What Does Innovation Have to Do With WINS?

A while ago, a colleague was joking with me that he, “just didn’t get the whole WINS thing.” Why exactly, he wondered, was it that women needed their own ‘club’ and should he perhaps consider starting a MINS (for Men in Neurosurgery)?

An excellent point indeed – so very glad he asked! No woman practicing neurosurgery wants to be thought of as a ‘female neurosurgeon.’ Being female is not a subspecialty like “vascular neurosurgeon” or “skull base neurosurgeon,” thus the extra moniker adds no professional dividend and, in fact, may be distracting or even regarded as diminutive. Why WINS? What exactly is our purpose? And why have I chosen innovation as my theme for this year? What exactly does innovation have to do with anything?

Ninety-four percent of the 3,811 actively practicing, board-certified neurosurgeons in the United States are men. Approximately 17 percent (n=215) of all residents currently enrolled in training programs are women. Two-thirds will eventually be board certified to increase the total percentage of women to about eight percent of neurosurgeons by 2030 and 12 percent by 2045.

Success against the odds in neurosurgery requires hard work, resilience, ingenuity, persistence and a mad passion for the mission. In many cases, since there are so few women in academic positions of power, it also requires an ability to find mentors and role models in unusual places: of opposite genders, in different fields and at various types of institutions. All of these qualities are also necessary for innovators – another calling where women are under-represented and have recently made amazing strides.

At this year’s CNS Meeting, the WINS sessions will highlight the passion and motivation of great innovators – people who succeed against the odds to improve the quality of care we can give our patients. Neurosurgical innovators extraordinaire L. Nelson Hopkins, MD, FAANS, and William Couldwell, MD, PhD, FAANS, will keynote the scientific session and techie Torrie Adams will speak at the evening reception, along with the Greg Wilkins Barrick Visiting International Scholar, Selfy Oswari, MD, from Malaysia. Resident Sophia Shakur, MD, will be awarded the Sherry Apple Prize.

Being an innovator is something that I personally feel rather passionately about. We all know that neurosurgery often relies on imperfect measures, to
I am thrilled to have the opportunity to learn from my more experienced peers in innovation and perhaps to provide an example to those who will innovate beyond me. Innovation to me is about pushing the field of neurosurgery forward so that we can improve patient care in the future.

WINS also hopes to push the field of neurosurgery forward. WINS is not just about bringing balance to neurosurgery, it is about bringing out the best in every person: about personal and career development at every stage, from pre-med to full professor or partner. Fifty percent of the most talented graduates from medical schools are females. Neurosurgery needs that talent and needs to be inclusive of all!

So to my friend, the budding MINS founder – I say, “come join us.” The WINS sessions and reception are open to both genders, as we invite all of our colleagues to work with us to find the best within ourselves so we can help others. We look forward to seeing you in New Orleans!

Uzma Samadani, MD, PhD, FAANS, is the Rockswold Kaplan Endowed Chair for TBI Research at Hennepin County Medical Center and an Associate Professor of Neurosurgery at the University of Minnesota. She has founded a neurodiagnostic startup company called Oculogica Inc., which is currently pursuing FDA clearance for an eye-tracking technology that will serve as an aid to the diagnosis of concussion.

Sources:
http://www.esa.doc.gov/sites/default/files/womeninSTEMgaptoinnovation8311.pdf
http://www.abns.org/~/media/Files/ABNS/Newsletters/newsletter_info_32.ashx?la=en
The Congress of Neurologic Surgeons (CNS) 64th Annual Meeting, held this year in New Orleans themed “Mentorship: Service, Education, Progress” strives to provide cutting-edge medical education, provoke discussion on current issues in the field and promote networking between colleagues all around the world. At the time of the 1st Annual Meeting, held in 1951, there were only 121 members in the Congress of Neurologic Surgeons. Now, that membership has grown to over 8,000. This year’s Annual Meeting will feature honored speakers, symposiums, practical courses, seminars and oral presentations. A number of highly accomplished women neurosurgeons and professionals in the neurosurgical profession will be teaching and presenting at this year’s Annual Meeting. Here is a look at some of their topics:

**Saturday, September 26**

**Jody Leonardo, MD, FAANS**
Endoscopic and Keyhole Cranial Surgery - Keyhole Craniotomy and Endoscopic Assisted Microsurgery (Cadaver Course)
8 a.m.-4 p.m., Ernest N. Morial Convention Center R09/R09

**Sepideh Amin-Hanjani, MD, FAANS; Mandy Jo Binning, MD, FAANS**
Neurovascular Update: Evidence-Based Guidelines and Paradigm Shifts in Ischemic and Hemorrhagic Stroke
8 a.m.-5 p.m., Ernest N. Morial Convention Center 207

**Pamela L. Derstine, PhD, M.H.P.E.; Heidi Waldo**
RRC Next Accreditation System, Milestones, and the Neurosurgery Matrix
12:30-4 p.m., Ernest N. Morial Convention Center 225/226/227

**Deborah L. Benzil, MD, FAANS**
Managing Your Practice in a Changing Environment, the Transition from Volume to Value Based Care
6-8:30 p.m., Tomas Bistro

**Sunday, September 27**

**Renee M. Reynolds, MD**
Laser Ablation Surgery: Indications, Techniques, and Pitfalls
8-11:30 a.m., Ernest N. Morial Convention Center 342

**Megan Brosious**
Building a Neurosciences Program
8-11:30 a.m., Ernest N. Morial Convention Center 338

**Andrea L. Strayer, NP; Kristina Shultz, NP; Christina Matthews, NP; Amanda Gordon, NP**
Integration of Wisdom and Pearls into the Advanced Practice Provider’s Practice
8-11:30 a.m., Ernest N. Morial Convention Center 225, 226, 227

**Isabelle M. Germano, MD, FAANS**
Surgical Management of Tumors in Eloquent Regions
8-11:30 a.m., Ernest N. Morial Convention Center 343

**Sepideh Amin-Hanjani, MD, FAANS; Laura S. Mitchell**
Clinical Guidelines Development: A Primer on the Development and Review of Evidence-Based Clinical Guidelines
8-11:30 a.m., Ernest N. Morial Convention Center 229/230

**Darlene Angela Lobel, MD, FAANS; Aruna Ganju, MD, FAANS**
Simulation-Based Neurosurgical Training
8 a.m.-4 p.m., Ernest N. Morial Convention Center R07

**Holly Gilmer MD, FAANS; Kimberly Harbaugh MD, FAANS; Marie-Noelle Hebert-Blouin MD, FAANS; Line Jacques, MD, FAANS; Lynda Yang MD, PhD, FAANS**
Peripheral Nerve Exposure and Anatomy for Oral Boards: Cadaver Demonstration
12:30-4 p.m., Ernest N. Morial Convention Center 220/221

**Shelly D. Timmons, MD, PhD, FAANS; Nancy Carney, PhD; Jamie S. Ullman, MD, FAANS**
Trauma Update: Traumatic Brain Injury
12:30-4 p.m., Ernest N. Morial Convention Center 342

**Kim Pollock, RN, MBA**
2015 CPT Coding Update
12:30-4 p.m., Ernest N. Morial Convention Center 338

**Ann R. Stroink, MD, FAANS**
What are you Worth? The Art of Hospital Negotiation from the Experts -- Getting the Best Deal
12:30-4 p.m., Ernest N. Morial Convention Center 225/226/227

**Krystal Lynne Tomei, MD, MPH**
Choice Abstracts: Spanning the Spectrum of Neurosurgery
1:30-4 p.m., Ernest N. Morial Convention Center-Great Hall

**Monday, September 28**

**Shelly D. Timmons, MD, PhD, FAANS**
I Thought Someone Else Would Take Care of It
7-8:30 a.m., Ernest N. Morial Convention Center 333/334

**Uzma Samadani, MD, PhD, FAANS**
Mentorship in Innovation in Neurosurgery
7-8:30 a.m., Ernest N. Morial Convention Center 342

**Shelly D. Timmons, MD, PhD, FAANS**
Working with your State
8-8:20 a.m., Ernest N. Morial Convention Center 333/334

**Aruna Ganju, MD, FAANS**
Case Based Review for MOC
12:30-2 p.m., Ernest N. Morial Convention Center 222
Karin M. Muraszko, MD, FAANS; Ruth E. Bristol, MD, FAANS
Managing Challenging Pediatric Neurosurgical Diseases: Interactive Case Based Discussion
12:30-2 p.m., Ernest N. Morial Convention Center 221

Sepideh Amin-Hanjani, MD, FAANS
Surgical Clipping
4:45-5 p.m., Ernest N. Morial Convention Center R03/R04/R05

Tuesday, September 29
Cara L. Sedney, MD
Council of State Neurosurgical Societies Oral Presentations
7-8:30 a.m., Ernest N. Morial Convention Center 333/334

Aviva Abosch, MD, PhD, FAANS
The Cost Effectiveness of Neuromodulation in the Real World
7-8:30 a.m., Ernest N. Morial Convention Center 338/339

Erika A. Petersen, MD, FAANS
Section on Pain Oral Presentations; Section on Stereotactic and Functional Neurosurgery; History of Pain Surgery -- What’s Old is New Again
7-8:30 a.m., Ernest N. Morial Convention Center 335/336

Julie G. Pilitsis, MD, PhD, FAANS
Building a Cost-Effective Practice in Pain Neuromodulation
7:20-7:40 a.m., Ernest N. Morial Convention Center 338/339

Aviva Abosch, MD, PhD, FAANS
Section on Stereotactic and Functional Neurosurgery Oral Presentations
7:45-8:30 a.m., Ernest N. Morial Convention Center 338/339

Shelly D. Timmons, MD, PhD, FAANS; Jamie S. Ullman, MD, FAANS; Patricia B. Raksin MD, FAANS
Guidelines for Neurocritical Care Management
12:30-2 p.m., Ernest N. Morial Convention Center 231/232

Lynda Jun-San Yang, MD, PhD, FAANS
Peripheral Nerve Board Review
12:30-2 p.m., Ernest N. Morial Convention Center 221

Susan Chang, MD
Innovations in Brain Tumor Surgery and Adjuvant Treatments: Case Based Discussions
12:30-3 p.m., Ernest N. Morial Convention Center 340/341

Stacey Q. Wolfe, MD, FAANS
Section on Cerebrovascular Surgery; Council of State Neurosurgical Societies
4:30-5:45 p.m., Ernest N. Morial Convention Center- Hall B/C

Jennifer A. Sweet, MD
Section on Pain
4:30-5:45 p.m., Ernest N. Morial Convention Center- Hall B/C

Sandi Lam, MD, FAANS
Section on Pediatric Neurosurgery
4:30-5:45 p.m., Ernest N. Morial Convention Center- Hall B/C

Wednesday, September 30
Krystal Lynne Tomei, MD, MPH
General Scientific Session IV
8-10:30 a.m., Ernest N. Morial Convention Center- Great Hall

Lissa Catherine Baird, MD
Debate: First Treatment in Infants with Hydrocephalus: ETV vs. Shunt
8:21-8:41 a.m., Ernest N. Morial Convention Center- Great Hall

Aviva Abosch, MD, PhD, FAANS; Ellen L. Air, MD, PhD; Zelma HT Kiss, MD, PhD
Update on Movement Disorders: Novel Targets, Indications, and Approaches
11:30 a.m.-1 p.m., Ernest N. Morial Convention Center 209

By: Rachel Blue, MS3
Rachel is a third-year medical student at The University of Minnesota Medical School intent on pursuing a career in neurosurgery. She is interested in brain mapping and neuroprosthetics.
Don’t miss the WINS CNS Evening Reception – Tuesday, Sept. 29, from 6-8 p.m. at the Hilton Riverside Melrose Room, 3rd floor.
This free event is open to people of all genders at all levels of training, including non-WINS members.

This year’s speaker is Torrie Adams, who will talk about “Succeeding Against the Odds – Women in Technology and Innovation.”

Torrie Adams is head of product at Kickboard and the founder and president of New Orleans Women in Technology (WIT). Adams holds a B.S. in Computer Science from the University of Maryland, as well as two graduate certificates in Software Development Management and the Commercialization of Technology. In her professional career over the last 15 years, Adams has brought five innovative software products to market, first as a software engineer and later as a Product Manager. In the two years since she started New Orleans WIT, Adams has raised over $30k in corporate sponsorships, built a board of directors and volunteer roster, and grown the organization to over 250 local women. As an organization, New Orleans WIT hosts free monthly skills workshops for local women to learn new technology skills like web design, programming, testing and graphic design. They also host an annual Bring Your Daughter to Hack Day outreach event for children ages 3-18, where kids and their parents work together on a project to learn technology skills like circuitry, web design and video production. These efforts have led the way for two new programming boot camps starting in New Orleans (with women as the majority in each class), two new STEM after-school programs for girls, and an influx of future women innovators in the local talent pipeline.

The CNS evening reception will also feature Dr. Selvy Oswari in addition to Torrie Adams.

The WINS Greg Wilkins Barrick Chair Visiting International Scholar Award, sponsored by Mark Bernstein, MD, FAANS, will be presented to Selvy Oswari, MD.

Dr. Oswari is a neurosurgery resident from Malaysia. She will spend time after the CNS meeting performing an observership with Dr. Uzma Samadani at Hennepin County Medical Center at the University of Minnesota.

Dr. Bernstein is the Greg Wilkins-Barrick Chair in International Surgery and Professor, Department of Surgery, at the University of Toronto.
In 2015, it is estimated that more than 1.6 million new cases of cancer will be diagnosed in the United States. As cancer treatments continue to progress, many patients are undergoing combinations of treatments to combat their disease. Radiation is often a component of such treatments, especially in tumors arising or traveling to the brain. Recently, significant publicity has surrounded former United States president, Jimmy Carter, and his fight with metastatic melanoma. At the age of 90, he was found to have a metastatic lesion in his liver, as well as four small lesions within his brain. His treatment plan includes stereotactic radiosurgery for the brain lesions and an immunotherapy drug.

I had the pleasure of interviewing Isabelle Germano, MD, FAANS, Professor of Neurosurgery, Neurology and Oncological Sciences, regarding the use of stereotactic radiosurgery. Dr. Germano is the director of the Mount Sinai Comprehensive Brain Tumor Program, a multidisciplinary program based on computer-assisted image-guided neurosurgery and brain mapping to perform minimally invasive procedures and treatments of brain tumors. She is also the co-director of the Radiosurgery Program and has received several awards and grants in this field.

What components are necessary for a comprehensive brain tumor program?

Brain tumor programs should utilize a three-pronged approach integrating clinical practice, research and education. A multidisciplinary approach is a key element to ensure comprehensive treatment. In order to execute this concept, it is important to make sure all involved disciplines are represented including neurosurgery, neurology, neuropathology, neuroradiology and rehabilitation medicine. At our institution, I chair a weekly multidisciplinary meeting with healthcare providers from each discipline to discuss each presented case. Organizing a time when all specialties are available and running the meeting efficiently requires significant preparation to compile all patient data and relies on the ancillary staff for all departments.

What is the standard course for a patient with a recently diagnosed brain tumor?

Each patient has a specific course, influenced by his or her presentation and how he or she was referred to the neurosurgeon. For most patients seen by our department, surgical intervention is the first line of treatment. The patient is then discussed at our multidisciplinary brain tumor meeting regarding any further interventions such as chemotherapy or radiation. For patients with recurrences of their tumors, their course is again discussed at the brain tumor conference taking into consideration clinical trials available at our and other institutions.

Can you briefly describe stereotactic radiosurgery and what uses it has?

Stereotactic radiosurgery is focused radiation aimed at a tumor with a steep drop in dosage so as not to affect the surrounding normal brain. It is used for metastatic brain tumors; benign brain tumors, such as vestibular schwannomas; meningiomas; pituitary adenomas; arteriovenous malformations and occasionally for recurrent high-grade gliomas. For the past eight years, we have also used it for spinal tumors, with metastatic tumors comprising the majority of those treated.

What additional training is necessary to be able to perform stereotactic radiosurgery?

If a resident graduates from a neurological program in which radiosurgery is part of the program, he or she should not need additional training. Most training programs provide broad education, and if physicians would like to obtain supplementary focused training, they can proceed with a neurological oncology fellowship with stereotactic radiosurgery as part of the curriculum.

Do most neurosurgeons involved in neuro-oncology also perform stereotactic radiosurgery?

There are currently no national statistics regarding this subject to accurately estimate. Based on my knowledge of the field, I would guess approximately 60 percent of neurosurgeons practicing neuro-oncology are involved in radiosurgery.

How did you become interested in neuro-oncology and brain tumor research?

When I was a first-year medical/PhD student, I heard about a professor of neuropathology, David Schiffer, MD, who was studying brain tumors. He was known to select one or two students to join his team each year. Knowing this, I went out of my way to request to be evaluated for the position. Once chosen, I was exposed to the science of brain tumors. I became very interested and intrigued with the science behind tumor research and that led me to my current position.

Are the majority of the brain tumors you treat primary CNS tumors or metastatic lesions?

In my practice, I treat approximately 50 percent primary CNS tumors and 50 percent metastatic lesions. This may vary from neurosurgeon to neurosurgeon as a practice can be influenced by referral network of the surgeon, referral patterns of the institution and geographic location.

Do you have any advice or recommendations for medical students or residents interested in brain tumors and radiosurgery?

For medical or graduate students, I would recommend that they find a lab to learn the techniques of basic science research. This background knowledge will allow them to become more involved, productive and better surgical oncologists. While not everyone has a basic science background, learning the language and basics of brain tumor research will benefit them.
in the future. Alternatively, students might be more interested in clinical research. Similarly, they should increase their skills in clinical research early on so that by the time they are a resident they can have a deeper contribution with ongoing projects within their training program.

For residents, working in a lab during dedicated research time can provide additional experience and displays that they are interested in the field. This provides more opportunities to participate and become involved in the field. Alternatively, they can pursue the clinical research track. Finally, if the young neurosurgeon is interested in neurosurgical oncology, a fellowship will provide the best experience to learn directly and at depth from a mentor and a master.

An important consideration for anyone interested in entering into neuro-oncology is the emotional component of the job. One must be aware that the job is not just clinical practice, education and research, and a large portion of the equation involves an emotional burden. This is often not represented in the job description but can be an overwhelming part, sometimes even detracting people from the field. While discovering a new apoptotic drug or completing a gross total resection is a significant feat, discussing diagnoses and prognosis can often be a daunting task for some people.

What future advances to you see occurring in the treatment of brain tumors?

Based on history, it is likely that there will be advances in both the laboratory and clinical research arenas.

Cati Miller is a PGY6 resident at the University of Minnesota Department of Neurosurgery. She hopes to be a spine surgeon after completion of her residency.

My Journey to being a Neurosurgeon

I still have nightmares and palpitations; scars that have forever changed me
No longer can I listen to a conversation patiently without the eagerness to get to the conclusion.
The heightened sense of awareness and expecting more from others
My Husband once summarized it all with his recollection of my days as a PGY2
Nights of me waking up and demanding results to lab tests from imaginary patients
Refusing to resume my sleep without an answer
Him picking up his computer as he attempted to log into powerchart
At least, that was what he made me believe in my semi-conscious state
Platelet count is 175 would ring in my ears like sweet words as I drifted back to sleep.
Only now can I laugh about his stories, as living it then was a challenge
A challenge that has made me the women that I am today

Beep-Beep! Beep-Beep! Beeeeeep-Beep!
There it goes again. This damn pager won’t stop
The signs of war between us two have failed to silence it
As I wrap more tape around it to cover up its bruises.

Beep-Beep! Beep-Beep! Beeeeeep-Beep!
My Bowels will have to wait
Beep-Beep! Beep-Beep! Beeeeeep-Beep!
Conference room for sign out
Beep-Beep! Beep-Beep! Beeeeeep-Beep!
New consult
The increasing respirations as I feel myself speed walking, seconds shy of running
You can do this! I tell myself.

The ringing words of a female colleague;
You have the balls to do this; they just don’t dangle between your legs
I don’t want to have balls, I am a female and proud to be one.
To be amongst Men and Women different but yet similar with one common goal
This was part of the many things that drew me to Neurosurgery

The sense of camaraderie. I wanted to be part of the club.

Beep-Beep! Beep-Beep! Beeeeeep-Beep!
The sense of calmness knowing I could handle anything on the other side of the pager
My sense of awareness knowing I was surrounded by teammates
My heart beating at its normal tempo
Beep-Beep! Beep-Beep! Beeeeeep-Beep!
A smile on my face as I proudly return the page.

Olabisi Sanusi, MD was born in Lagos, Nigeria. She moved to the U.S. after high school and completed undergraduate studies at the University of Texas, San Antonio, and medical school training at Pennsylvania State College of Medicine. She is currently a fourth year resident in Neurosurgery at Northwestern Memorial Hospital with an interest in brain tumors and neuro-trauma critical care.
A few years ago, one of my good friends told me about a Take Back the Night rally she had attended. She was emphatic that we needed to create safer spaces for women and needed to raise awareness on sexual assault. I remember thinking she was being dramatic for talking that way. I asked myself, “Aren’t we past all of that already?” Sure I had encountered the odd chauvinist in my life, but it had never been an actual problem and I had never felt unsafe.

Three years later, I understand what she meant. It has been a painful lesson, and one that no woman should ever have to learn. But in a world where it is still true that one in three women will be sexually assaulted during their lifetimes and one in five women will be raped, it is clear that we still have a long way to go.

I was nearing the end of my intern year and I had developed a great friendship with one of my co-residents. I will call him Sam. Sam and I spent almost every Tuesday night together at a local bar for wing night, exchanging stories about work, life and dating. Sam would often make off-color comments that made me a little uncomfortable, but I brushed them aside as him ‘just being a guy.’ We hung out together and looked out for each other in the hospital. I stayed at his apartment when we had stayed out too long for it to be safe for me to drive home. When my car got towed from downtown after a late night, Sam drove me over an hour to the towing company to retrieve it.

I was grateful to have found a great platonic friendship. Sam had liked me, but I always made it clear we were friends. He continued to make comments that tested the waters occasionally, but it was pretty easy to set him straight.

One night in June, I went out with Sam and a group of other residents. I parked my truck at his place and we took a cab over to a co-resident’s house. We were celebrating the end of intern year and celebrating hard. We then bar-hopped until after midnight. When I got lost in downtown, I called Sam, who immediately came in a cab to pick me up. I had been scared wandering the city and was grateful to be back in a safe space. When we got back to his apartment where I had parked my truck, I quickly curled up and fell asleep, glad it was all over.

When I woke a short time later, I felt like I was in a daze. My head was fuzzy. I was hearing and seeing things, but somehow unable to process them. Like the fact that Sam was in the room and that half of my clothes were gone, the rest still in the process of being pulled off. I remember being confused and just wanting to go back to sleep. I rolled back over and covered myself with a blanket, only to have it immediately pulled off again by Sam. Most of the scene is hazy, but not all. I wish it was. Maybe then I could forget how his fingernails tore holes in my insides, or that I was sobbing, and how his only response was to tell me that it was him, Sam, so everything was ok. Maybe I could forget him telling me to ‘just do it, it’s me,’ and ignore my attempts to get away.

Afterwards, I just wanted to get on with my life. I was already in the midst of changing programs when this happened, so I would never have to see Sam again anyway. I could walk away and leave it all behind. But slowly I understood that this was not the first time that Sam had violated someone, and if no one ever said anything, it wouldn’t be his last either. Furthermore, he was going to be a licensed physician soon, with all the trust and privilege that comes with it. The image of someone suffering the way that I was drove me to the police station two weeks later. It was also what drove me to call my program director, who in turn told my chairman what had happened. When I spoke to my PD over the phone, he was supportive in words, but cautious in tone of voice. A week later Sam had one of the most prominent and expensive defense lawyers in the city.

I wish that I could say that I received exemplary support from my program’s administration and that Sam was dragged into a courtroom and made to answer for his crime. I wish I could tell you that justice was served and we are all are safer for it. I, in fact, was the only one who was brought into a jury room. Sam had a brief scare at being called into the police station, but it was I who was subpoenaed to testify at the grand jury hearing. I was asked what I was wearing, what the nature of my relationship with Sam was, whether I was flirting with him and why I was in his apartment.

The grand jury found insufficient evidence to go to trial. My program administration has been silent. Sam will finish his residency and become a full physician without so much as a note on his license.

Was speaking up even worth it?

Absolutely.

The next time Sam thinks about forcing himself on someone, he will have to think twice about whether he wants to be dragged into a police station again. If that someone is brave enough to speak up, there is a police record waiting to support her. One data point can be easily dismissed. Two data points make a trend line.

More importantly, I have found that almost every time I talk about my experience, whether in conversation or in a large group, at least one person comes up at the end to say, “Me too. You’re the first person I’ve told.”

Enough is enough. It is time to throw this dark, horrible secret into the light. The silence ends now.

There are an increasing number of women who have risked their reputations, personal lives and careers to speak out about the crimes perpetrated against them. These women who speak out deserve our support. They are our colleagues. They are our friends. They are you. They are me.

One in five raped. One in three assaulted. Think of all the women you know. Then pick one out of every five. The numbers are real. It is time to talk openly so we can create truly safe spaces for women everywhere, spaces in which survivors can find support and heal.

The silence ends now.
Speaking up (continued)

Adrienne Moraff, MD, has moved to California and is now a fourth year neurosurgery resident at Stanford University Hospitals and Clinics. Her focus is on cerebrovascular neurosurgery, using open and endovascular techniques to provide the safest, highest quality care for patients. Outside the hospital, she is an avid West Coast Swing dancer. She is the founder of The Herd Project, an online support site for survivors of sexual violence.