

# NEWS

## WOMEN IN NEUROSURGERY



### President's Message

## Why WINS? A President's Message:

"Yes, I will bring the understanding of a woman to the Court, but I doubt that alone will affect my decisions. I think the important thing about my appointment is not that I will decide cases as a woman, but that I am a woman who will get to decide cases."

--Sandra Day O'Connor, 1st woman to serve as a Justice in the Supreme Court of the United States

"Women In Neurosurgery" means different things to different people. To some the organization is a step towards acceptance in a culture that was exclusionary to females not even 20 years ago. WINS will be celebrating its 20th anniversary at the AANS 2009 meeting in San Diego this April, and for the 15 women who founded the organization at the very first WINS gathering in Atlanta in 1989, the goal of acceptance and camaraderie defined WINS. For those in my own generation who started residency in the early '90s, WINS was the doorway to mentorship. Although today all but three residency programs in the country have graduated women neurosurgeons, in the early '90s there were few women in training programs and if you were one of them, the chance that there was another woman in your program was very slim. As a young resident at my first AANS in Orlando, Florida, I had met only one woman neurosurgeon, who had graduated before I arrived at my training program, and then I walked into this room with almost 20 other female neurosurgeons! It was surreal. Although the formal program was a blur to someone whose main goal was to stay awake for the 80-plus-hour run each week, going out with these women and other residents was life-changing. When one of the famous established neurosurgeons bought me a shot of vodka and told me to "Drink it straight and act like a real woman, damn it!" it hit me that despite all the hardships, a woman can survive this thing called neurosurgical residency and be stronger for it. Today, many women feel that they do not need WINS—which in some ways is actually an accomplishment. It would be great if women were treated equally in gaining acceptance into neurosurgical training, faced the same challenges in residency as our male colleagues without the

added complications of gender bias or sexual harassment, obtained the same academic jobs and promotions as the men we work with, and felt the limitless potential that as women we can attain our career goals and use the skills we have developed without having to be a "pioneer," childless, less "female," or even different from our male counterparts. It would be wonderful if WINS was just a social club where women neurosurgeons could meet and chat and enjoy amazing speakers. Well that time is not quite here. What WINS is to a new generation of young neurosurgery residents and recent graduates is more than just a voice in neurosurgery. So here is a partial answer to the question "Why WINS?".....

WINS now has 176 physician members, including 15 lifetime members and 29 resident members, and 181 total members including medical students, RNs, and PAs. Our membership includes both American and international members. WINS members through liaison appointments sit on the CSNS, the CNS Executive Committee, the AANS Board of Directors, the AANS Scientific Program Committee, the CNS Scientific Program Committee, The International Committee, The Young Neurosurgeons Committee, the American College of Surgeons, and many other WINS-sponsored committees. In this way, WINS provides opportunities for young neurosurgeons to gain exposure and become a part of political organized neurosurgery through these liaison positions. Once on a committee, one can volunteer for projects and become familiar to the leaders of each organization, and ascend the ladder to more advanced leadership roles. WINS members on the Scientific Committee can observe the productivity of female contributors to the Scientific Programs of both the AANS and the



Lauren F. Schwartz, MD  
WINS President

CNS. Through the WINS website, there is a database where women can list their area of expertise so that there is a resource for invited speakership and membership in panel participation. So for the young neurosurgeon, WINS provides the opportunity for entry into the infrastructure of organized neurosurgery. Building on the accomplishments of WINS members and non-members alike, women are becoming more visible contributors to neurosurgery, and through their contributions and hard work, we are slowly becoming more accepted in the world of organized neurosurgery.

This year is truly one of the most historic times for women in neurosurgery, with the publication of a groundbreaking article, "The Future of Neurosurgery: A White Paper on the Recruitment and Retention of Women in Neurosurgery," published in the Journal of Neurosurgery September 2008. The leaders of neurosurgery acknowledged the existence of issues in recruiting and retaining women in neurosurgery and asked the WINS leadership to evaluate the causes and potential responses for a remedy. This request heralded a "new age" for women and in fact for neurosurgery. This call and the resulting paper and action items will be a model to the medical community at large for the progressive thinking demonstrated by our subspecialty. The leadership of

*continued on page 2*

Fall 2008

INSIDE

2

Travel Scholarship Recipients

3-4

Women Helping Women: A Mission For Each of Us

5-7

Female Faculty-Moderators-Presentors

8

WINS Member Survey Results

Meet the Officers

9

2009 Louise Eisenhardt Lecturer: Geraldine Brooks

## WINS MISSION

To educate, inspire, and encourage women neurosurgeons to realize their professional and personal goals, and to serve neurosurgery in addressing the issues inherent to training and maintaining a diverse and balanced workforce.



**Bawarjan Schatlo, MD**  
 University Hospital of Geneva, Switzerland  
 First-year Neurosurgery Resident



**Michelle J. Clarke, MD**  
 Washington University in St. Louis School of Medicine  
 Resident, Department of Neurosurgery



## The 2008 Louise Eisenhardt Resident Travel Scholarship

*Cortical Infarct in a Primate Model of Subarachnoid Hemorrhage (SAH): Is it an Animal Model of Delayed Ischemic Deficits?*

This paper and award was presented at the AANS Annual Meeting, Chicago, Illinois, AANS/CNS Cerebrovascular Section, Tuesday, April 29, 2008.

The Louise Eisenhardt Resident Travel Scholarship is granted yearly to an outstanding resident abstract accepted at the American Association of Neurological Surgeons Annual Meeting. Up to \$2000 stipend is given to cover travel expenses.

For both Sherry Apple and Louise Eisenhardt Resident Travel Scholarships, all interested residents may submit their abstracts through the CNS and AANS Abstract Center and indicate WINS award consideration in the provided menu.

## The 2008 Sherry Apple Resident Travel Scholarship

*Development of Resistance in Multicycle Temozolomide Chemotherapy for Glioblastoma*

This award will be presented at the WINS reception during the CNS Annual Meeting, Tuesday, September 23, 2008, Orlando, Florida.

The paper will be presented during the CNS Neurosurgical Forum: Section on Tumors, Monday, September 22, 2008, 3:40-3:50 PM.

The Sherry Apple Resident Scholarship was named in honor of our dear colleague and WINS President who, sadly, died in 2001. The Sherry Apple Resident Travel Scholarship is granted yearly to an outstanding resident abstract accepted at the Congress of Neurological Surgeons Annual Meeting. Up to \$2000 stipend is given to cover travel expenses.

Contributed by Jamie Ullman, MD

## Why WINS? A President's Message:

Continued from page 1

WINS worked together to study and organize the issues and potential solutions, and the response from the AANS was profound. Dr. James Bean, the President of the AANS, wrote an editorial response to the White Paper in the Journal Of Neurological Surgery (109:377, 2008) in which he states:

*Neurosurgery attracts a unique pool of individuals willing to learn complex and esoteric anatomy, endure long years of difficult training, treat high-risk neurological conditions, learn challenging and complex surgical procedures, accept profound responsibility, and face extraordinary levels of liability. It will never be a haven for the timid.*

*However, the rigor of training or practice does not justify arbitrary barriers to women entering or advancing within the specialty. We cannot afford the failure to attract the brightest and most talented in the applicant pool when they are excluded*

*by subtle and deniable discrimination.*

*We can neither discourage the rewards of accomplishment nor block the ascension to positions of leadership and authority in our specialty by ignoring or condoning discrimination, no matter how disguised, without stunting the growth of our discipline or, more importantly, unfairly depriving half our potential members of the promise and moral entitlement of equal opportunity.*

*The American Association of Neurological Surgeons Board of Directors requested the "White Paper on the Recruitment and Retention of Women in Neurosurgery" because we believe that fairness and equality are fundamentally right and vital to the future success of our evolving specialty. In recognition of the findings of this report, we acknowledge the need for active measures to ensure that every neurosurgeon enjoys the same benefits and opportunities by dismantling the barriers and offering a hand across the remaining gulfs that separate the privileged from the deserving.*

Dr. Bean should be applauded for these words of recognition. These words and the White Paper project are truly a new beginning for women neurosurgeons but also the end product of an effort and spark that originated 20 years ago at the meeting of those 15 women in Atlanta. As attributed to Bernard of Chartres, and oft quoted in neurosurgery, "Pigmaei gigantum humeris impositi plusquam ipsi gigantes vident," truly applies to those pioneering women upon whose shoulders we now stand.

We have moved from the time of forced sacrifices to a time where more and more woman are able to balance being a neurosurgeon with being a parent or a spouse, and having a satisfying career with fewer sacrifices. WINS not only provides speakers at the national meetings and smaller regional meetings who discuss practical topics such as how to develop successful business

models for your practice, image consulting and recruitment insights, and networking through our receptions and web site, but WINS also provides as a resource women who are receptive to helping others learn the successful ways to balance life and be productive both as a neurosurgeon and as a woman. Just as we learn surgical technique, there are lifestyle techniques that can be shared and improved.

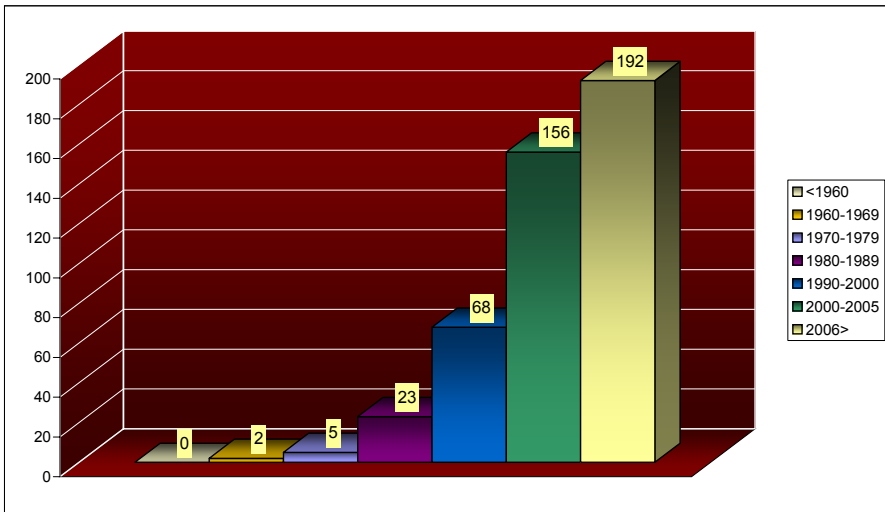
So WINS may mean many different things to different people, but what it ultimately means is just that—women are IN neurosurgery. So why join WINS? Mentorship, friendship, networking, leadership, a voice for women in organized neurosurgery, and oh yes.....don't forget the vodka shots!

*"Never doubt that a small group of thoughtful committed citizens can change the world. Indeed, it is the only thing that ever has."*

—Margaret Mead

## Board-Certified U.S. Women Neurosurgeons

UPDATED 08/08 • Contributed by Roxanne Todor, MD



Renew or become a member of  
WINS on line at  
[www.myaans.org](http://www.myaans.org)

For help obtaining a password,  
please contact  
Sandy Meyer at [sjm@aans.org](mailto:sjm@aans.org) or  
Chris Philips at [cap@aans.org](mailto:cap@aans.org)



## WOMEN HELPING WOMEN: A Mission for Each of Us

By Lauren F. Schwartz, MD



When I was a junior neurosurgery resident at the Cleveland Clinic, I used to take time out of my busy day or night to stand by a particular statue outside in the plaza of the main entrance of the massive hospital complex. This sculpture is entitled "Man Helping Man," and it was sculpted by Mr. William McVey in 1974. Displayed above, it shows one individual carrying another in his arms. To me, it illustrated the reason that I stood there at that moment in Cleveland—far from my family and friends, working day and night, year after year, with all the exams, stress and sacrifices—the simple reason: to be able to help another human being. There are three sayings on the plaque at the fountain which are in dedication to the three principles of being a physician: "better care of the sick," "further study of their problems," and "teaching those who serve."

We have started to accomplish the goal "teaching those who serve" with the publication of WINS' groundbreaking paper, "The Future of Neurosurgery: a White Paper on the Recruitment and Retention of Women in Neurosurgery," published in the *Journal of Neurosurgery* September 2008. The paper has brought recognition and potential solutions to the

obstacles faced by women pursuing neurosurgical training and in their subsequent careers. However, to focus only on the male leadership as a limit to women's advancement in neurosurgery is hyperopic. It is not only WINS' mission, but also each of our individual missions, to look back down the ladder and help provide opportunities for other women to secure good jobs, to write papers and gain authorships, to be placed on boards and speak at seminars. Like the two figures in the sculpture, we need to carry each other at times. WINS has done so much for women in neurosurgery, but now it is time to take the general and make it specific. Our responsibility as women is to help other women rise up so that hopefully the next "generation" will surpass our personal achievements—the essence of progress.

One individual who personifies this dedication to women neurosurgeons by directly sharing her lessons on how to survive training and a career choice that is not the most welcoming is Dr. Kathryn Ko. The essence of Dr. Ko is illustrated by the response she gave when I asked her to help with a paper for WINS: "I am not really into writing papers, I am into getting women jobs." Dr. Ko wrote a book entitled "The Survival Bible for Women In Medicine," and has lectured on this topic nationally. She is a woman who truly makes it a priority to help women in medicine to become the best they can be.

Here is a letter Dr. Ko forwarded to me from someone who recently read her book. It demonstrates this issue clearly.

Dear Dr. Ko,

I read excerpts from your book on women's survival guide in medicine while on call tonight...

I think that it is wonderful that you took the time to write a manual on the topic providing insight for women in surgery residency. I started my career as a general surgery resident at [name withheld] and switched fields to radiology during my third year. You mention concepts that are learned through hard knocks experience but are not necessarily spoken and passed down. There are often too few women in medicine to pass along helpful advice along the way, particularly in surgery. Actually, the few women senior residents that I did encounter in surgery were in survival mode themselves and were often more competitive than helpful with regard to their relationship with their younger women peers. Common sense advice about time management, looking your best even when stressed for time, preparing for call, the art of learning procedures from male attendings — all good practical information that demonstrates a positive "can-do" perspective. Hats off to you for helping women docs — something that many of us mean to do but don't always expend the effort to seek out opportunity to do so once we survive our own training.

Best Regards,  
[name withheld], MD

In this respect, I felt inclined to interview Dr. Ko for the Newsletter and I encourage any resident or practicing neurosurgeon to contact her with any questions.

*continued on page 4*

## Women Helping Women: A Mission for Each of Us

Continued from page 3

### Women Helping Women: An interview with Dr. Kathryn Ko

*Question: In terms of creating a strategy for success, why do male and female neurosurgeons have to have different strategies?*

Because the playing field including the tools are not designed with women in mind. It's up to us to adapt. In the physicality of surgery this may be difficult to learn by oneself, especially if the men are not sensitive to it. During residency I once tried to explain this concept to a senior neurosurgeon who refused to let me use the Midas to do a laminectomy. Taking the Leksell and finishing the case, he said dismissively, "Go to the gym and lift weights." Look at the Olympics...the nets are lower in women's volleyball, the tennis rackets are lighter, underhanded pitching is normal in softball, golf clubs are shorter, and on and on...different game ...same gold medal. Now that we have the attention of a group of very accomplished senior-level neurosurgeons, we should share ideas on how to overcome practical issues.

*Question: How do priorities between male and female neurosurgeons differ and what is the significance of these differences?*

In a word: Time...is more important to women. Being a woman takes more time: biological clock, time away for motherhood, we have to pack in more per 24 hours.

*Question: How do we recruit men to help us?*

Why should they help us? We have to stop looking to the men and start asking, what have I done to fundamentally help a woman? At the same time we must also examine our behavior and ask if we have ever turned our back on a female colleague instead of helping her. We need to honestly appraise our behavior towards each other; otherwise we are our own painful obstacle. In other words, we must "woman up" and admit that we can do more and reach for the chance to help even one woman. If we don't positively affect other women why should the men?

*Question: We have seen a significant increase in our WINS membership and the spotlight turned to developing processes to guarantee women equal training and opportunity by the male leadership in neurosurgery, but why do we not see more women reaching out to other woman to give them a "hand up" in an individual way?*

Some of us are in "Survival Mode" and barely able to help ourselves, others are jealous, others are scared, others don't want to help, and others don't have the time. Figurehead female leaders rarely change the culture of women because

many of them come to power directly through men. Therefore putting a woman in a leadership position will not guarantee that our careers will be easier. Women In Neurosurgery is reaching critical mass numbers to enact a culture change in our profession, and I'm hoping to be practicing when a woman is elected to a top position.

*Question: Your book, "The Survival Bible for Women in Medicine," received international acclaim. Based on the international response, what do you think is the common thread worldwide for women in medicine?*

We tend to go into medicine because it is a heartfelt calling and above all else we want to help patients. However, the profession wears us down and often times women cannot reach their full potential because of frustration and disillusionment. I wrote that book over 13 years ago, and I'm saddened that I still hear from women speaking of the same problems that befell me.

*Question: How can women start to help other women? What steps do we need to take to change our behavior?*

Loyalty towards one another.

Dr. Ko is a model for the modern women neurosurgical mentor. Here is a portion of the Foreword from her book:

*I am part of the feminization of American medicine, a minuscule player in the changing landscape of a profession whose pulse until recently, was transfixed by men with women in supporting roles at home, in the office, and in the hospital. This type of organization allowed men to focus their efforts singlemindedly on medicine and to build this great field into what it is today. We have inherited a profession whose lifestyle is difficult to reconcile with the basic definition of what it is to be a woman. Women are therefore unlikely to travel the road that many of the men took because the steps they left for us are too narrow for all the roles we live. The medical profession may eventually evolve to accommodate our needs and our biology, but until then it is up to women to create the means to build careers and lives that bring satisfaction...I bequeath this book ...to all those women who in my specialty I have not yet seen to mentor. May your journey be if not a little shorter at least a little kinder.*

The last chapter is entitled, "Discharge Instructions":

*Inspire the women around you to join forces instead of dissolving into micropockets of jealousy and bitterness that splinter more than bind us. May we support one another because all women benefit in spite of only one or two moving ahead at a time. Find the courage to elevate women even if it means that they will surpass and be better than you. Then imagine your daughter poised on their shoulders as part of an unyielding feminine ladder and know that her life will be higher for it. And have the comfort that despite the 1000 nights, 18000 miles and a few sundry tears spent to get here, this woman would chance the journey again.*



**Dr. Ko Biography**

Dr. Ko graduated with a BA in Zoology followed by an MD from the University of Hawaii. She completed her neurosurgical training at Mt. Sinai Medical Center under Dr. Leonard Malis and completed a fellowship in Cerebrovascular Surgery at the University of Washington. Dr. Ko has devoted much of her career to working in some of the most underserved, underprivileged and violent areas of New York. She has worked at 9 Level One Trauma Centers, and served as Chief of Neurosurgery at 3 of these facilities. Dr. Ko is presently an attending neurosurgeon and Chief of Neurosurgery at both St. Barnabas Medical Center in the Bronx, and the Metropolitan Medical Center in New York City.

Dr. Ko has published basic science papers on cerebrovascular physiology and was the first recipient of the Galbraith Award from the American Association of Neurological Surgeons for this work. Dr. Ko has also investigated the use of the pulsed ruby laser for medical holography. Examples of her work are on permanent display at the Museum of Natural History, Liberty Science Center and the National Institutes of Health.

Dr. Ko is the author of the book "The Survival Bible for Women in Medicine" with a second edition published in 2005 by Cambridge University Press.

**Summer 2009**

Join WINS President Lauren Schwartz and Kathryn Ko in the Women Neurosurgical First Annual Circumnavigation of Manhattan Island by kayak.

Sign Up Now and BYOL (bring your own life jacket!)

## Female Faculty-Moderators-Presentors – 2008 CNS Program

### SATURDAY

#### Practical Neurosurgical ICU Management: The Basics (for MDs in Training, RNs, APRNs, and PAs)

Course Directors: Owen B. Samuels  
Faculty: William M. Coplin, Michael DeGeorgia, E. Sander Connolly, Jr.,  
**Jennifer A. Frontera**

#### CPT Coding: Fall 2008 Update

Course Directors: Gregory J. Przybylski  
Faculty: Joseph S. Cheng, **Mina Foroohar**, Robert R. Johnson, II, Alexander M. Mason, William Mitchell

### SUNDAY

#### Hands On: Cerebral Revascularization

Course Directors: Fady T. Charbel, **Sepideh Amin-Hanjani**  
Faculty: David J. Langer, Jacques J. Morcos, Gary K. Steinberg, Gregory J. Zipfel, Ying Mao, Ketan R. Bulsara, George K.C. Wong

#### Traumatic Brain Injury

Course Directors: Raj K. Narayan, **Lori Anne Shutter**  
Faculty: Jamshid Ghajar, Jack Jallo, **Claudia S. Robertson**,  
**Shelly D. Timmons**, Geoffrey T. Manley, Domenic P. Esposito, Rocco Armonda,  
Ramon Diaz-Arrastia, Jogi V. Pattisapu

#### Inpatient and Outpatient Management Dilemmas: For Nurses, APRNs and Physician Assistants

Course Directors: Mark E. Shaffrey, **Andrea L. Strayer**, MSN, APNP, CNRN  
Faculty: Praveen V. Mummaneni, Christopher I. Shaffrey, David O. Okonkwo,  
Aaron S. Dumont, John A. Jane, Jr., W. Jeffrey Elias, **Elana Farace, PhD**, **Tina Lisman, PA**

#### Neurosurgical Practice Development, Negotiation and Liability

Course Directors: William E. Bingaman, Alan M. Scarrow, Michael P. Steinmetz  
Faculty: Frederick A. Boop, Edward C. Benzel, Fernando G. Diaz, Gregory J. Przybylski, **Katie O. Orrico**, **Shelly D. Timmons**, **Victoria Vance, JD**, J. Javier Provencio, **Andrea Strayer, MSN, APNP, CNRN**

#### Spinal Radiosurgery

Course Directors: Peter C. Gerszten  
Faculty: **Lilyana Angelov**, Mark H. Bilsky, Steven D. Chang,  
Fraser C. Henderson, Jason P. Sheehan

#### Principles of Peripheral Nerve Surgery

Course Directors: Rajiv Midha  
Faculty: Allen H. Maniker, Robert J. Spinner, Robert L. Tiel,  
**Lynda J. Yang**, Eric L. Zager

#### Pediatric Brain Tumor Update

Course Directors: James T. Rutka, Corey Raffel  
Faculty: Michael Taylor, Nalin Gupta, Jeffrey H. Wisoff, **Shenandoah Robinson**, John A. Jane, Jr., John Wellons, III, Andrew Jea, Douglas L. Brockmeyer, Mark D. Krieger

### MONDAY

#### Implementing Evidence Based Practice in Your Neurosurgical ICU for Allied Health Providers in Neurosurgery

Moderator: **Andrea L. Strayer**, MSN, APNP, CNRN  
Faculty: Michael W. Groff, Michael F. Nido, PA-C, **Shelley Timmons**

#### Peripheral Nerves for Spine Surgeons

Moderator: Stephen M. Russell  
Faculty: Nicholas M. Boulis, Line Jacques, John E. McGillicuddy, Michael P. Steinmetz, **Linda J. Yang**, Eric L. Zager

#### The Effect of the Role Out of Massachusetts Health Care Reform on Neurosurgical Procedure Reimbursements

Anthony Burrows; Richard Moser; John P. Weaver; Demetrius Litwin; **Julie G. Pilitsis**

#### A Model for Neurosurgical Outreach to International Charity Hospitals: Lessons From Maria Auxiliadora Hospital, Lima, Peru

**Melanie Hayden**; Samuel Hughes; E. J. Hahn; Henry E. Aryan; Michael L. Levy; Rahul Jandial

#### Timing of Surgery for Aneurysmal Subarachnoid Hemorrhage

**Kelly B. Mahaney**; James Torner; Michael M. Todd; Bradley J. Hindman; **Julie B. Weeks**

#### Hemoglobin Level and Cerebral Metabolism in Patients with Aneurysmal Subarachnoid Hemorrhage: A Microdialysis Study

H. Isaac Chen; Mauro Oddo; Andrew H. Milby; **Suzanne Frangos**; **Eileen Maloney-Wilensky**; Michael F. Stiefel; Andrew Kofke; Joshua Levine; Peter D. LeRoux

#### Comparison of Primary Angioplasty with Stent Placement for Treating Symptomatic Intracranial Atherosclerotic Disease: A Multi-center Study

Farhan Siddiq; Muhammad Zeeshan Memon; **Gabriela Vazquez**; Muhammad Fareed K. Suri; **Joan C. Wojak**; John C. Chaloupka; Adnan I. Qureshi

#### Embolization as an Adjuvant in the Treatment of Cerebral Arteriovenous Malformations: Predicting Complications and Outcome

Robert M. Starke; Ricardo Jorge Komotar; Raqeeb M. Haque; Marc Louis Otten; Brian Y. Hwang; **Laura Fischer**; Matthew C. Garrett; Maxwell B. Merkow; Michael B. Sisti; Robert A. Solomon; Sean D. Lavine; E. Sander Connolly, Jr.; Philip M. Meyers

#### Clinical Features, Surgical Treatment, and Long-term Outcome of Adult Moyamoya Patients: A Single U.S. Institution Experience

Robert M. Starke; Ricardo Jorge Komotar; Zachary Lee Hickman; Yehuda Paz; **Angela Pugliese**; Marc Louis Otten; Matthew C. Garrett; Maxwell B. Merkow; Mitchell S. Elkind; Randolph Marshall; Philip M. Meyers; **Joanne Festa**; Edward S. Connolly

#### Single Center Comparison of Bioactive versus Bare Platinum Coils for the Endovascular Treatment of Intracranial Aneurysms: A Multivariate Regression Analysis

**Michelle Janine Smith**; Kyle Chapple; Justin Mascitelli; Philip E. Stieg; Howard A. Riina; Pierre Gobin

#### Prognostic Factors Influencing the Outcome of 267 Consecutive Patients Undergoing Surgery for Metastatic Renal Cell Carcinoma of the Spine

Claudio E. Tatsui; Stefan S. Kim; Mustafa Aziz Hatiboglu; Ian E. McCutcheon; **Sheila M. Smitherman**; Dima Suki; Abhijit Salaskar; Laurence D. Rhines

#### Transplanted Adult Neural Precursor Cells Differentiate into Mature Oligodendrocytes, Remyelinate the Injured Axons and Improve Functional Recovery after Chronic Spinal Cord Injury

**Sarah Chan**; Soheila Karimi-Abdolrezaee; Eftekhari Eftekharpour; Jian Wang; Michael G. Fehlings

## Select Abstract Session – Section on Disorders of the Spine and Peripheral Nerves

Moderators: Ajit Krishnaney, Lynda J. Yang

## CNS Neurosurgical Forum – Section on Neurotrauma and Critical Care

Moderators: Jamie S. Ullman, Shelly D. Timmons

## The Use of MR Diffusion Biomarkers to Predict Functional Outcome in Mild Traumatic Brain Injury

Amy Lee; Christine Mac Donald; Sarah C. Jost; Tammie Benzinger; Steffany Chleboun; David L. Brody; Sheng-Kwei Song

## A Prospective Randomized Clinical Trial to Compare the Effect of Hyperbaric to Normobaric Oxygenation on Cerebral Metabolism and Intracranial Pressure in Severe Traumatic Brain Injury

Gaylan L. Rockswold; Sarah B. Rockswold; Thomas A. Bergman; Xuewei Zhang; Archie Defillo; Carla Cerra

## Discrete Cerebral Hypothermia in the Management of Severe Traumatic Brain Injury

Odette Harris; Carrie Rebecca Muh; Monique Surles; Yi Pan; Grace Rozycki; Jana Macleod; Kirk Easley

## Levetiracetam versus Phenytoin as Seizure Prophylaxis in Severe Traumatic Brain Injury

Kristen E. Jones; Ava Puccio; Kathy J. Harshman; Bonnie Falcione; Neal Benedict; Brian T. Jankowitz; Michael R. Fischer; David O. Okonkwo

## Assessment of Early vs Late Tracheostomy in Severely Head Injured Patients: A Systematic Review of 3,104 Patients

Elias Boulos Rizk; Kevin M. Cockroft; Vernon M. Chinchilli; Christy Stetter

## Select Abstract Session – Section on Neurotrauma and Critical Care

Moderators: Eve Tsai, David O. Okonkwo

## CNS Neurosurgical Forum – Section on Pediatric Neurological Surgery

Moderators: Sarah J. Gaskill, Mark D. Krieger

## Neurocognitive Aspects of Chiari Malformation Type I

Maureen Lacy; Emily L. Austria; David M. Frim

## Complication Rates Using Various Dural Graft Substitutes in Posterior Fossa Decompression for Type 1 Chiari Malformation

Stephen Parker; Herbert E. Fuchs; Peggy Cotton; Gerald A. Grant

## Chiari 1.5 Malformation: Is It Real?

Kerri Thorn; Katie Quigley; Michael C. Huang; John S. Myseros; Amanda Yaun; Robert F. Keating

## Outcome of Repeat Spinal Cord Untethering

Wajd Al-Holou; Karin M. Muraszko; Hugh Garton; Cormac O. Maher

## Use of Axial and Subaxial Translaminar Screws in the Management of Upper Cervical Spinal Instability in Children

Roukoz B. Chamoun; Keyne Kristin Johnson; William E. Whitehead; Daniel Curry; Thomas G. Luerssen; James M. Drake; Andrew Jea

## Long-term Benefits of the Percutaneous Endoscopic Recanalization of Catheter (PERC) Technique for Proximal Shunt Revision: Analysis of 105 Cases

Jogi V. Pattisapu; Christopher Gegg; Greg Olavarria; Scott Poag; Eryn Lawson; Susan Lynch

## Pediatric Sinusitis: A Significant Problem for the Neurosurgeon

Robert F. Keating; Maria Pena; Diego Preciado; John S. Myseros; Amanda Yaun; George Zalzal

## Deep Brain Stimulation for Major Depressive Disorder (Resistant to 4 or more Treatments): Preliminary Results of a Multi-Center Study

Abbas F. Sadikot; Helen S. Mayberg; Andres M. Lozano; Sidney H. Kennedy; Peter Giacobbe; Clement Hamani; Guy Debonnel; Theodore Kolivakis; Christopher Honey; Raymond Lam; Andrew Howard

## Cortical Stimulation for Tinnitus: Long-term Follow-up with PET/rTMS

Brian H. Kopell; Manoj Raghavan; Wolfgang Gagg; Christina Runge-Samuelson; Justin Hulvershorn; David Soltysik; David Friedland

## Mapping the Effects of STN DBS: The Spatial Relationship between Desired and Adverse Stimulation Effects, and Implications for a Multiparameter Localization-Optimization Paradigm

Mahesh B. Shenai; Harrison Walker; Stephanie Guthrie; Barton L. Guthrie

## Cognitive Improvement following Deep Brain Stimulator Placement for Treatment of Movement Disorders

James McInerney; Moksha Ranasinghe; Tiffany Jennings; Elana Farace

## The Role of Tregs in Human Glioma Patients and Their Inhibition with a Novel STAT-3 Inhibitor

Mohamed Abou-Ghazal; Ling-Yuan Kong; Chantal Reina-Ortiz; David S. Yang; Jun Wei; Wei Qiao; Robert J. Schmittling; Gary E. Archer; Gregory N. Fuller; John H. Sampson; Waldemar Priebe; Amy B. Heimberger

## Human Glioma Cells Recruit and Expand Adult Glial Progenitors via Paracrine PDGF Signaling

Kim A. Lopez; Marcela Assanah; Allen E. Waziri; David Fusco; Aaron M. Tannenbaum; Katy Linskey; Guy M. McKhann, II; Michael B. Sisti; Jeffrey Bruce; Peter D. Canoll

## Factors Associated with Recurrence and Malignant Degeneration following Surgical Resection of a Hemispheric Low Grade Glioma

Kaisorn L. Chaichana; Matthew McGirt; Sophia Shakur; Debraj Mukherjee; Alfredo Quinones-Hinojosa

## Development of Resistance in Multicycle Temozolomide Chemotherapy for Glioblastoma

Michelle J. Clarke; Mark Schroeder; Brett Carlson; Patrick Grogan; Paul Decker; Jann Sarkaria

## Intrathecal Transplantation of the Human Neuronal GABA/Glycinergic hNT2.17 Cell Line for Alleviation of Neuropathic Pain in the Streptozotocin (STZ) Model of Diabetic Neuropathy

Stacey Charlene Quintero Wolfe; Alice Holohean; Miguel Martinez; Yadira Salguero; Massiel Hernandez; Mary Eaton

## Alpha-2-Noradrenergic Antagonist Administration into the Central Nucleus of the Amygdala Blocks Stress-Induced Analgesia

Nathan R. Selden; Justin P. Ortiz; Liesl N. Close; Mary M. Heinricher

## Adenovirus-mediated Expression of GAD65 into the Trigeminal Ganglion Produces Long-lasting Analgesia

Luc Jasmin; Jean-Philippe Vit; Mariana Puntel; Chunyan Liu; Maria Castro; Pedro Lowenstein; Peter Ohara

## Negative Exploration during Microvascular Decompression: Initial Experience with Intra-operative Glycerol Rhizotomy for Trigeminal Neuralgia

Richard S. Zimmerman; Amy Theiler; Naresh P. Patel

**CNS Neurosurgical Forum – Clinical Trial Design and Translational Science in the Community of Neurosurgery Active Clinical Trials Select Abstract Session**

Moderator: Sarah C. Jost, Ali Chahlav

**Neurosurgeon as Educator: Making an Indelible Impression**

Course Director: Vinay Deshmukh, Jamie S. Ullman

## TUESDAY

**Surgical Intervention for Lumbar Spine: What the Literature Supports**

Moderator: Charles L. Branch, Jr.

Faculty: Charles Kuntz, IV, Daniel K. Resnick, Beverly C. Walters

**Peripheral Nerve Entrapment**

Moderator: Lynda J. Yang

Faculty: Robert J. Spinner, Robert L. Tiel, Eric L. Zager

**Radiosurgery: What the Literature Supports**

Moderator: Bruce E. Pollock

Faculty: Isabelle M. Germano, John G. Golfinos, Douglas Kondziolka, Jason P. Sheehan

**Traumatic Brain Injury: Future Directions**

Moderator: Peter D. LeRoux

Faculty: Luiz Vicente Forte, John Douglas Pickard, Jamie S. Ullman

**New Frontiers in Pain Management for Allied Health Providers in Neurosurgery**

Moderator: Andrea L. Strayer, MSN, APNP, CNRN

Faculty: Deborah Bizjak, Joseph S. Cheng, Daryl R. Fourney

**Serving our National Community: Emergency Coverage, Acute Care Surgery, and the Neurosurgeon National Neurosurgery Coverage: Current Status**

Shelly D. Timmons

**Treatment of Spasticity in the Pediatric Population**

Moderators: Sarah J. Gaskill, Mark D. Krieger

**Deep Brain Stimulation for Parkinson's Disease: Data, Practice and Experience**

Moderators: Emad N. Eskandar, Kathryn L. Holloway

Technology Moderators: Kelly D. Foote, Paul Larson

**Continuity in the Community of Neurosurgery: Changes to Residency Training**

Moderators: Richard P. Schlenk, Deborah L. Benzil

Technology Moderators: Holly Gilmer-Hill, Sepehr Sani

**Competency Based Medical Training**

Deborah Powell, MD

Dean, University of Minnesota Medical School

**Interactive Discussion and Consensus Development**

Moderators: Richard P. Schlenk, Deborah L. Benzil

**Injury Prevention: Neurosurgery and Public Health**

Moderators: Michael G. Fehlings, Odette Harris

**Epidemiology and the Neurosurgeon**

Beverly C. Walters

**A Case in Study: Pedestrian Safety in New York City**

Jamie S. Ullman

**Failed Back Syndrome Neuromodulation: Data, Practice and Experience**

Moderators: Joshua M. Rosenow, Julie G. Pilitsis

Back Table Moderator: Konstantin V. Slavin, Andre Machado

## WEDNESDAY

**Introduction of the CNS Julian T. Hoff**

Lecturer Ed Viesturs

Karin M. Muraszko

**Brachial Plexus Injury**

Moderator: David G. Kline

Faculty: Allan J. Belzberg, Lynda J. Yang, Eric L. Zager

**Chiari I Controversies**

Moderator: Karin M. Muraszko

Faculty: Douglas L. Brockmeyer, Joseph S. Cheng, Richard G. Ellenbogen, Thomas H. Milhorat

**Economics of Neurosurgical Healthcare**

Moderator: Fernando G. Diaz

Faculty: E. Hunter Dyer, Katie O. Orrico, Edie S. Zusman

**Anterior vs. Posterior for Cervical Radiculopathy**

Moderator: Nicholas Theodore

Faculty: Andrea F. Douglas, Larry T. Khoo, Joseph C. Maroon

**Hyperosmolar Therapy in Traumatic Brain Injury: Data, Practice and Experience**

Moderators: Roland A. Torres, Odette Harris

Technology Moderators: Eve C. Tsai, Patricia B. Raksin

**Negotiating with Insurance Companies**

Moderators: Alan M. Scarrow, Mark E. Linskey

Technology Moderators: Trent L. Tredway, Holly Gilmer-Hill

**Compensation Models in Neurosurgical Practice**

Moderators: Michael P. Steinmetz, Gary R. Simonds

Technology Moderators: Satish Krishnamurthy, Catherine A. Mazzola

**Arrested Hydrocephalus: To Treat or Not To Treat?**

Moderators: Sarah J. Gaskill, Thomas Pittman

Technology Moderators: Jogi V. Pattisapu, Philipp R. Aldana

## THURSDAY

**Cases and Coffee with the Masters (Section-based Breakout Interactive Case Sessions)**

**Stereotactic/Functional Discussants:**

Roy A. Bakay, Robert E. Gross, Aviva Abosch

Trauma Discussants: Shelly D. Timmons, M. Ross Bullock, Jamie S. Ullman

Peripheral Nerve Discussants: David G. Kline, Eric L. Zager, Lynda J. Yang



## WINS Member Survey Results

Jamie S. Ullman, MD - WINS Past President

WINS is happy to report the results of the member survey conducted in March 2008. WINS would like to thank all members and non-members who completed the survey. We are grateful to the AANS and Chris Philips for offering their resources and time to conduct this survey online and compile the results.

Out of 352 email requests, 152 (43%) responded to the survey of which 95 (63.3%) revealed themselves as WINS members. 69% were attendings and 29% were residents and fellows.

The following represents responses to the multiple choice questions. Results of open-ended questions are not included here due to the variations in responses, but have been reviewed by the Strategic Planning Committee.

1. Primary Practice Type (N= 128)
 

Academic	46.1%
Hospitalist	1.6%
Hospital-based	16.4%
Private Practice- Solo	14.8%
Private Practice—Group	19.5%
Locum tenens	1.6%
  
2. Nature of Academic Practice (N= 71)
 

Full-time	77.5%
Private Practice with academic appointment	22.5%
  
3. Academic Rank (N= 72)
 

Professor	9.7%
Associate Professor	3.9%
Assistant Professor	36.1%
Clinical Professor	1.4%
Clinical Associate Professor	2.8%
Clinical Assistant Professor	5.6%
Instructor	9.7%
Other	20.8%

(mostly residents)
  
4. Do you feel that there is a glass ceiling for women in academic neurosurgery? (N= 147)
 

Yes	63.3%
No	36.7%
  
5. Do you feel that there is a glass ceiling for women in organized neurosurgery? (N= 147)
 

Yes	64.3%
No	35.7%
  
6. Do you feel that women are well-represented in organized neurosurgery? (N= 143)
 

Yes	20.3%
No	79.7%
  
7. Do you see the need for a women's advocacy group in neurosurgery? (N= 144)
 

Yes	76.4%
No	23.6%
  
8. Do you feel that there is still gender discrimination in neurosurgery? (N= 144)
 

Yes	86.8%
No	13.2%

## MEET THE OFFICERS 2008-2009



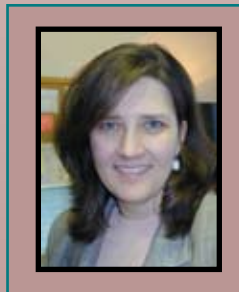
**Lauren F. Schwartz, MD**  
President

Dr. Schwartz completed neurosurgical training at The Cleveland Clinic Foundation and Albert Einstein College of Medicine/Montefiore Medical Center. She has additional fellowship training in pediatric neurosurgery under the late Fred Epstein at the Institute for Neurology and Neurosurgery in New York City, and in cerebrovascular surgery from the University of Texas. Dr. Schwartz is currently an attending neurosurgeon at Metropolitan Medical Center in New York City. Dr. Schwartz has been a member of WINS since 1993.



**Aviva Abosch, MD, PhD:**  
President-Elect

Dr. Abosch completed her Neurosurgery residency at the University of California, San Francisco (UCSF). She subsequently pursued fellowship training in Epilepsy Surgery at the Montreal Neurological Institute of McGill University (Montreal, Quebec) followed by fellowship training in Stereotactic and Functional Neurosurgery at the Toronto Western Hospital of the University of Toronto (Toronto, Ontario). She was a member of the Neurosurgery faculty at Emory University before taking the position as Director of Epilepsy, Stereotactic, and Functional Neurosurgery at the University of Minnesota. In addition to expanding the epilepsy and deep brain stimulation surgery programs at the University of Minnesota, Aviva is actively engaged in functional imaging research aimed at elucidating the mechanisms that underlie the neuropsychiatric disorders. She lives with her husband and their two children, in St. Paul, MN.



**Shelly Timmons, MD:**  
Secretary -Treasurer

Dr. Timmons completed her residency training in neurological surgery and her Ph.D. at the University of Tennessee Health Science Center-Memphis. She is a neurological surgeon with Semmes-Murphey Clinic in Memphis, TN, Associate Professor of Neurosurgery and Chief of the Neurotrauma Division of the University of Tennessee Health Science Center Department of Neurosurgery, and Chief of Neurosurgery at the Regional Medical Center at Memphis/Elvis Presley Memorial Trauma Center. She is actively engaged in clinical research, primarily aimed at improving outcomes after traumatic brain injury. She is married with two children.





Geraldine Brooks

## The 2009 Louise Eisenhardt Lecturer: Geraldine Brooks

The 2009 Louise Eisenhardt Lecturer at the AANS meeting in San Diego is Geraldine Brooks. Australian-born Geraldine Brooks is an author and journalist who grew up in the Western suburbs of Sydney, and attended Bethlehem College Ashfield and the University of Sydney. She worked as a reporter for *The Sydney Morning Herald* for three years as a feature writer with a special interest in environmental issues.

In 1982 she won the Greg Shackleton Australian News Correspondents scholarship to the journalism master's program at Columbia University in New York City. Later she worked for *The Wall Street Journal*, where she covered crises in the Middle East, Africa, and the Balkans.

She was awarded the Pulitzer Prize in fiction in 2006 for her novel *March*, and her novel *Year of Wonders* is an international bestseller. She is also the author of the nonfiction works *Nine Parts of Desire* and *Foreign Correspondence*.

Brooks married author Tony Horwitz in Tourette-sur-loup, France, in 1984. They have one child and three dogs, and divide their time between homes in Martha's Vineyard, Massachusetts, and Sydney, Australia.

We are honored to have Ms. Brooks as our distinguished Louise Eisenhardt Lecturer.

Contributed by Lauren Schwartz, MD

**2009 Louise Eisenhardt Lecture: Geraldine Brooks**  
11:15 - 11:45 a.m. • Main Hall Convention Center

## WINS Board of Directors

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Women in Neurosurgery thanks MGI PHARMA, INC., a wholly-owned subsidiary of Eisai Corporation of North America, Biomet and Leica for their generous support of the Louise Eisenhardt Breakfast at AANS 2008.



## Women Neurosurgeons Board-Certified in May 2008

Manprit K. Dhillon MD, Lancaster, CA

Zeena Dorai MD, Lutherville, MD

Odette Althea Harris MD MPH, Atlanta, GA

Jenny Jasbir Multani MD, Walnut Creek, CA

Carrie Lee Schmitt MD, Honolulu, HI

Debra L. Steele MD, Casper, WY

Cornelia S. von Koch MD PhD, Redwood City, CA

Sabrina M. Walski-Easton MD, Minneapolis, MN

*Congratulations!!*



Women in Neurosurgery  
5550 Meadowbrook Drive  
Rolling Meadows, IL 60008



**WOMEN IN  
NEUROSURGERY  
2008-2009  
OFFICERS**

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*Lauren F. Schwartz, MD*

**President-Elect**

*Aviva Abosch, MD, PhD*

**Secretary/Treasurer**

*Shelly Timmons, MD*

[www.neurosurgerywins.org](http://www.neurosurgerywins.org)

*Announcing...*

Women In Neurosurgery is pleased to announce the

**“20th Anniversary of WINS”**

Please join us in celebrating at the Gala Dinner  
Monday, May 4th at the 2009 AANS meeting in San Diego.

