. PMID: 38306646.
- Weiss J, Nguementi Tiako MJ, Akingbesote ND, Keene D, Balasuriya L, Sharifi M, Genao I, Latimore D. Perspectives on Medical School Admission for Black Students Among Premedical Advisers at Historically Black Colleges and Universities. JAMA Netw Open. 2024 Oct 1;7(10):e2440887. doi: 10.1001/jamanetworkopen.2024.40887. PMID: 39441593.
- Roth SG, Ortiz AV, Feldman MJ, Reisen BE, Mummareddy N, Chitale RV, Chambless LB. "Home Field Advantage": The Presence of a "Home" Neurosurgical Residency Training Program is Associated With Improved Match Outcomes. *Neurosurgery*. 2024 Sep 1;95(3):702-708. doi: 10.1227/neu.000000000002907. Epub 2024 Mar 19. PMID: 38501773.