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Chairman's Message: Our Future is Now by Edward Smith, MD, FAANS

We are convening in Chicago for the CNS meeting, where the theme centers on the idea that "our future is now." While there are some clear distinctions between the AANS and the CNS in terms of mission, membership, and programs, it is fair to say that the two organizations share an interest in promoting the development of younger students, trainees, and faculty to advance the field of neurosurgery – essentially investing in the future of our specialty by making the effort to mentor our upcoming leaders. The AANS Young Neurosurgeons Committee (YNC) is the embodiment of this concept.

The YNC exists to ensure that the people who will become the future of neurosurgery have a voice in the discussions about what is important to us. Through the YNC, we can offer ideas, talk with colleagues, and listen to what others have to say. Over the past year, on top of our hallmark efforts such as the Neurosurgical Top Gun competition and alliance with the Annual Neurosurgery Charity

efforts such as the Neurosurgical Top Gun competition and alliance with the Annual Neurosurgery Charity Softball Tournament, we have been approved to begin a new fellowship for medical students, enlarged our roster, initiated programs to reduce head injury across the country, and offered physical and on-line forums to foster ideas about what our constituency needs. An exciting result of this work is the new development of a course specifically created for the YNC demographic.

The AANS Exit Strategy Course for Chief Residents* will take place on April 5-6, 2013 in Chicago, IL. This new, two-day course – sponsored by the AANS – is designed specifically to help young neurosurgeons learn about all of the aspects of starting a practice that simply are not covered elsewhere. While there are many wonderful fellowships that can teach one how to operate and well-designed programs that can help improve the science, research or writing skills of aspiring clinicians, there is a profound dearth of practical, experienced guidance relevant to the key aspects of choosing a practice and succeeding in one's first "real" job.

This intense course will cover important topics such as malpractice, financial negotiations, choosing a practice, billing, contracts, hiring staff, and many other key issues that are not part of the regular curriculum of residency. These areas – and many others – are critical to the transition from trainee to independent neurosurgeon. The course is unique in organized neurosurgery and highlights the role that the YNC plays in voicing the needs of its members. Equally important, the willingness of the senior leadership to make the substantial investment of time and effort in creating the course speaks to the interest that exists for mentoring the junior colleagues – the future of our profession.

It has been an exciting time to serve as chairman of the YNC – and I have been fortunate to enjoy the benefits of working with an excited, driven, enthusiastic core of committee members. Through their hard work – along with the efforts of the executive committee, heads of working groups, liaisons, senior leadership in the AANS and – especially – our indefatigable Chris Philips, we have really seen a remarkable growth in the YNC. I would strongly urge all eligible YNC members to take advantage of this important Exit Strategy course – <u>your</u> future is now! To all other medical students, residents, fellows and new faculty – I invite you to become part of the growing and dynamic YNC.

* Exit Strategies Course for Chief Residents, Chicago, Illinois, April 5–6, 2013. Joni L. Shulman, AANS email: <u>jls@aans.org</u>. Website: <u>http://www.aans.org</u>.



Secretary's Message: Our Future is Now by Stacey Quintero Wolfe, MD

The future depends on what you do today. Proclaimed by Ghandi, this ideal continues to hold true across all peoples, countries, and creeds. While neurosurgery is a small microcosm, this truth stands for each one of us.

The YNC hopes to provide each one of you with vision and opportunity to achieve and shape an amazing future, for you as an individual and for neurosurgery as a whole. In addition to the outstanding surgical skill that you practice for your individual patients, the YNC hopes that you will be inspired by some of the people and accomplishments highlighted in this newsletter and reach

even higher to create our neurosurgical future.

The YNC seeks to provide individual mentorship as well as organized promotion of young neurosurgeons in order to enhance the field of neurosurgery for all, patients and surgeons, alike. We hope to encourage the participation of students and residents, recruiting the best and brightest into the field of neurosurgery. From our new MISSION program for medical students, to our collaboration with WINS, ThinkFirst, and the Annual Softball tournament, to the advanced degree accomplishments of our members, the YNC offers innumerable opportunities.

On behalf of the YNC Executive Committee, we would like to recognize and thank all the members of the YNC who have helped this organization flourish as a result of their hard work, and would like to invite *all* young neurosurgeons: students, residents, and faculty alike; to come to the YNC meeting at the CNS in Chicago on Monday, October 8, 2012 from 6:00 – 8:00 p.m. in Chicago Ballroom VII of the Sheraton.

ThinkFirst: How to get started

by Krystal Tomei, MD YNC ThinkFirst Liaison and 2011-12 Marshals Chairman

Interested in starting a ThinkFirst chapter at your institution? Here is what you need to know.

Q. Why start a ThinkFirst Chapter?

A. As neurosurgeons, we see irreversible brain and spinal cord injuries every day, many of which are preventable. Since the only true cure is prevention, ThinkFirst is a way to reach out to schools and the community to help educate the public on injury prevention. ThinkFirst provides a way to educate the community by both educational modules and talks by the ThinkFirst VIPs – Voices for Injury Prevention. The VIPs are volunteers who were themselves affected by brain and spinal cord injury.

Q. What do I need to do before I start a ThinkFirst chapter?

A. Each ThinkFirst chapter will need a chapter director. This is the person who will go to the chapter director training and head the local organization. This can be anyone; a nurse, mid-level provider, therapist, office staff, physician, etc. They should have some base knowledge about brain and spinal cord injury. Additionally, each chapter will need sources of funding. This can be through donations, hospital contributions, or fundraising efforts. Remember that any level 1 or level 2 trauma center has a community education requirement for injury prevention, so there may be some funding available there!

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Q. I've found a chapter director and raised the funds, now what?

A. Go to <u>www.thinkfirst.org</u> and click the "Start a Chapter" link. You'll find the application form to fill out and mail in with the introductory fee. If you submit your application before December 31, 2012 you will receive half off the new chapter fee. (The fee is only \$750 for a limited time!)

Q. What does the fee cover?

A. ThinkFirst creates evidence based educational programs which are directed towards specific age groups. Your chapter membership fee includes chapter director training, a chapter director guidebook, and educational materials for the "ThinkFirst for Kids," "ThinkFirst for Youth," and "ThinkFirst for Teens" programs as well as the VIP Speaker training program DVD.

Q. How do I find out if there is already a chapter near me?

A. Go to <u>www.thinkfirst.org</u> and click the "Find a Chapter" link to see if there is a chapter near you. If your institution already has a chapter, contact information is available on the website for the chapter director. Link up and get involved!

Annual Neurosurgery Charity Softball Tournament

by Ricardo J. Komotar, MD

Softball Tournament Liaison



Annual Neurosurgery Charity Softball Tournament – 2012 Champions, The University of Miami.

Twenty-eight teams of neurosurgeons from top medical institutions competed June 9th in Central Park at the 9th Annual Neurosurgery Charity Softball Tournament

(www.NeuroCharitySoftball.org). Endorsed by the American Association of Neurological Surgeons and hosted by Columbia University, the event benefited brain tumor research via the Neurosurgery Research and Education Foundation of the AANS. This year's competing Departments of Neurosurgery included Columbia, Cornell/MSK, NYU, Einstein, Mt. Sinai, Penn, Harvard, Jefferson, Dartmouth, Penn State, Hopkins, Alabama, Emory, Florida, Duke, Miami, Barrow, Pittsburgh, Utah, Toronto, Northwestern, Colorado, Vanderbilt, Mayo, GW, USF, and Ohio State. The playoff field included Jefferson, Hopkins, Barrow, Mayo, Alabama, Emory, Columbia, Colorado, Pitt,

Florida, Duke, USF, Ohio State, and Miami. The elite eight teams were Jefferson, Barrow, Alabama, Columbia, Pitt, Duke, USF, and Miami. The final four teams were Barrow, Alabama, Pitt, and Miami. The University of Miami claimed their first championship by beating Barrow, 5-4, in the finals.

The Annual Neurosurgery Charity Softball Tournament has rapidly evolved into an international competition, with Toronto joining the field in 2010. The first two championships were claimed by Columbia University in 2004 and 2005, while the University of Pennsylvania repeated their title runs in 2006 and 2007. Harvard followed by winning in convincing fashion during the 2008 tournament. Columbia won their third overall championship in 2009 and the Barrow won in 2010 and 2011. The championship trophy, named "The J. Lawrence Pool Memorial Trophy" in honor of the former Columbia chairman, will be housed in Miami this coming year.

For the ninth consecutive year, the Steinbrenner family and the New York Yankees have sponsored the tournament. Supported by Mayor Michael Bloomberg, this date has been declared "Neurosurgery Charity Softball Tournament

Day" in the City of New York. The Annual Neurosurgery Charity Softball Tournament has become a tradition within the neurosurgical community and represents the amiable competition, social camaraderie, and charitable nature within our field. In particular, the dedication of participating programs, particularly traveling teams, has been impressive. Partnership with the American Association of Neurological Surgeons has been instrumental for transitioning from an institutional effort to an international initiative, with this collaboration allowing funding to support NREF neuro-oncology research fellowships. The planning has already begun for the games to continue next year in June 2013 at the 10th Annual Neurosurgery Charity Softball Tournament, with potentially an expanded field of 30+ teams across the US and Canada.

Mentoring the Next Generation of Neurosurgeons by Julie G. Pilitsis MD, PhD, FAANS YNC Alumni 2002-08

In a joint effort between the AANS Young Neurosurgeons Committee (YNC), Women in Neurosurgery (WINS), and the Council of State Neurological Societies (CSNS), a research project was conducted to assess barriers to medical student interest and involvement in neurosurgery (<u>http://w3.cns.org/dp/2011CNS/7.pdf</u>). The project was acknowledged as the best poster in the CSNS section at the Congress of Neurological Surgeons in October 2011 (1). Briefly, two separate surveys were designed to assess perceptions of neurosurgery in the present medical school curriculum; one targeted attending neurosurgeons and the other, third and fourth year medical students. Forty-seven percent (47%) of students indicated that clinical mentors were a primary reason for deciding on a chosen specialty, yet only 40% of students had any opportunity to work with neurosurgeons during medical school. Seventy-eight percent(78%) of attending neurosurgeons stated that working clinically with a neurosurgeon was the crucial factor resulting in the decision to pursue the field. Thus, mentorship is an important component of attracting dedicated students into our field as well as helping them to start their careers.

A medical student mentorship program was first developed by WINS in 2004 after the Residency Review Committee approached WINS to help find ways to increase female applicants for neurosurgical residencies, and has been successfully continued under the leadership of Dr. Roxanne Todor. I have been fortunate enough to serve as co-director with Dr. Todor over the last two years. Over the past two years, we have paired 80 mentees with mentors, both male and female, based on interest and geographical preference. Drs. Karin Muraszko and Deborah Benzil created a brochure explaining the process entitled "So you think you want to be a neurosurgeon" available on the WINS website at <u>http://www.neurosurgerywins.org/career/index.html</u>. We have augmented this resource with podcasts addressing the most popular 10 questions asked by medical school mentees. Our webpage also points out a number of other on-line resources, available at <u>www.aans.org/Young%20Neurosurgeons/Medical%20Students.aspx.</u> Mentorship from both men and women is important at all stages of one's career, from medical school to residency to practice. With the support of YNC and other organizations in organized neurosurgery, we hope to expand our mentoring program by attracting diverse mentees and mentors, to improve access to our resources, and to ultimately increase the number of medical students interested in our field through mentorship.

Figure 1 depicts our current mentors broken down by location and gender. As the graphic displays, both men and women serve as mentors. We welcome all medical students interested in neurosurgery to participate. Often times, it is a commonality such as geography, a military commitment, and/or similar career interests that is most important for the relationship. What the mentoring experience constitutes ranges dramatically based on what works for the mentee/mentor pair. Sometimes, it is as simple as a phone call while other times a long-lasting relationship develops. If you are a resident or an attending and are interested in finding out how you can be involved with this program, please contact Ashley Hamm at <u>aeh@aans.org</u> for further information. The experience of helping someone maximize all their opportunities as they discover our field is truly rewarding.

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1. Pilitsis JG, Beverly S, Mazzola C, Ashley Jr, W, Colen C, Asadi K, Steinmetz M. Neurosurgeon and Student Perspective on the Current Medical Education in Neurosurgery. Congress of Neurological Surgeons. October 2011.

Up and Coming...A YNC Medical Student Fellowship

by William W. Ashley, Jr., MD, PhD, MBA

YNC Medical Student Task Force Chairman-emeritus

Neurosurgery is a rapidly evolving specialty and is facing complex new challenges. This offers exciting new opportunities for growth and improvement. As a specialty, we must leverage these opportunities to our best advantage. In order to ensure that we can do this effectively we must continue to attract and retain the best medical students. One of the goals of the YNC, and specifically the Medical Student Task Force, is to develop and nurture student relationships in an effort to create a pathway for interested and capable students to pursue careers in neurosurgery. With that in mind the AANS has approved funding for the YNC <u>Medical Student O</u>rganized <u>N</u>eurosurgery Fellowship or MISSION Fellowship.

The MISSION Fellowship will be a competitive, annual fellowship selecting two senior US medical students on alternate years. As a Fellow, students will –

- Attend meetings and participate on subcommittees under the direction of YNC mentors.
- Participate in the discussions and decision making processes that are critical to the success of the YNC and AANS.



• Identify a research topic that addresses an issue in the realm of organized neurosurgery. The topic will be selected or approved by the YNC and mentored by the Medical Student Task Force with the goal of completing the project and submitting an abstract for publication.

Organized neurosurgery is an integral facet of modern neurosurgery. By encouraging early medical student involvement, we hope to build lasting personal and professional relationships that will help strengthen a student's desire to pursue neurosurgical residency and stay active in neurosurgical organizations after the completion of training. Students can have the opportunity to be involved in projects with real world significance that impact our specialty as a whole. We are very excited about the MISSION Fellowship and ask for your assistance to make it a success. Please forward any questions to Chris Philips at <u>cap@aans.org</u>. Medical Students and neurosurgical training programs will be notified when applications are available.

Neurosurgery and Research: Pursuing a PhD by Jay Hauptman, MD, PhD

YNC Committee 2012-2016

When I first told my co-residents that I was thinking about getting a PhD during residency, I was initially met with confused looks and the occasional, "Are you nuts?" I began thinking about it early in my training, realizing through my mentors the true impact of translational research. I began to have dreams of making a meaningul contribution to our field that would change the course of neurosurgical disease for our patients.

Interestingly enough, I hadn't really considered getting a PhD during medical school. And if I had, since I didn't decide on neurosurgery as a career choice until my clinical years, for all I know it could have been in dermatologic research. For that reason, I think getting advanced research training once you've started to formulate a real career plan during residency is an outstanding idea. The PhD does many things for the neurosurgeon: it gives extensive training with the language and tools of basic science, teaches you how to run a lab (as opposed to learning on-the-fly as an attending), exposes you the wealth of grant opportunities, and gives you the credentials proving you know how to do all of these things. This is particularly relevant in the age of increased competition for grant funding and increased fiscal austerity within academic medicine.

With the help of my department, I engineered a plan to get the degree (using a pre-existing infrastructure at UCLA) within three years. Funding was mainly internal though I also supplemented it with grants received along the way. For any residents thinking about a PhD during training, I recommend planning early. I think the key to being successful at doing it quickly and efficiently is to have an experienced mentor who understands your goals, having a well-defined project at the outset with potential contingency plans should things not work out the way you envisioned (common in basic science), and being driven to get the work done and not treat the lab as casually as you might be tempted to. The extra time spent in the lab was well worth it, and I recommend it to any resident with a commitment to science who wants to go the extra mile in training. If anyone has any questions or needs help putting a plan together, I'm more than happy to help. You can contact me at jhauptman@mednet.ucla.edu

Neurosurgery and Public Health

by Krystal Tomei, MD, MPH

YNC ThinkFirst Liaison and 2011-12 Marshals Chairman

While contemplating how to spend my PGY-5 research year, I ran through my options. Should I: (1) revisit a basic science lab and commit myself to a year of "pipette thumb"; (2) perform micro-dissections on rat spines; (3) seek an in-folded fellowship; or (4) continue in my comfort zone as a perpetual student – Go back to grad school? That answer was easy; I decided to pursue a Master in Public Health.

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A few years ago, I packed up my Jersey City apartment and shipped up north to Boston to attend the Harvard School of Public Health (HSPH). And for an entire year, I was asked the question "Why is a neurosurgeon getting a degree in public health?" Failing to come up with an appropriately witty response, I was forced to think about all of the reasons I chose to use this flexible year to gain another \$35,000 debt. At the end of the year, I can truly say that it was worth every penny.

The truth is, on the surface it doesn't seem to make sense. I chose neurosurgery because of the amazingly detailed skill that is required of our very small specialty. I love neurosurgery because we treat what so few people can, or even want, to treat. So how, with that reason for choosing our specialty, did I decide on a Master in Public Health? I chose it because every day I see the shortcomings of our health care system which affect every specialty, large and small. I am forced to work within the confines of a system created by non-physicians, one that all too often fails those individuals who it intends to protect – our patients. I constantly fight a bureaucracy that stands between the physician and patient. So the beacon of a year spent at HSPH was the opportunity to impact change to this system.

I chose a focus in Health Policy, which allowed me to take a combination of courses to prepare myself for clinical research as well as courses that examined and evaluated the US health care system. I also had the fortune of starting my year at HSPH a few months after the passage of the Patient Protection and Affordable Care Act. It was truly a landmark year, with a major health care reform bill being enacted and many stipulations that created more questions than answers. My year at Harvard taught me more than just the skills and knowledge I will need to go forward with an academic career and continue my involvement in organized neurosurgery to make lasting change to our health care system. It taught me that there are so many others who care just as much about creating a health care system that works for everyone, patients and providers alike.

Whether you envision your role in research, in international health, in health policy, or so many other disciplines, a Master in Public Health affords anyone a fantastic opportunity to augment a clinical career. If any of this sounds intriguing, please don't hesitate to contact me at <u>KLTomei@gmail.com</u>.

Book Reviews by Stacey Quintero Wolfe, MD

The Human Brain in 1969 Pieces: Structure, Vasculature and Tracts Nowinski WL, et al. Thieme: 2012

The intricacies of the human brain make neurosurgery one of the most difficult and demanding specialties. An incredible feat of science, art, and technology, *The Human Brain in 1969 Pieces* is an updated version of *The Human Brain in 1492 Pieces*. This highly sophisticated computerized 3D neuro-anatomy atlas is now compatible with both MAC and PC.

The Human Brain in 1969 Pieces is a virtual cadaveric specimen, available for dissection over and over again. This computer program depicts nearly every anatomical structure of the brain in 3-D format. The cortex, white matter tracts, deep structures, ventricles, veins, and arteries down to 80 microns can be rotated, flipped, and removed with a simple click of the mouse, allowing for in-depth study of anatomical relationships. By simply rolling the mouse over a structure, it is identified, even down to tiny cortical arteries. No longer is it necessary to puzzle over a figure legend or flip through multiple pages in order to find a labeled structure!

This program is self-explanatory and easy to use. It runs smoothly without hiccups in the system. The subsystems of arteries, veins, white matter tracts, and brain structures can be viewed independently or in any combination. Multiple cutting planes facilitate dissection. It can be reset to its original view with a single stroke or saved in any permutation for use in study and presentations, such as PowerPoint. New features of the updated version include

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cranial nerves with their nuclei, a more realistic cortex parcellated into lobes, gyri, and sulci, and axial, coronal, and sagittal MR planes correlated with the 3D anatomy. This is a highly recommended resource for any neurosurgeon.

Surgery of the Craniovertebral Junction, 2nd Edition Bambakidis NC, Dickman CA, Spetzler RF, Sonntag VKH. Thieme: 2012

This updated edition of *Surgery of the Craniovertebral Junction* provides a comprehensive look at the unique pathology and anatomical complexity of the craniovertebral junction. The second edition includes technological advances since the first publication in 1998, focusing on surgical decision making and including new chapters on stereotactic radiosurgery, endovascular management of posterior fossa atherosclerosis, and endoscopic skull base techniques.

Beginning with chapters on the embryology, anatomy (by Drs. Rhoton and DeOliveira), biomechanics, radiographic, and clinical evaluation, the text then focuses on surgical indications and surgical techniques, including a large component of fixation and fusion techniques. This book is authored by masters in each genre of pathology and spans every type of pathology, including congenital, vascular, neoplastic, traumatic, and degenerative diseases. The technique section provides step by step coverage of each surgery and is very well-illustrated for ease in learning or reviewing each approach. Techniques such as the trans-oral, trans-facial, far-lateral, trans-petrosal, postero-lateral, jugular foramen approaches, and retro-sigmoid approaches are included as well as adjunct techniques such as endonasal, stereotactic, endovascular, and bypass. An additional nine chapters are dedicated to fixation and fusion techniques, from odontoid screws to occipito-cervical fusion.

This text also includes an interactive DVD with excellent videos containing cadaveric dissections, animations of surgical approaches and techniques, and a selection of short, narrated cases. The second edition of *Surgery of the Craniovertebral Junction*, is a valuable resource for all neurosurgeons to learn, or perfect, their knowledge of this challenging area.

Intracranial Aneurysms Samson DS, Batjer HH, White J, Trammell JT, Eddleman CS. Thieme: 2011

Intracranial Aneurysm Surgery: Basic Principles and Techniques is a user-friendly manual that takes a simplified, step-by-step approach to explaining the techniques of aneurysm surgery. It distils years of expertise of masterful surgeons into a straightforward in order to assist young neurosurgeons in learning their trade.

In this era of expanding endovascular techniques, it is well-recognized that microsurgical clipping is still a necessary and invaluable tool. Unfortunately, many trainees do not have the opportunity to learn clipping nuances by sheer numbers, and this short text provides those practical pearls and insights. The 200 page book is organized into discussions of carotid, middle cerebral, and anterior cerebral aneurysms followed by aneurysms of the posterior fossa and unique circumstances such as giant aneurysms and post-stent or coiled aneurysms.

Intracranial Aneurysm Surgery uses an engaging and conversational writing style to make complex concepts easy to understand and includes beautiful illustrations that elucidate aneurysm surgery techniques. As the authors emphasize, this is not an expansive text of all facets of aneurysm surgery, but (perhaps just as helpfully) a step by step manual to "how we do it in Dallas and Chicago". I would recommend this book as a valuable addition to any young neurosurgeon's library.

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Pocket Atlas of Spine Surgery Singh K, Vaccarro A. Thieme: 2012

The *Pocket Atlas of Spine Surgery* is just that: a concise 139 page picture text of the most common spinal surgeries. This is a practical atlas using actual surgical photos with anatomy and labels superimposed. From positioning to the step by step surgical approach to radiographic images, this book clarifies and simplifies basic spine surgery. This atlas includes visual instruction along with helpful pearls and possible pitfalls for the following surgical procedures: ACDF, cervical corpectomy, cervical foraminotomy (open and minimally invasive), occipitocervical fusion, laminectomy and laminoplasty with fusion, thoracic and lumbar pedicle screws, minimally invasive thoracic corpectomy, percutaneous cement augmentation, lumbar diskectomy (open, minimally invasive and far lateral), posterolateral fusion, TLIF, XLIF, ALIF, minimally invasive lumbar corpectomy, and percutaneous pedicle screws. The emphasis on newer and minimally invasive techniques makes this text useful not only for the trainee, but also as a refresher for the more experienced surgeon. It is an easy text to consult just prior to surgery as an anatomical, technique and instrumentation reminder.

This is an excellent and beautifully illustrated atlas for understanding the subtleties of the core open and minimally invasive spinal procedures. Another very valuable addition to the library of a young neurosurgeon.

Lateral Skull Base Surgery: The House Clinic Atlas Friedman RA, Slattery WH, Brackmann DE, Fayad JN, Schwartz MS. Thieme: 2012

Written by leading skull base surgeons from the renowned House Clinic, *Lateral Skull Base Surgery: The House Clinic Atlas* is an excellent reference of detailed lateral skull base techniques from an ENT perspective. This atlas provides readers with a well-illustrated, comprehensive overview of surgical procedures and techniques used to treat a variety of skull base diseases.

Including multiple skull base approaches, such as the orbitozygomatic, subtemporal, middle fossa, infracochlear, retrosigmoid, translabyrinthine, transcochlear, combined petrosal, far lateral, and infratemporal approaches, there are 192 high-quality illustrations depicting the step-by-step surgical procedures. Most useful to the neurosurgeon is the otolaryngologic anatomy and pearls of tumor resection, giving a unique perspective that can only enhance neurosurgical safety and finesse in the resection of such lesions, especially acoustic schwannomas.

Purchase of this text is accompanies by 1 hour of eight online surgical videos, including the above techniques, and offers insight and expertise from some of the most respected ENT, skull base, and neurosurgeons. It is an insightfully organized text of advanced surgical techniques that will assist any training or practicing surgeon caring for those with acoustic schwannomas and other skull base pathology.

Rhinology: Diseases of the Nose, Sinuses, and Skull Base Kennedy DW, Hwang PH. Thieme: 2012

Rhinology: Diseases of the Nose, Sinuses, and Skull Base, is a comprehensive reference covering current knowledge on the pathogenesis as well as the medical and surgical management of sinonasal and skull base disorders. This 800 page text offers in-depth coverage of all key topics in the subspecialty of rhinology, ranging from rhinosinusitis to endoscopic skull base reconstruction and more.

Most interesting to neurosurgeons, is a substantial section on surgical techniques for treating skull base disorders and tumors, including endoscopic skull base surgery. In addition to excellent discussions on the anatomy and management of sinonasal pathology, the surgical illustrations and endoscopic surgical pictures are outstanding, and incredibly useful in developing expertise in endoscopic and skull base surgery. Also included is a DVD containing

21 professional videos that demonstrate the key pearls, pitfalls, and surgical techniques of pathologies such as anatomy of the paranasal sinuses, orbital decompression, esthesioneuroblastoma, endoscopic approaches to the odontoid and clivus, pituitary adenoma, and juvenile angiofibromas, among many others.

In this age of increased interdisciplinary collaboration, this multimedia reference is very helpful for neurosurgeons who wish to expand their surgical expertise, develop a broader armamentarium of techniques, and successfully manage their patients with sinonasal and skull base disorders.

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American Association of Neurological Surgeons