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Chairman's Message by Jon Friedman, MD

Government efforts at healthcare reform continue to dominate the news and the political agenda, and discussions of what healthcare reform will mean for medicine as we know it are similarly dominating discussions among physicians and health-related professionals. While most physicians applaud an attempt to improve access and quality care for all United States citizens, many are frustrated or even insulted by the lack of meaningful inclusion of tort reform, the lack of a permanent correction of the flawed SGR (sustainable growth rate) model for physician reimbursement for Medicare, and the specter of increased governmental influence on clinical decision-making and the doctor-patient relationship.

While we as neurosurgeons are most certainly not immune to these issues and the potential impact of new healthcare legislation, regardless of sociopolitical changes in healthcare we can fall back on the fundamental principles that drove us into the field in the first place. Let's face it - if we didn't love neurosurgery, we'd never have put in the years of training nor commit to the long hours and high intensity. For that matter, we didn't go into medicine for economic reasons either - it has been clearly shown that the return on investment for the hours spent in medical school and residency is much less than in business, finance, or law.

The current government debate regarding healthcare reform is certainly not the first sociopolitical issue that has threatened to deleteriously affect neurosurgery. Thirty years ago, a dire future for organized neurosurgery was predicted based on a perceived paucity of innovation and a limited spectrum of neurosurgical procedures being performed, along with an excessive surplus of new trainees. In the mid-1990s, most analysts perceived a dramatic excess of specialists, and significant proposals were made to drastically reduce payments for specialists and training slots for specialities. This decade, a medical liability crisis led to an explosion in frivolous lawsuits combined with dramatic increases in insurance premiums - many would argue that this crisis has not yet been resolved. In each case, despite the challenges and negative predictions, neurosurgery did not just persevere but prospered.

I argue not for passivity but rather against pessimism. We must continue to advocate strongly and participate in the political dialogue, both independently and through our organized societies - most forcefully through the Joint AANS/CNS Washington Office. Yet at the same time young neurosurgeons should keep in perspective that regardless of government intervention, the fundamental principles that inspired us in the field will remain, as will the most important rewards of improving the lives and health of our patients.

Secretary's Letter – What is the YNC? by Ed Smith, MD

The Young Neurosurgeon's Committee (YNC) of the American Association of Neurological Surgeons (AANS) is the major representative body for all young neurosurgeons within organized neurosurgery. This group serves to introduce residents and those starting their practice to the resources and activities of the AANS. Its stated goal is to develop the future leaders of neurosurgery by providing them with the opportunity to work with the existing leaders of the AANS, to become involved with the important committees of the AANS and Council of State Neurosurgical Societies (CSNS) and to promote participation by all young neurosurgeons in the annual AANS scientific program and publications.

The membership of the YNC is composed of 24-30 elected individuals who serve terms of 4 years. Elections are held annually, with the number of available positions varying from year to year based on the number of rotating off the committee. The goal is to recruit a diverse group of neurosurgeons, including residents and attendings who are



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in academic or private practice. To be eligible, applicants have to be under the age of 40 or have been in practice for 5 years or less (not including fellowship) at the time of election. A call for nominations will go out each year in the summer, with elections finalized by August 31^{st} .

In addition to elected positions, it is important to note that the YNC strives to be inclusive of all young neurosurgeons. Anyone – elected or not – is encouraged to attend the YNC at the annual CNS and AANS meetings and get involved. There are many ways to participate in the YNC, and those individuals that participate on a regular and voluntary basis can be appointed to a 2-year term as official Committee members by the Chair. As evidenced within the pages of this newsletter, there is a great deal of exciting and important work to be done, including the annual Silent Auction, Neurosurgical Top Gun competition, recruitment of medical students to neurosurgery and getting involved with the senior leadership of the AANS.

The YNC is headed by its own executive committee, with Dr. Jon Friedman as our current Chair, Dr. Ed Vates as Vice-Chair and Dr. Ed Smith as Secretary. Appointment to the YNC executive committee is also by election and all official committee members participate in the nomination and voting process. These positions are held for proscribed terms and come with responsibilities outlined in the YNC rules and regulations.

It is sometimes hard to understand or figure out what goes on in organized neurosurgery. While the official bylaws and organizational structures for both the AANS and the YNC are spelled out on the website (AANS.org), the "take home" version is that the YNC is a great way to get involved in an organization that is critical to your professional life. Nearly all facets of being a neurosurgeon – starting a practice, maintaining certification, advancing the field of medicine to which we have all committed ourselves – are integral parts of the YNC. We need the best neurosurgeons to help make our field grow and succeed. You can help make this happen – and do it while making friendships that will span your career. We invite you to come to our meeting, introduce yourself, and get involved.

Going Green by Christian B. Kaufman, MD

Unless you have been buried in your work as of late, most of you have probably heard the buzz around the AANS concerning the upcoming meeting in Philadelphia in regards to this meeting being *paperless*. That's right, anyone bringing paper into the meeting will be fined. Just kidding. Rather, what this refers to is the bulky meeting booklet, which will be replaced by the compact and versatile iPod touch[®].

For those of you not familiar with the iPod touch, you may think of it as an iPhone[™] sans phone. The iPod touch, first released in the fall of 2007, uses the same intuitive touch screen interface technology, hardware, and operating system (OS) as the iPhone. It is available with a larger memory capacity than the iPhone, but retains mostly the same features of its cellular brethren. This includes full WiFi access, Bluetooth® connectivity, multimedia capabilities to access photo albums and online video content (like YouTube), e-mail, and access to Apple's iTunes Store and App Store, which grants access to the tens of thousands of applications that have already been developed for the iPod touch and iPhone platforms.

The idea for the paperless transition and innovation came from a former YNC member, Michael Oh, MD, now chairman of the Education and Practice Management (EPM) Committee, after Troy Tippett, MD, AANS President, put out a call for new ideas. Dr. Oh recognized that the multimedia capabilities of the device and its intuitive compact design would be well suited for the task at hand. Although this will represent the first *scientific* meeting to use the iPod touch platform, the Canadian Film and Television Producer's Association had the same idea and earlier this year successfully integrated the iPod touch into their annual trade show. The iPod touch system was critically evaluated by the AANS, and was felt to be the right technology to move forward into a paperless, interactive meeting.

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For the inaugural paperless meeting in Philadelphia, every meeting attendee will be given an iPod touch as part of their registration. Each device will come pre-loaded with the meeting program. Additional content will include both audio and video podcasts, online access to all meeting posters on-demand, course evaluations, CME tracking, as well as digital publications. In addition to CME tracking, there are plans to develop a Maintenance of Certification (MOC) application (app) that could potentially help track the MOC timeline for a member and provide useful links for MOC related content.

The WiFi feature of the iPod touch will increase member interface and communication by allowing greater opportunities for interactive lectures via an audience response system (ARS) for some presentations, will enable users to instant message one another, and grant the ability for continuous updates to be made to the conference schedule. The conference center in Philadelphia is being specially outfitted so that it will be able to handle the increased WiFi traffic of all the members by dramatically increasing the facility's bandwidth.

As the versatility of the iPhone and iPod touch is already very familiar to many of the members who already own one, some inquiry has been made as to members using their own devices and downloading content directly into them. To assure uniformity of experience for the first meeting, all members will simply be given a fully loaded iPod touch. However, plans for re-use of the distributed devices or use of personal iPhones and iPod touchs at future meetings is already being planned.

On the opposite end of the spectrum, the AANS recognizes that many members may still be unfamiliar with the platform and touch screen interface. In an effort to help improve member experience and provide a smooth transition into the paperless world, the AANS is planning on providing "facilitators" to be stationed around the convention center, at the registration area, and at Practical Courses. Facilitators will be available to provide assistance to members in navigating the Annual Meeting with the iPod touch, and how to utilize and maximize the advantages this new technology conveys.

Looking beyond the first meeting already, a tremendous number of ideas and innovative uses for the iPod touch platform are being generated and developed by the AANS iPod touch Taskforce. Already the Taskforce has reviewed over 1000 medical-related apps, and found almost 80 apps directly relevant and potentially useful to neurosurgery. Although not directly sponsored by the AANS, these identified apps will be listed or provided on the AANS website as an additional resource.

If all continues to go as well as it has so far, the introduction of the iPod touch platform and the changes it will bring will likely help revolutionize neurosurgical education and member communication in the years to come.

Would you like to serve as logistic support for the iPod touch program in Philadelphia? Please contact the AANS Department of Education and Meetings at <u>aansam@aans.org</u>. <u>Priority will be given to medical students and residents</u>. Early in 2010, you will receive a form to complete and submit indicating your session preferences.



Washington Committee Update by Ed Vates, MD, PhD

With healthcare reform as the number one issue in Washington, the AANS/CNS Washington Committee has been working tirelessly to represent the interests of neurosurgeons as the debate works through both houses of Congress and in the body politic. Robert Harbaugh, MD, Chairman of the Washington Committee, and Katie Orrico, JD, Director of the Joint AANS/CNS Washington Office, have advocated on behalf of neurosurgeons, providing feedback to the Senate and House leaders as well as with the AMA, the ACS, and other participants in the negotiations as different health care bills move through the legislative process. In particular, Katie has been keeping members of the Washington Committee, the leadership of the AANS and the CNS, and

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neurosurgeons throughout the country informed about the different legislative initiatives that have been proposed, in an effort to keep neurosurgeons engaged and represented in the debate.

The central issues, as recently outlined in corresponded to the AMA and the ACS, are as follows:

The Public Health Insurance Option There is no question that the inclusion of the public health insurance option will lead to more and more people being covered by this government run plan. As some commentators have suggested, the public option is the entire camel under the tent, moving toward a single-payer, government run healthcare system. In addition, under the public option, the government is empowered to set benefits and implement rules that would restrict patients' choice of physician and limit timely access to quality care. Furthermore, the problems with the public option are not solved by merely requiring the government to negotiate reimbursement rates with providers or other mechanisms to ensure that payment is not tied to Medicare rates. The entire concept is problematic and the reimbursement scheme under such an option is not the paramount issue.

The Medicare Commission In July a coalition of 16 surgical societies expressed grave concerns about the establishment of an Independent Medicare Commission in a letter to House Speaker, Nancy Pelosi, where we stated: Should provisions to place the authority for Medicare payment policy in an unelected executive agency be included in any legislation at any point, the surgical community *would vigorously oppose this legislation regardless of any other provisions that may be included*.

We are fundamentally opposed to taking Medicare policy decisions out of Congress and replacing the transparency of Congressional hearings and debates with a minimally open process overseen by unelected officials with little accountability for the healthcare decisions it makes. We view this structure as an opportunity for a handful of individuals to implement sweeping changes to the Medicare program, with limited opportunity for Congress to intercede and with no judicial review of any decisions made by the Commission. To place a healthcare program of this magnitude (projected expenditures for Medicare exceed \$500 billion in 2010) in the hands of so few individuals is, to us and others, unacceptable. We also note that the current interpretation of the Baucus bill exempts hospitals from this policy. This is outrageous, fundamentally unfair, and points to why the entire provision must be struck from the bill.

Center for Medicare/Medicaid Services (CMS) Payment Innovation Center The AANS and CNS are very concerned about the proposed CMS Payment Innovation Center as it is currently constructed. Indeed, as we interpret these provisions, the Innovation Center would have more authority and power than the Independent Medicare Commission in that the Secretary of Health and Human Services would have the authority to enact national-level reforms in either Medicare or Medicaid that improve care, reduce costs, or both, without requiring consideration by Congress or the President. These changes would be done under the guise of "pilot" studies, rather than "demonstration" projects. This, as you may know, is a distinction with a significant difference. A demonstration project is essentially a research study. It has an end date and providers are recruited to participate for a certain period of time. If it proves beneficial, then the research findings could serve as the basis of legislation to broaden the demonstration program further or change Medicare policy. A pilot, on the other hand, is simply an initial step to implement a policy. It may be watched closely, and if government officials deem it to be working or meeting the policy goals of the pilot, it can be expanded. In essence, under this authority, CMS could use its authority to make extensive changes to Medicare and Medicaid without Congressional involvement simply by calling the new policy a "pilot" study. The AANS and CNS are not opposed to exploring new healthcare delivery and payment models. Indeed, we have repeatedly called on Congress to include in health system reform legislation a variety of demonstration projects to evaluate such ideas as Accountable Care Organizations and bundled payments. However, we believe that these concepts should be tested under the demonstration model, rather than under pilot study rules to ensure adequate input from the medical community, beneficiaries and Congress.

Physician Payment Policy There are a number of physician payment policies (in Senator Baucus' draft legislation in particular) that we oppose. Individually, each of these is enough to give us serious pause, but when taken together,

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we do not see how anyone can possibly support legislation that includes these provisions. The following provisions are particularly troubling:

- The temporary one-year sustainable growth rate (SGR) "patch" to replace the 21.5 percent payment cut in 2010 with a 0.5 percent payment increase in the Baucus bill does little to address the serious underlying problems with the current Medicare physician payment system and compounds the accumulated SGR debt, causing a payment cut of approximately 25-28 percent in 2011.
- In the Baucus bill, one-half of the 10 percent bonus payment to primary care physicians and general surgeons would be paid for on the backs of all other physicians through an across-the-board, budget neutral, cut in reimbursement.
- The bills inappropriately expand the government's involvement in determining the quality of medical care and resource use. Under the Baucus plan, doctors are mandated to participate in the Physician Quality Reporting Initiative (PQRI) which does not effectively measure quality or their fees will be cut by 2 percent and physicians who fail to comply with national resource use benchmarks face cuts of 5 percent.
- The new payment modifier included in the Baucus bill that is aimed at paying physicians or groups of physicians differentially based on the relative quality of care they achieve for Medicare beneficiaries relative to cost is completely untested. Furthermore, it is sheer folly to believe that the government can develop a composite of appropriate measures of quality that reflect the health outcomes of Medicare beneficiaries, when the tools to measure health outcomes are not even in place. Neurosurgery is moving forward with a new registry to collect clinical data, and we are collaborating with the Surgical Quality Alliance to investigate the feasibility of a surgical quality data base, but these systems are not fully operational and, in our field, no other system to assess neurosurgical quality currently exists. We suspect this is the case for most specialties and so this idea is clearly not ready for "prime-time."
- The bills create a duplicative process for determining code values. The surgical coalition supports maintaining the role of the AMA/Specialty Society Relative Value Update Committee (RUC) as the entity through which medical services are valued. The RUC although not perfect continues to be a dynamic process, which makes recommended increases and decreases in the value of codes reimbursed under the Medicare Physician Fee Schedule. A new "shadow RUC," consisting of so-called health policy experts (which will not likely be dominated by practicing physicians) will likely remove the ability of the profession to effectively oversee this important function. An additional affront to practicing physicians is the House proposal to remove the authorization for the Practicing Physician Advisory Council. While the PPAC may not have much authority or influence over Medicare physician payment policies, it is at least one ongoing opportunity for practicing physicians to voice their concerns and opinions about Medicare to government officials and other interested parties.

Other Issues The above issues are not our only concerns with the current healthcare reform legislation. Patientcentered healthcare is threatened by provisions curtailing the development of physician owned specialty hospitals and changes to office-based imaging. The bills fail to recognize the looming workforce shortages in surgery by requiring that all unused medical residency training slots be allocated to primary care and placing the emphasis on national workforce policy on primary care, to the exclusion of surgical (other than general surgery) and other specialty care. The House bill inappropriately expands the government's involvement in determining the quality of residency training programs. And the House provisions related to comparative effectiveness research could potentially stifle medical innovation and restrict patient access to valuable, life-saving, treatment options. The AANS and CNS also cannot ignore several key issues which are vital to any overhaul plan and are missing from this bill including: concrete options for proven medical liability reform and protections to ensure patient choice of physician, including the right of patients to privately contract with their physicians.

A Note about the SGR (Sustainable Growth Rate) The AANS and CNS clearly support repealing the current sustainable growth rate formula and establishing a new budget baseline for the physician payment system. We certainly do not want physician reimbursement to be cut by nearly 22 percent next year (and by a total of 40 percent over the next several years). However, we do not believe that the SGR is *the* issue that trumps all other issues in

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healthcare reform legislation. It would be a real shame if either the ACS or the AMA endorses or merely withholds its support for healthcare reform legislation that includes SGR reforms as provided in the House bill if, at the same time, said legislation also incorporates the provisions that we highlighted above. In our view, the short-term reimbursement benefit is simply not worth the long-term costs associated with more government oversight and involvement in the practice of medicine. Ultimately, this would not be good for patients and it would certainly not be good for the profession. Congress is not going to let these SGR cuts go into effect and so we hope that the ACS and the AMA will not be coerced into backing a healthcare reform bill that includes many problematic provisions for the sake of SGR reform.

Grassroots Activism Finally, the AANS and CNS would like to encourage all members of the AANS and CNS to contact their Members of Congress on key issues – those things that should be included, as well as those that we oppose being included. While we appreciate that things in Congress are still fluid, and final bills have not yet been crafted. If we wait until the last minute to engage surgeons in the debate, we fear it will be too little, too late. We still have an opportunity to shape the final legislation if we can mobilize our nation's surgeons, and the AANS and CNS look forward to contributing to this grassroots effort.

YNC Division Reports

The following article is a series of summarized reports from the various committees to which the Young Neurosurgeon's Committee (YNC) sends representatives. One of the objectives of the YNC is to involve its members in the executive committees of organized neurosurgery, in order to communicate the concerns of our constituency, to better understand how these committees affect us and also to contribute our unique skills as residents and young faculty. In order to more efficiently streamline dissemination of the information from these numerous committees, the YNC executive board has established clusters of related representatives with a head of each division, such as education, communications, etc. These division heads collect the reports from each of the liaisons in their group, then provide a summary document to the YNC as a whole. Salient points from these reports will be discussed at the national meetings and summaries are provided here in the newsletter in an attempt to provide more direct and transparent dissemination of this information.

Affiliated Organizations by Cormac Maher, MD Division Coordinator	Division Liaisons: American College of Surgeons American Medical Association Council of State	Eric Deshaies, MD Todd Hankinson, MD
	Neurosurgical Societies	Ed Vates, MD, PhD
	Joint Washington Committee	Ed Vates, MD, PhD
	Women in Neurosurgery	Sarah Jost, MD

Our liaison to the **AMA Young Physician Section** attended the annual AMA meeting in June. At that meeting, the Young Physicians Section focused its efforts on the issue of student loan forgiveness and repayment. It forwarded three resolutions to the House of Delegates. The first was intended to ensure that all resident and fellow physicians-in-training, and all physicians who accept Medicare, Medicaid or Tricare, fall within the definition of public service jobs for the purposes of the Public Service Loan Forgiveness Program. The second resolution asked the AMA to study the impact that the new Higher Education Opportunity Act will have on the length of time it will take young physicians to pay off their medical student loans and the effect of early loan repayment on specialty selection. A third resolution asked the AMA to draft legislation allowing 100 percent tax deductibility of student loan interest. The principles of these resolutions were supported by the AMA House of Delegates.

See Ed Vates' report from the **Joint Washington Committee** above.

The liaison from **Women in Neurosurgery** (WINS) reports that this group celebrated their twentieth anniversary with a gala breakfast at the AANS meeting in San Diego this past Spring.

WINS is also pleased to announce the publication of the book *Heart of a Lion-Hands of a Woman: What Women Neurosurgeons Do.* The production of this book was undertaken in an effort to celebrate the 20th anniversary of the Women in Neurosurgery organization. These memoirs and artwork carry startling insights into the unique experiences of female neurosurgeons. Individuals who have experienced similar struggles will gain solace from understanding that they are not alone. The WINS reception for surgeons, residents, medical students is planned for October 27th at the CNS annual meeting. See review of this book in the Book/DVD Review section of this newsletter.

Education by Christian B. Kaufman, MD	Division Liaisons: Education and Practice Manageme	Division Liaisons: Education and Practice Management Kaufman, MD	
Division Coordinator	MOC/CME	Jason Schwalb, MD	
	NREF	Cory Adamson, MD	
	Scientific Planning Committee	Jon Friedman, MD	

The MOC Committee has been changed to the **MOC/CME Committee** to better reflect the charges of the committee, covering CME for AANS and ABNS.

The February MOC/Weekend Update course went well this year and objectives will be changed up to better reflect what attendees wanted to receive of this course. 81% reported not understanding MOC process which is troublesome. There are presently 6 diplomats who have not completed their MOC requirements. The committee is undertaking marketing efforts to make sure that all diplomats are aware of the requirements.

The **Scientific Program Committee** is working closely with the annual meeting committee and coordinators to support the implementation of the iPod touch[®] platform for the meeting. Select weekend courses will take advantage of the enhanced interactivity of the iPod touch, and all avenues are being exhausted to achieve a true "paperless" meeting.

There are hopes to increase medical student attendance at the Annual Meeting, and a new weekend course codirected by Deborah Benzil, MD and Dan Sciubba, MD, focused on needs and interests of medical students. With so many medical students within driving distance of Philadelphia, increased medical student participation in the meeting is anticipated.

The YNC will continue to sponsor and moderate the weekend course Choosing and Developing a Neurosurgical Practice, geared towards residents and fellows. The young neurosurgeons' luncheon on Monday afternoon will also continue.

Operations	Division Liaisons:	
-	AANS Board of Directors	Jon Friedman, MD
by Kathryn Beauchamp, MD	Ethics	Samuel Barnett, MD
Division Coordinator	International Outreach	Cory Adamson, MD
	Member Benefits	Kathryn Beauchamp, MD

The **Ethics** Committee has been focused on developing a series of training modules covering Clinical Ethics in Neurosurgery. The modules will provide CME credit and the first five will be available shortly on the <u>www.myaans.org</u> web page. The modules will include an introduction and cover methods in ethics, informed consent, resolving conflict and research ethics. Additional modules are currently under development. From a young neurosurgeon's perspective, these are going to provide an interesting way to obtain ethics CME credit that is relevant to our practices. It is also a topic that was probably missing from most residency programs.



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The International Outreach Committee is working in the following areas:

- 1. *Increase recruitment of International Members*. The IOC decided to focus on researching the Iraq Medical Association in order to reach out to members that may benefit from our neurosurgery organizations. Specific IOC members were chosen to serve as liaisons to each of the five WFNS continental organizations (Asian Australasia, Pan African and Middle East, FLANC, EANS, and AANS) to enhance global communication and recruitment. Dr. Anil Nanda continues to solicit AANS members to volunteer to present at WFNS courses.
- 2. *More services for international members.* The online journal article project where important JNS articles by international authors are placed online to be downloadable free by international members continues successfully. Online offerings such as online case studies and courses are also popular. More services are being explored.
- 3. International Awards for 2009. International Travel Scholarship: Sang Hyung Lee, MD, PhD (Korea); International Visiting Surgeon Fellowships: Haitham Handhel Shareef, MBChB, IBMS (Iraq) spent three months at Albany Medical Center. Mohammad Shahzad Shamim, MD (Pakistan) just concluded his fellowship at Henry Ford Hospital in Detroit. International Lifetime Recognition Award: Albino P. Bricolo, MD (Italy); Humanitarian Award: Armando Basso, MD (Argentina). 2010 awardees will be announced in November 2009.
- 4. XIX World Congress of Neurological Surgery. A significant effort was put forth from IOC to recruit members during the meeting. Dr. Merwyn Bagan was able to have donated neurosurgical equipment and supplies that FIENS had been storing moved to a storage area near the convention during the meeting for international attendees to pick up

Member Benefits Development Committee continues to partner with businesses to provide discounts on a wide range of items. Most recently there is an opportunity to save 15% on Brooks Brothers clothing items through the corporate casual attire savings program.

The **Pain Section** is working hard to establish the "Oakley Fellowship" for postgraduate training in Pain neurosurgery. The hope is to begin soliciting applications for the fellowship this summer and possibly the first award summer 2010. This timeline will be dependent on the growth of the endowment and investment losses. The general plan is to offer a \$5K stipend for a 3 month fellowship.

The upcoming AMA pain summit and plan for possible creation of new specialty board for pain medicine was discussed. This is a high priority for the section. The American Board of Pain Medicine has applied to American Board of Medical Specialties before for recognition on multiple occasions, never successfully.



YNC Subcommittees by Jon Friedman, MD YNC Chairman Division Liaisons:MarshalsStacey Quintero-Wolfe, MDMedical Student Task ForceWilliam W. Ashley, MDNeurosurgery: The Real WorldEd Vates, MD, PhDSilent AuctionTodd Hankinson, MDNeurosurgical Top GunAnand Germanwala, MDYoung Neurosurgeons LuncheonEd Vates, MD

The YNC engages in multiple roles and activities to support the AANS. The **Marshals Committee** supports and provides coordinating support for the AANS annual meeting. The key charge for the Marshals Committee for the 2010 AANS Annual Meeting is to support the roll out of the iPod touch[®] framework. The Marshals Committee will engage, train, and coordinate medical student, resident, and neurosurgeon volunteers to provide support for the iPod touch at the meeting.

The **Medical Student Task Force** is charged with increasing exposure of medical students to the field of neurosurgery, providing resources to medical students during their residency exploration and selection process, and facilitating the needs of medical students who will be going into neurosurgery. William Ashley will be assuming leadership of this task force. A significant drive to increase medical student attendance at the 2010 AANS Annual Meeting is under way, including a weekend course co-directed by WINS (Women in Neurosurgery) and the YNC geared towards medical students.

The YNC continues to direct the **Neurosurgery: The Real World** course *Choosing and Developing a Neurosurgical Practice.* Ed Vates served as moderator at the 2009 AANS meeting and will also moderate the 2010 course. Topics are geared towards residents and fellows and have been of significant interest. Last year's speakers included Katie Orrico, JD, Larry Chin, MD, Hunt Batjer, MD, William Couldwell, MD, PhD, and Judy Rosman, JD.

The 2009 **Silent Auction** again benefited incredibly from the generous support of the entire neurosurgical community, who donated items ranging from vacation properties to sports tickets, handmade jewelry, fine wine and books. Further donations were made by local San Diego businesses and meeting vendors. The auction expanded its use of the cMarket online auction system, allowing people to more readily view and bid on items remotely. Despite the trying economic times, over 30 items were sold, garnering more than \$10,000 for the NREF.

For the 2010 Silent Auction, the widespread use of the iPod touch throughout the Annual Meeting will provide an excellent platform to increase exposure. It will allow participants to browse through items and track bids anytime and from any place.

The 2010 Silent Auction Committee, which has been invigorated by the addition of 3 new members, has already begun reaching out to senior neurosurgeons and meeting vendors. As always, the success of the Silent Auction will rely on the donors who graciously provide items or cash donations every year. If you, or someone you know, might be interested in donating or helping the YNC solicit donations, please contact Todd Hankinson (tch12@columbia.edu), Michele Gregory (msg@aans.org) or Julie Quattrocchi (jaq@aans.org). On behalf of the entire Silent Auction Committee, we look forward to seeing you in Philadelphia!



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Residents and fellows from programs nationally and internationally competed in at the AANS Annual Meeting in San Diego to win the 2009 **Neurosurgical Top Gun** Honors. The winners are listed below. Congratulations to all participants and we look forward to a bigger event for 2010.

Neurosurgical Top Gun:

Program Winner:

Thoracic Spine Top Honors:

Bone Scalpel Top Honors:

Lumbar Spine Top Honors:

Dr. Shahid Nimjee Duke University Medical Center

Duke University Medical Center

Dr. Shahid Nimjee Duke University Medical Center Dr. John Park Cleveland Clinic Neurological Institute Dr. Francisco Ponce Barrow Neurological Institute

Are you the next Neurosurgical Top Gun? For the fifth consecutive year, the Young Neurosurgeons Committee presents a technical competition for residents and fellows during the upcoming AANS meeting in May 2010. This three-day competition will test your skill with tasks such as robotic brain surgery, computersimulated ventriculostomy, and pedicle screw placement. Contestants will receive points for their performance and the resident or fellow with the best score will receive the Neurosurgical Top Gun Honor and prizes. Watch for more information online at www.AANS.org.



The **Young Neurosurgeons Luncheon** was again standing room only at the San Diego meeting. Fred Meyer, MD, Chairman of Neurosurgery at Mayo Clinic, was the keynote speaker and discussed balance in career and family commitments. The luncheon speaker for the 2010 meeting in Philadelphia will be Harry van Loveren, MD.

Book/CD Reviews

The Cerefy® *Atlas of Cerebral Vasculature (1st edition)* by Wieslaw L. Nowinski, A. Thirunavuukarasuu, Ihar Volkau, Yevgen Marchenko, and Val M. Runge CD-ROM. New York, Thieme, 2009. ISBN 978-1604060904

Reviewed by: Ning Lin, MD, Brigham and Women's Hospital, Boston, MA

The Cerefy® *Atlas of Cerebral Vasculature* was created by a group headed by Professor Wieslaw L. Nowinski at the Biomedical Imaging Lab, Singapore. It is an interactive electronic atlas that provides extensive and precise displays of the cerebral arteries and veins in 3-dimensional (3D) drawings. The atlas is a sequel to the *Cerefy Atlas of Brain Anatomy*, a similar work published by the same group in 2006, which focuses on the 3D organization of functional networks of neuroanatomy¹.

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Currently available neurovascular atlases are limited in their presentation because it is difficult to convey the complex 3D arrangement of the human cerebral vasculature in 2D formats. This task is especially challenging since parts of cerebral vessels are almost always hidden behind nearby parenchymal structures². Advances in vascular imaging such as magnetic resonance angiogram (MRA) and computed tomography angiogram (CTA) facilitate the 3D depiction of cerebral vasculature. The *Cerefy® Atlas* is a 3D cerebrovascular modeling tool that consists of 365 parenchymal vessels derived from a time-of-flight MRA and labeled with names and diameters in all head positions. The model is co-registered with MRI and MRA scans in 3D space, so that one can explore cortical anatomy along with vascular anatomy and readily measure distances between vascular and parenchymal structures.

The interface is highly user-friendly and efficient. In addition to detailed demonstration of anatomic structures, the atlas also contains a vast amount of background information, precise descriptions of vascular variations, and many useful references. There are 215 pages of text and 100 images included in the atlas. Moreover, the atlas even includes a "test" mode for self-assessment. It can serve as a unique and valuable learning companion to more traditional neurovascular anatomic texts for both physicians and researchers in neurosciences.

References:

- 1. BOOK REVIEW: Cerefy Atlas of Brain Anatomy. Am J Neuroradiol 27, 946-947 (2006).
- 2. Nowinski, W.L. Three-dimensional presentation of cerebral vasculature facilitates greater understanding. *ECR TODAY* (2009).

Anatomic Basis of Neurologic Diagnosis

by Cary D. Alberstone, Edward C. Benzel, Imad M. Najm, and Michael P. Steinmetz

600 pp. New York, Thieme, 2009. ISBN 9780865779761

Reviewed by: Ning Lin, MD, Brigham and Women's Hospital, Boston, MA

Anatomic Basis of Neurologic Diagnosis, written by Cary D. Alberstone, Edward C. Benzel, Imad M. Najm, and Michael P. Steinmetz, offers a comprehensive review of anatomic concepts underlying neurologic disorders. The book contains 600 pages and is divided into four sections. It begins with a thorough review on neuroembryology, followed by a detailed description of neuroanatomy organized in both morphologic and functional aspects, and ends with cerebrospinal fluid (CSF) and vascular anatomy.

The book is superbly written and contains comprehensive and well-described neuroanatomical facts. Each anatomic structure is discussed in detail, yet the language is concise and not overwhelming. The discussion is focused on clinical applicability and highlights the pragmatic correlation between physical findings and structural lesion localization. The text is accompanied by impressive color illustrations that are extensive and original. The book does not employ traditional anatomical figures utilized in most textbooks but instead provides creative schematics to illustrate key anatomic elements of the nervous system involved in a physiological process.

This book complements the strength of currently available neuroanatomy texts for neurologists and neurosurgeons^{1,2}. In addition to extensive coverage of anatomic details, the book emphasizes the importance of understanding the functional connections between multiple anatomic components within a physiologic system. An entire section is dedicated to analyzing and explaining the intricate relationships within the visual system, motor system, auditory system, etc, and provides differential diagnoses and practical approaches to patients with multi-system disorders. While discussions on the pathophysiology of neurologic diseases are brief, and descriptions of CSF related syndromes are thin compared with other disease processes, the thorough coverage of anatomic concepts in this textbook makes it the perfect resource for both residents and advanced practitioners.



Heart of a Lion, Hands of a Woman: What Women Neurosurgeons Do

Editor/Author: Deborah L. Benzil and Karin M. Muraszko

175 pp. Rolling Meadows, AANS, 2009. ISBN Number: 978-1-57864-573-2

Reviewed by: William W. Ashley, MD, University of Illinois, Chicago, IL

Heart of a Lion-Hands of a Woman is a welcome departure from the standard neurosurgical reading. It is a 175 page collection of poems, essays and stories written by female neurosurgeons. It is thematically organized into five chapters focused on the hands of women neurosurgeons in different arenas of practice.

Although it does not present any objective clinical or scientific information, there is still a great deal to learn from this book. In its pages it provides valuable insight into the subtle challenges of patient care. In particular it details the difficult challenge of being a woman in a historically male dominated field. *Heart of a Lion-Hands of a Woman* offers a unique opportunity for practitioners – men and women - who have had similar experiences to reflect, to grow and to improve.

Writings by leading female neurosurgeons such as Dr. Duhaime, Dr. Muraszko, Dr. Tindall and Dr. Canady were of great interest. Moreover, works like "Silent Observation" and others were poignant and affirm the humanity of the neurosurgeon. By guiding the reader to reflect on his or her own feelings of joy, disappointment, frustration, satisfaction or despair, *Heart of a Lion-Hands of a Woman* can help to shape better doctors.

There are many gender-specific issues addressed in this work, however, this book is in no way exclusionary and can be enjoyed by a diverse group of interested readers. In addition to the neurosurgeons, neurosurgical trainees, neurologic nurses and other practitioners that may enjoy reading this book, general readers, including their friends and family can benefit greatly from this book.

Going Global: My Neurosurgical Education Abroad by Ashwin Viswanathan, MD

Editor's Note: Dr. Viswanathan is the recipient of the 2009 Young Neurosurgeons Committee's Public Service Citation for his service to training residents and providing neurosurgical care to patients in underserved areas of the world.

My experience with international medicine, and in particular international neurosurgery, began four years ago with a medical excursion to Lima and Manchay, Peru. The opportunity reminded me that the world spans slightly beyond the expanse of the Texas Medical Center where I attended medical school and completed my neurosurgical residency. Over the last few years, through working with the Foundation for International Education in Neurological Surgery (FIENS), I have had an opportunity to practice neurosurgery on four continents – a privilege I would not have thought possible when I began medical school a decade ago.

In early 2007, I spent two months in Addis Ababa, Ethiopia, soon after a residency training program started at Tikur Anbessa (Black Lion Hospital). At the time, there were four neurosurgeons in the country – all in Addis Ababa – caring for a population of roughly 80



Figure 1: Assisting Dr. Mersha with a craniotomy at Black Lion Hospital

million people. The residency program began with two physicians who completed their training in general surgery and returned to train in neurosurgery.

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Figure 2: Treating pediatric trauma was one of the most rewarding aspects of neurosurgery in Addis Ababa

That resources were limited in Ethiopia was no surprise. There was no hot water, limited soap to scrub the hands for surgery, power failures were common, and the hospital bed space was at a tremendous premium. Supplies were rationed and all materials were carefully saved and reused. A package of bone wax or surgicel could last for five or six cases.

The more significant challenges to practicing medicine and neurosurgery in Ethiopia were not immediately evident. Infrastructure for a voluntary blood bank does not exist. For a patient to have access to blood intraoperatively, family or friends must have donated the anticipated blood necessary. This limitation really becomes evident for patients with neurosurgical emergencies, where a delay to prepare blood can be perilous.

Ventilators were in short

supply. Again the implications of this were not immediately apparent until we were faced with operating on a patient with a large right temporal brain mass. The patient was awake, but very lethargic, and in all likelihood would need a ventilator postoperatively. In order to take the patient to the operating room, we needed to ensure there would be a ventilator available postoperatively, creating another several day delay in treatment.

Availability of OR time for emergencies is scarce and is shared among the surgical services. Hence, when two patients come to the emergency room needing operations, they must be triaged according to who can be helped and the urgency with which they need treatment. The challenges went on, but our small victories allayed any doubts as to whether neurosurgery could survive at Black Lion Hospital.



Figure 3: Intraoperative ultrasound has proven an invaluable technique in Bharatpur



Figure 4: Through training with Dr. Warf in Uganda, Dr. Sushil has developed ETV in Katmandu

My experience in Addis, led me to work with FIENS in Nepal and Vietnam the following years. Both regions continue to be tremendously underserved, with only one neurosurgeon in Nepal operating outside the Kathmandu Valley. However, the significant

impact of international collaboration has left an indelible mark. Both through the work of FIENS, and through local surgeons participating in fellowships abroad, competency in a wide range of neurosurgical treatments has been

achieved. Importantly, the neurosurgical development serves as a model for the program in Ethiopia demonstrating what can be accomplished with time and investment.

Figure 5: Assisting Dr. Anil in placing emergent EVD in Kathmandu

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As my interest in global neurosurgery began, I naively and perhaps arrogantly viewed these experiences as an opportunity for me to impart some of my western medical training to those in developing regions. With time, I have come to understand that international medicine is a bidirectional opportunity for development. On each trip, I have tried to find some means for benefiting my hosts – whether it be in the form of donating shunt assemblies, an electric drill, or just a willingness to take call and operate at inopportune moments. These small efforts have been far overshadowed by what I have received.



Figure 6: Dr. Hoanh rounding on ward in Danang General Hospital

Operating in America is a luxury. Occasionally there are times things don't work or are not available. But, there is never a scarcity of suture, drill bits, or x-rays. Learning to operate in new environments has taught me patience and humility. It is not easy to tie knots with needle drivers that cannot grasp the suture. It is not easy to operate without adequate lighting. And it is definitely not easy to operate on patients with head trauma with only a Hudson brace.

My residency training was centered in a large tertiary center with an enormous patient base. Despite this, operating

on large myelomeningoceles, giant acoustics, and unembolized AVMs is just not that common in western medicine. Being exposed to unusual pathologies and unconventional treatment approaches has broadened my perspective as a physician and convinced me that there is never one answer in medicine. The only right answer is the one that helps the patient.

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Figure 7: Manipulating CTA preoperatively in Danang