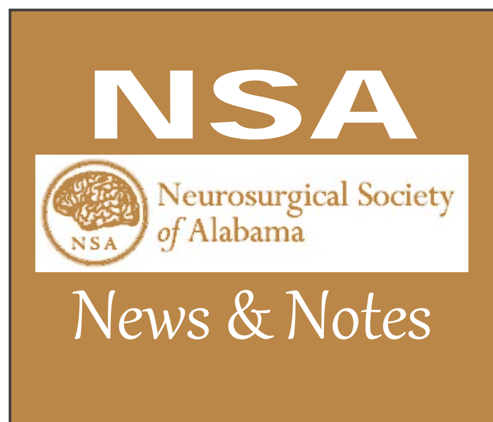


Advancing interest in neurological surgery and allied subjects

WWW.NSANEUROSURGEONS.COM

August is Neurosurgery Awareness Month

American Association of Neurological Surgeons

For 2016, Neurosurgery Awareness Month will focus on the role of neurosurgeons in the treatment of stroke.

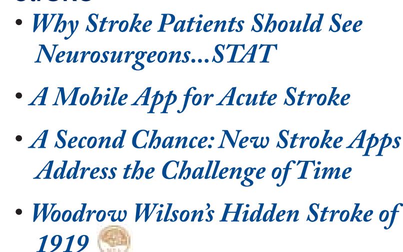
In their essay, "Why Stroke Patients Should See Neurosurgeons…STAT," Christopher Nickele, MD, and Adam Arthur, MD, MPH, FAANS, describe their vision of a neurosurgeon's role in stroke treatment:

Since we, as neurosurgeons, have the training that makes us uniquely able to treat these stroke patients comprehensively, we should not sit back passively and wait for these patients to be brought to our operating rooms. We must be involved in and lead the process even before diagnosis and lasting beyond the intervention, on through to the acute phase of the patient's recovery.

See the full essay below to learn more about the future of neurosurgery and stroke treatment, from the perspective of two neurosurgeons actively treating stroke patients.

Other materials include a review of current apps designed to support stroke diagnosis and treatment, a look at a few historical figures who dealt with stroke and some patient stories.

Neurosurgery Awareness 2016: Stroke



- *Why Stroke Patients Should See Neurosurgeons...STAT*
- *A Mobile App for Acute Stroke*
- *A Second Chance: New Stroke Apps Address the Challenge of Time*
- *Woodrow Wilson's Hidden Stroke of 1919*

AANS among societies to send "21st Century Cures" letter to Speaker Ryan

The American Association of Neurological Surgeons (AANS) was among a group of medical specialty societies to sign on to a letter encouraging the passage of the 21st Century Cures bill. The text of the letter is as follows:

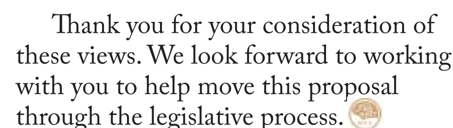
Dear Speaker Ryan,

On behalf of the undersigned medical specialty organizations, we applaud you for your commitment to move a compromise 21st Century Cures bill in the fall. As Senate Majority Leader McConnell said, this could be the most important legislation Congress passes this year.

The ultimate goal of both the House and the Senate bills is to accelerate innovation, boost research, streamline drug and device approvals, and enhance health information technology (HIT) interoperability. We believe these things individually and combined will ultimately improve patient care and improve outcomes. They will also increase the quality, safety, and efficiency of health care delivery.

Specifically, the bills include provisions focused on National Institutes of Health (NIH) funding and boosting innovation. They will help the NIH and the Food and Drug Administration (FDA) recruit top talent, improve research focused on women and minorities, and encourage young investigators. They include a system of more rapidly approving drugs and devices by decreasing paperwork and streamlining the approval process. Additionally, they will help address the executive branch "Moonshot Agenda" to find a cure for cancer and advance precision medicine.

The other major focus of both pieces of legislation is on HIT. The stated goals are to improve and legislate more rapid advancement in interoperability. The HIT provisions aim to reduce the documentation burden for physicians, improve access to information for patients, and improve physician access to patient medical records. We are particularly supportive of language included in the Senate HIT legislation that creates a definition of clinician-led clinical data registries and requires that HIT vendors share data with those registries as a condition of certification to ensure such registries have efficient and cost-effective access to clinical outcomes data.



Thank you for your consideration of these views. We look forward to working with you to help move this proposal through the legislative process.

Neurosurgical Society of Alabama

2016 Annual Conference • July 8-10 • Hilton Sandestin

CONFERENCE WRAP UP

Welcome new off cers

President: W. Brent Fairchloth, MD, Mobile

President-elect: Curtis J. Rozzelle, MD, Birmingham

Secretary/Treasurer: Robert D. Robinson, MD, Birmingham

Past President: Donald R. Tyler, MD, Mobile

Scientific Chairman: James "Jim" Johnston, MD, Birmingham

Save the Date! Save the Date! Save the Date!

The NSA 2017 Conference will be July 7-9 at the Sandestin Hilton. Rates begin at $310 per night. The discount is available for two days before and two days after the conference!. Call (800) 267-9500.

Neurosurgery makes pain management curricular breakthroughs

Leaders in neurosurgery have taken a hands-on approach to training residents with an eye toward filling knowledge and skill gaps – one such gap is pain management. Learn how they're making strides in preparing residents for the board exam and more effective patient care.

AMA Wire

Neurosurgery "boot camps" were created in 2009 to help fill in some of the knowledge gaps in resident training. Neurosurgeons in training attend one boot camp at the start of internship and another before becoming a junior resident.

"The boot camps … use extensive simulation labs with ICU crises where you have a mannequin on a table with an ICU monitor," said Christopher Winfree, MD, an assistant professor of neurological surgery at the Columbia University College of Physicians and Surgeons in New York City. "They go through all kinds of scenarios. The important thing is to have the residents trained across all of the topics they need to know."

The Neurological Surgery Milestone Project, developed in 2013, was created to further formalize the content of residency training. The content addresses areas such as procedural skills, professionalism and interpersonal relations with colleagues and patients. The Milestones also facilitate resident assessment to make sure residents are making appropriate progress as they go through their training.

Training neurosurgical residents in pain management

Six years ago, Dr. Winfree became president of the pain section of the two major neurosurgery groups, the American Association of Neurological Surgeons and the Congress of Neurological Surgeons. The executive committees asked him to make pain management in neurosurgery more prominent.

Dr. Winfree developed a module for the resident boot camp that includes everything residents need to know about pain management in neurosurgery. Topics covered include different types of pain, neuropathic pain medications, how opioids work, treatment ladders, chronic and acute pain management, caring for patients with opioid dependence or substance use disorder, and buprenorphine treatment.

"I thought that would be an excellent opportunity to teach pain management at a boot camp level so the interns and junior residents are not only getting comprehensive neurosurgical training but also a focus—at least in one module—on pain," he said.

Making sure the knowledge sticks

"Everybody likes to think that when you institute a new curriculum, it's going to be great," Dr. Winfree said. "But we had no data to prove that. Further, we had neurosurgery residents and attendings not doing so well in the pain sections on their board exams."

"People weren't really getting it and weren't really learning what they needed to learn," he said. "We tried to address that with the boot camp [and] the milestones, and that was a good start, but we were still making little progress on board exam performance."

As a member of the editorial board of the Self-Assessment Neurological Surgery (SANS), which writes the board exam questions, Dr. Winfree wrote 150-200 questions, vetted by the Board, for a rotating practice exam, which includes a different set of 100 questions each year. Using the results from these tests, they can now see how the residents are doing on the sections regarding pain.

Some of these pain questions are used at the boot camp sessions. The residents study the material and take a test before they arrive and then are tested again at the end of the course.

In Dr. Winfree's pain lecture, he talks about pain management for neurosurgery, including craniotomy, spine surgery, post-operative pain management, use of non-opioid medications, the treatment ladder, management of specific chronic pain conditions and much more.

"We're trying to get away from passive learning, because how many times have we all sat in lectures and retained probably 10 percent," he said. "When you have somebody study ahead of time and test them on it ahead of time, then show it to them in person, where they can sit one-on-one with faculty members in these sessions, and then you test them on it again, they have this stuff for life."

"This isn't just stuff that the residents blow off," he said. "They study [it]. They're professionals, and we treat them like professionals. But we test them also. We make sure that they know the material."

"Every question has an explanation at the end," he said. "It's self-assessment, but it's not just yes, no, you got it right or wrong. The residents get an explanation as to why the answer is right or wrong."

Changing the curriculum at Columbia

Dr. Winfree is also changing how he teaches neurosurgical residents at Columbia University Medical Center. "I would give talks on the material," he said, "and randomly call the residents after and quiz them about the lecture—and the results were terrible. It was almost like the residents did not attend the lecture."

"The whole passive, didactic learning thing is 20th century," he said. "What we've been actively trying to do is get things to the 21st century. Now, instead of just giving a random talk on neuro for pain, I designed a curriculum that directly follows the milestones."

continued on page 4

FREE
WEBINAR
Current Applications and Advances in Fluorescence-guided Surgery
Sept. 14, 2016
at 6 p.m. CDT
Led by:
Costas G. Hadjipanayis, MD, PhD, FAANS

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Free Webinar: Current Applications and Advances in Fluorescence-guided Surgery

This complimentary webinar is provided by support from Neurosurgery Research & Education Foundation and Leica Microsystems.

Wednesday, Sept. 14 | 6 p.m. CDT

Faculty: Costas G. Hadjipanayis, MD, PhD, FAANS
Neurosurgical Oncology director and professor and chair of the Department of Neurosurgery at Mount Sinai Beth Israel; Brain Tumor Nanotechnology Laboratory director at the Tisch Cancer Institute Icahn School of Medicine at Mount Sinai

Participants will receive an overview on the concept of fluorescence-guided surgery (FGS) for the resection of brain and spinal cord tumors. Neurosurgeons will understand the current technologies available for FGS and the different tumor types that can undergo FGS. Safety, diagnostic accuracy, and Level 1 evidence in support of FGS will also be discussed. **(Note: this webinar does not provide CME credit.)**

Upon completion of this activity, participants should be able to:

- Define the use of FGS for brain tumors with 5-aminolevulinic acid (5-ALA) and fluorescein;
- Identify different brain and spinal cord tumor types that are amenable to FGS;
- Distinguish the technical aspects of FGS, including the use of FGS for real-time intraoperative guidance, tumor margin visualization, and reported extents of tumor resection;
- Explain patient safety with FGS;
- Demonstrate the difference between current and future FGS technology; and
- Summarize the current U.S. regulatory state for FGS.

Register at ***https://www.surveymonkey.com/r/Leica2016***

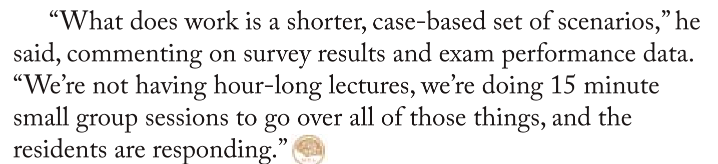
Pain management breakthroughs continued

Every week, residents training with Dr. Winfree present a case, and the group addresses the topic. Instead of a long lecture, the residents' case study lasts 15 minutes, with Dr. Winfree moderating. "Studies have shown that an educated person's attention span for a talk is 18 minutes," he said. "That's why TED Talks are 18 minutes and contain stories, because a story represents a cognitive hook that allows a person to pay attention more."

"It's not a lot of PowerPoint and bullet presentations," he said. "It's images that reinforce the stories that are being told … so it captivates the residents' attention. It's active learning, not passive learning."

So how have the residents responded? They like it, a lot.

"Nobody wants to sit through an hour lecture," Dr. Winfree said. "We've been doing these boot camp courses every year now, and every time we do it, we survey the residents. Every resident says, 'Get rid of the didactic lectures, we're falling asleep, [and] we're not learning anything.'"



"What does work is a shorter, case-based set of scenarios," he said, commenting on survey results and exam performance data. "We're not having hour-long lectures, we're doing 15 minute small group sessions to go over all of those things, and the residents are responding."

NSA *News & Notes*

Neurosurgical Society of Alabama
3200 Dauphin Street, Bldg. A | Mobile, AL 36606
(334) 954-2500 | Fax (334) 269-5200 | www.nsaneurosurgeons.com

Donald Tyler, MD, Publisher
Jennifer Hayes, Executive Editor
Charlotte H. Morris, Senior Editor

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