

# Young Neurosurgeons' NEWS

## Focusing on Issues Relevant to Young Neurosurgeons

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## Chairman's Message



*B. Gregory Thompson Jr., MD*

Winston Churchill once said, "The price of greatness is responsibility." As neurosurgeons, each of us appreciates that while we are certainly privileged to care for and are often inspired by our patients, we also realize that this great privilege is inseparable from great responsibility. Because neurosurgery can be a consuming profession, it is particularly noteworthy and inspiring to recognize colleagues who successfully balance the responsibilities of professional work with additional assumed responsibilities of public service.

Recently the AANS Board of Directors approved the establishment of the "Young Neurosurgeons Committee Public Service Award." This award was established "to recognize and honor the extraordinary efforts of a young neurosurgeon who, outside the traditional art and science of neurosurgery, has served the public in an exemplary fashion, and in doing so brings both greater benefit to mankind and greater honor to our specialty." The first annual Young Neurosurgeons Public Service Award will be presented to Carl Laurysen, MD, on Wednesday April 25, 2001, at the annual Young Neurosurgeon's Luncheon during the AANS Annual Meeting in Toronto, Canada,

During this first year for the selection of this annual award, five names were submitted in nomination by members of the Young Neurosurgeon's Committee, including at least three truly outstanding nominees.

### Serving the Underserved

Dr. Carl Laurysen is a native of South Africa and completed his neurosurgical residency training in Calgary and a spinal neurosurgery fellowship at the University of Alabama. Since 1995 he has been on staff at Washington University in St. Louis.

Following a long-standing desire to return to Africa in an effort to improve the medical care on that underserved continent, he began to cultivate a relationship with the neurosurgical community in Nairobi, Kenya. His dream of a neurosurgical medical mission to Africa came to fruition in May 2000, when he organized and led a group of five neurosurgeons, one anesthesiologist and four neurosurgical nurses on a two-week medical mission based at the Kenyatta National Hospital in Nairobi.

Dr. Laurysen assembled the team from three separate neurosurgical organizations in St. Louis and also orchestrated the delivery of nearly \$500,000 worth of medical equipment and supplies to Nairobi. The mission successfully completed 25 operations on a variety of congenital and acquired defects. His team also provided numerous instructional presentations for the education of physicians, nurses and other healthcare staff at the Kenyatta National Hospital. Dr. Laurysen hopes to return to Nairobi this year and on an annual basis and wants to sustain an ongoing educational and medical service mission there.

Please join me in commending our colleagues such as Dr. Laurysen, both this year and in the future, as they inspire us and honor our specialty with their imagination, perseverance and intrepid service.

Nominations for the 2002 YNC Public Service Award may be submitted to Ms. Barbara Morrison, American Association of Neurological Surgeons, 5550 Meadowbrook Drive, Rolling Meadows, Illinois, 60008 or to [blm@aans.org](mailto:blm@aans.org). A formal call for nominations will be issued in the next YNC newsletter. Nominees should be an individual actively engaged in neurosurgery training or practice. The nominee must not be more than seven years out of neurosurgery training. This award has been established to recognize and honor extraordinary or unusual public service by a young neurosurgeon, not

# Message from the AANS President-Elect

By Stan Pelofsky, MD

A year is a very short time. A mere 365 days after I become president of the AANS in April, I will have to determine whether or not I made a difference for the organization and for you as members. In other words, I can neither waste time, nor can I sit back in complacency and wait for someone else to lead the debate regarding the medical, philosophical and financial issues that we as neurosurgeons and citizens face everyday. For this reason I have titled the theme of my presidency "Speaking Out," and I expect young neurosurgeons to join the dialogue.

A number of contemporary issues are worth speaking out about: the future of stem cell research, genetic material patents, handgun related violence and neurosurgical reimbursement, to name but a few. These issues are fraught with moral, ethical, religious and emotional fireworks that make them difficult to discuss and impossible to agree upon. But we must reach a consensus about them and, what is more, we must speak out about them.

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Neurosurgeons can and should lead the medical community by developing strong position statements, some of which may be controversial, and then we must stand ready to lead national debates.

The task is large. Consensus is not reached overnight, and it is not done in the presence of only one opinion. It requires that all of us speak up individually in order for us to find our voice organizationally. It requires that you, young members of our profession, become actively involved in the process of shaping the future of neurosurgery and of the larger society.

Join me in this effort to bring meaning to the words of Henry Longfellow, who wrote: "Look not mournfully into the Past. It comes not back again. Wisely improve the Present. It is thine. Go forth to meet the shadowy Future, without fear, and with a manly heart."

In other words, there is no time like the present to speak out.

*Stan Pelofsky, MD, is President-Elect of the AANS.*

## Newsletter Mission Statement

This newsletter is distributed to all young neurosurgeon members of the AANS. The purpose of this newsletter is:

1. Promote communication among Young Neurosurgeon Committee members.
2. Inform the membership of research, educational, employment and international opportunities.
3. Inform the membership of new developments within neurosurgery that impact young neurosurgeons.
4. Provide a forum to discuss neurosurgical topics that will aid young neurosurgeons.

## New Issue of Neuro-Oncology

A new issue of *Select Review in Neuro-Oncology* was released in December 2000. The review is an online summary of current literature on brain tumors.

The resource is sponsored by the Joint Section on Tumors of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons. The site's address is: [www.neurosurgery.org/tumor/selectreview](http://www.neurosurgery.org/tumor/selectreview).

The review has a multidisciplinary focus, supported by individuals in 10 different disciplines. The review is divided into four sections: journal article reviews, meeting abstracts, feature stories and "What's Hot in Neuro-Oncology."

A notification listserv to tell users when an issue has been released is available.

The editor-in-chief is Anthony L. Asher, MD, of Charlotte, N.C.

# Overview of the Professional Conduct Committee

By W. Ben Blackett, MD

The Professional Conduct Committee (PCC) of the AANS is a standing committee appointed by the AANS president. Current members are W. Ben Blackett, MD, Chairman, Ulrich Batzdorf, MD, Joseph Hahn, MD, and William Shucart, MD.

The business of the committee is to evaluate complaints by members of the association about other members. The committee follows procedures set forth under AANS bylaws Article II, Section 3 as well as the procedural guidelines of the PCC. Following a formal hearing on the charges the committee makes recommendations to the AANS Board of Directors. Recommendations may be for dismissal of the complaint or for imposition of some sanction. Sanctions include a letter of censure, suspension of membership or expulsion from the association. At times a letter of admonition instead of a formal sanction may be recommended.

The PCC has no independent investigative authority and functions only as a hearing committee for complaints brought before it and prosecuted by one or more members against another individual or group of members. The committee then makes recommendations to the AANS Board of Directors, which has the authority to sanction a member.

Any member for whom a sanction has been voted by the Board of Directors may appeal that decision to the general membership at an annual business meeting. An appealed sanction is not final unless approved by a majority of the membership. If less than a majority of the voting members at an annual business meeting support the action of the Board of Directors the claim is deemed to be dismissed. Due process and the rights of all parties are carefully respected throughout the proceedings.

Most of the complaints brought before the PCC have involved testimony by an AANS member while acting as an expert witness in a medical malpractice lawsuit. Complainants before the PCC have often been defendants in malpractice lawsuits but also have been non-defendant expert witnesses also appearing in the lawsuit. Claims brought to the committee and the Board of Directors frequently involve alleged misrepresentation of the standard of care and/or advocacy contrary to the requirement that testimony by AANS members be unbiased.

Final action on charges of unprofessional conduct since 1987 have included:

- Nine complaint dismissals
- Eight letters of censure
- Six six-month suspensions of membership
- One expulsion from AANS

A significant number of initial complaints are dropped because the complainant decides not to proceed with prosecution of the complaint. For the last several years the PCC has averaged between two and three formal hearings per year. Information on specific sanctions including a brief summary of the complaint

and the home state of the sanctioned member is published in the AANS *Bulletin*. The member's name is not published in the magazine but is sent to the sanctioned member's state licensing authority. In the case of suspension of membership or expulsion from the AANS, the National Data Bank also is notified. Information about whether a certain AANS member has been sanctioned may be obtained from the AANS through a subpoena.

The AANS has published standards for members testifying in legal actions. These are found in the AANS Code of Ethics, V, the Position Statement on Testimony in Professional Liability Cases and the Expert Witness Guidelines (section 16 of the AANS policy manual).

## Chairman's Message (continued from front page)

service to organized neurosurgery. Suitable nominees may serve the public through various means, including but not limited to public charities, medical or socioeconomic mission work, and governmental or legislative efforts. The second annual award will be presented in April 2002 in Chicago at the Young Neurosurgeon's Luncheon at the AANS Annual Meeting.

D O N ' T M I S S T H E

## 69<sup>th</sup> Annual Meeting of the AANS

April 21-26 in Toronto



*Details on pages 4 and 5*

# Learning Opportunities at the AANS Annual Meeting

The 69<sup>th</sup> Annual Meeting of the AANS April 21-26 in Toronto will offer an outstanding program.

“President Stewart B. Dunsker, MD, and the Planning Committee have organized a superb educational program,” said Paul C. McCormick, MD, AANS Annual Meeting Chair. “The Local Arrangement Chairs, Dr. and Mrs. James Rutka and Dr. and Mrs. M. Christopher Wallace, have planned a wonderful selection of tours and evening events that showcase all that Toronto has to offer.”

The theme of this year’s annual meeting is “Leading Neurosurgery through Science, Education, Innovation.”

A number of courses are particularly appealing to residents. Some of the highlights are:

## Saturday, April 21

### 8 AM-NOON

#### **Practical Clinic 003 Principles and Techniques of Examination and Evaluation of the Peripheral Nervous System for Residents**

This clinic will provide an overview of the neurosurgeon’s approach to patients with peripheral nerve injuries, entrapments and tumors.

### 1-5 PM

#### **Practical Clinic 007 How to Evaluate a Job (for Residents)**

James Bean, MD, will explain the issues to be considered in searching for a new practice location, describe how to analyze a neurosurgical practice and employment contract, emphasize important factors in the decision process and show how to make the most of a site visit and interview.



## Sunday, April 22

### 8 AM-NOON

#### **Practical Clinic 019 Surgical Anatomy for Residents**

Albert L. Rhoton Jr., MD, will review the microsurgical anatomy of operative approaches to the orbit, skull base, temporal bone, cavernous sinus and stellar regions; the lateral, third and fourth ventricles; and the posterior cranial fossa, cerebellum and lower cranial nerves, including the jugular foramen. The anatomy will be reviewed with stereo colored slides and video. Each of the three parts will be accompanied by a quiz.

### 1-5 PM

#### **Practical Clinic 030 Basics of Spinal Stabilization, Fusion, and Instrumentation for Residents**

This clinic is a general overview of principles pertaining to spinal fusion and instrumentation, including biology of bone fusion, spinal biomechanics and fusion indicants and techniques through the cervical, thoracic and lumbosacral spine. Saw-bones demonstrations and hands-on time are included.

## Monday, April 23

### 7:30-9:30 AM

#### **Breakfast Seminar 101 ABNS Board Preparation**

Current and former directors of the ABNS will discuss the salient features of preparing for and taking the oral board exam. Emphasis will be on the practical aspects of timing and adequacy of oral responses.

#### **Breakfast Seminar 107 Resident Course Video Presentation—Contemporary Management of Cervical Disease: How I Do It**

This seminar will include the neurological findings, radiodiagnostic studies, and surgical management of cervical disc disease. Clinical indications for surgery will include radiculopathy and myelopathy.



MR, CT, and Myclo-CT studies employed in the diagnosis of cervical pathology, be it disc disease, spondylosis, stenosis or early ossification of the posterior longitudinal ligament, will be reviewed in detail. The appropriate use of a single level discectomy, multilevel discectomy, single or multilevel corpectomy for the management of these entities will be presented in a combination of slide/video format. Technical aspects of disc resection will also be reviewed: i.e. awake intubation, awake positioning, intraoperative monitoring, drills used in disc resection, grafts used (autograft/allograft) with or without plating will be discussed.

## Tuesday, April 24

7-9 AM

### Breakfast Seminar 212 Developing a Successful Neurosurgical Practice

This seminar will feature outstanding practitioners of neurosurgery, who will describe their experiences creating and maintaining successful community neurosurgical practices. Partner relationships, marketing, patient and referring doctor service, and other issues will be discussed in detail.

## Wednesday, April 25

7:30-9:30 AM

### Breakfast Seminar 301 AANS Officers Breakfast with the Residents

During this seminar, residents will meet the officers of the AANS. The leaders of the AANS will tell the attendees about the organization and its many roles. The primary role of the AANS is to educate the members, but it also plays a role in helping and facilitating the practice of neurosurgery whether it is in private practice or in an academic setting. There will be an exchange of ideas and ample opportunity for questions and answers.



1-2 PM

### Young Neurosurgeons Session

#### Advice to a Young Neurosurgeon from another Young Neurosurgeon

*Roberto C. Heros, to be introduced by B. Gregory Thompson*

Roberto C. Heros trained in neurosurgery at the Massachusetts General Hospital. After three years as a faculty member at Pittsburgh University, he returned to Mass. General as Director of Cerebrovascular Surgery and eventually became Professor of Surgery (Neurosurgery) at Harvard Medical School. He was appointed the Lyle A. French Professor and Chairman of the Department of Neurosurgery at the University of Minnesota in 1989. In 1995, Dr. Heros went to the University of Miami as Professor, Co-Chairman and Director of the Residency Training Program. Dr. Heros is recognized as an international leader in cerebrovascular and skull base surgery.

Dr. Heros is currently Treasurer of the American Association of Neurological Surgeons and is President of the American Academy of Neurological Surgeons. A native of Cuba, Dr. Heros is the founding Chairman of the International Academy of Neurovascular Committee of the World Federation of Neurological Societies. He is a member of numerous neurological societies in Central and South America and has given over 400 scientific presentations as invited speaker. He has authored or co-authored four books and over 250 articles and book chapters. He was the founding Chairman of the National Brain Attack Coalition and was a member of the National Advisory Neurological Disorders and Stroke Council of the National Institutes of Health.

Dr. Heros serves on the editorial boards of *Stroke*, *Neurosurgery*, *Journal of Stroke and Cerebrovascular Disease*, and *Critical Reviews in Neurosurgery*. He is listed in *The Best Doctors in America*, *The Best Doctors in the Country* and *The Country's Best Heart Doctors*.

His talk is funded in part by an unrestricted educational grant provided by Aesculap.

#### Relax at Residents Lounge

The Synthes companies are hosting the inaugural Residents Lounge during the 2001 AANS Annual Meeting. While this will be a rendezvous and recaffeinate location, it also will provide residents with information on research concentrations, fellowships and other areas to aid career development. During the major program breaks, a nationally regarded speaker will discuss a career in a particular concentration of research and also discuss his or her institution's fellowship program.

# Evaluating Career Opportunities in Neurosurgery

By Craig H. Rabb, MD

Once a young neurosurgeon has investigated various jobs opportunities and interviewed for them, it is important to sit down and weigh the various factors that will help determine if the young neurosurgeon will be happy with his or her career choice. Below is a brief description of various important factors that must be considered when making a decision as to what type of practice to enter into.

- **Geography**—Geography is an intuitively obvious factor that influences what types of positions the young neurosurgeon will pursue. Unfortunately, most of the places that are widely considered to be ideal places in which to live are already overpopulated by physicians. This tends to limit the number of neurosurgical positions available and also tends to have a dramatic effect upon the compensation package. The simple laws of supply and demand are quite active in medicine today. Generally speaking, one should try to be as flexible as possible when it comes to geographical concerns. Often, smaller communities with fewer physicians nevertheless provide an excellent means of practicing quality medicine and are also advantageous in terms of compensation and quality of life.
- **Income**—Although this is certainly important, the amount of income should not play a preeminent role in the neurosurgeon's decision-making process. There are many anecdotes of neurosurgeons taking positions purely because of the large financial compensation only to be unhappy in their practice and ultimately leave. Hence, this should be very cautiously taken into account. Typical current incomes for starting positions range from \$125,000 to \$250,000 annually, depending upon the geography and type of practice.
- **Overhead**—Certain elements of the business of medicine are important variables to consider. In particular, malpractice insurance rates can vary from less than \$20,000 to more than \$100,000 per year. This often correlates with the amount of litigation in a given region. High premiums and the risk of lawsuits are not something most young neurosurgeons think about when coming out of residency but are definitely factors that will impact the surgeon's lifestyle and well-being.

Other expenses can vary. These include such things as rent and whether or not the practice employs physician-extenders for which the neurosurgeon will have to pay out of his accounts receivable. These factors have pros and cons that must be weighed on a case-by-case basis.
- **Contract type**—This is probably the most important component of the decision-making process. It is *absolutely imperative* that the young neurosurgeon who is offered a position with a given practice review the contract in detail with an attorney, preferably one who specializes in healthcare employment. The attorney will be able to give the young neurosurgeon a feel for what the marriage may be like on the basis of the overall tone of the contract. It is important to factor in such things as call schedules, who within the group takes call and how often. How patients are assigned is often detailed in the contract as well.

The partnership track is an absolutely critical issue that often leads to young physicians leaving a practice. The best contracts are one with a definite partnership track; this track usually takes one to two years. If a young physician enters a practice and is subsequently denied access to partnership or has this modified from the basis of the original contract, unpleasant interactions usually result.

As far as income, some groups provide a straight salary for a young associate; others offer a salary with a productivity-based incentive plan. Some groups allow the young neurosurgeon to sit in on business meetings, and others do not. Non-compete clauses are often inserted into contracts and the degree to which these can be enforced varies from state to state. Discuss this with an attorney. Unfortunately, the first job that a young neurosurgeon takes is very often not the job that he will stay with for a long time. Such non-compete clauses may influence the young neurosurgeon's ability to leave a practice and avoid having to move to a different community.

When I first graduated from residency, I was given a bit of advice by a senior neurosurgeon who stated "no one will look after you, but you." Unfortunately, this could not be more true.

There is no substitute for the school of hard knocks when it comes to learning about the business of neurosurgical practice and hopefully this information will be helpful to at least some of the readers of this publication. The author would be happy to assist with counseling young neurosurgeons looking for jobs. I may be reached at [craigrabb@rmna.net](mailto:craigrabb@rmna.net).

*This is the last of a three-part series on career opportunities in neurosurgery.*

## List of Officers

The officers of the Young Neurosurgeon's Committee are:

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# Washington Committee Update

By Richard G. Fessler, MD, PhD

The majority of us always wanted nothing more than to finish our training in neurosurgery and take care of our patients. However, soon after entering private or academic practice, we realize that others depend on us to earn their living and support their own families and aspirations. We depend on our staff and institutions to help us provide a range of services for our patients that reach beyond merely diagnosing surgical problems and operating. Tremendous changes to graduate medical education and federal financing of Medicare have profoundly affected our ability to support our staff, train residents and care for our patients.

The Washington Committee is composed of members of both the CNS and AANS. It is the political voice for organized neurosurgery. Through the Washington Committee, the AANS and CNS actively promote our concerns regarding reimbursement and neurosurgical practice, as well as graduate medical education and research. A brief description of some of the Committee's recent work helps to highlight its importance.

The Health Care Finance Administration (HCFA) sets guidelines for federal reimbursement in medicine. HCFA has progressively devalued surgical procedures while increasing the value of in-office work. The net result has been a substantial shift in reimbursement from specialists to primary care physicians. Through the Washington Committee, neurosurgery has actively objected to HCFA's methods because they do not accurately represent the cost of caring for neurosurgical patients. If HCFA's new guidelines are fully enacted in 2002, neurosurgery will suffer substantial reductions in surgical fees. Members of the Washington Committee will meet with the General Accounting Office this spring to recommend improvements in HCFA's practice expense methodology and data collection to accurately reflect the true cost incurred in treating neurosurgical patients.

The Coding and Reimbursement Subcommittee of the Washington Committee is tremendously active. With a coalition of general and orthopedic surgeons, the CPT editorial board recently supported our request for a revised -62 modifier to recognize co-surgery on anterior spine procedures. In addition, numerous CPT editorial changes have been initiated by neurosurgery, which will ultimately result in multiple new codes and splitting of ambiguous codes. Plus, new codes for intracranial endoscopic procedures will be added in 2003.

The federal government recently proposed funding only five years of post-graduate medical education. The five-year limit would have a substantial impact on our training programs. Through the Washington Committee, in conjunction with other surgical specialties, neurosurgery has actively opposed this plan. This effort appears to have been successful. A recent Medicare Payment Advisory Commission report stated that "at a minimum, the Commission believes that residents should be counted for the minimum training period required for board eligibility in the specialty they are pursuing."

In addition, members of the Washington Committee work with members of Congress to educate and assist in formulating legisla-

tion. Committee members have been actively involved with Senator Kennedy to create the "STOP Stroke Act of 2001." This bill would create a specific appropriation to generate matching grants for states to develop comprehensive stroke treatment and awareness programs. Senator Kennedy will introduce the legislation this session.

Other areas of activity for the Committee include legislation involving stem cell research, work with the FDA, Medicare support for patients involved in clinical trials, HCFA's proposed E & M guidelines and numerous other areas of government in which neurosurgery's views and interests need to be represented.

So, if you are feeling disenfranchised by the "system," stand up and be counted. The Washington Committee is as close as your phone or e-mail. It is composed of our friends and colleagues, all of whom donate their time and energy for the greater good of our specialty and, ultimately, for our patients.

## Silent Auction to be Held

By Lawrence Chin, MD

The Third Annual Silent Auction to benefit the Neurosurgery Research and Education Foundation (NREF) will be held April 23-25 during the AANS Annual Meeting in Toronto, Canada. The first silent auction was held at the AANS Annual Meeting in New Orleans under the leadership of Adam Lewis, MD. Each year the event has grown larger. This year's event will offer donated items with a total estimated value of greater than \$25,000.

The NREF was founded in 1981 by the AANS as an independent, non-profit organization dedicated to advances in the prevention and treatment of neurological disorders. Since 1983, 31 Research Fellowships and 29 Young Clinician Investigator Awards have been granted to young neurosurgeons. Clearly, this is an important cause for young neurosurgeons to support.

A Silent Auction booth will be set up at the registration area on Saturday and Sunday with selected items for bid available for viewing at that time. Starting Monday, the booth will be moved into the exhibit hall at the AANS Member Resources Booth. Bids will be accepted Monday and Tuesday from 9 a.m.-4 p.m. and Wednesday 9 a.m.-noon. Winners will be announced Wednesday at noon and prize pickup will occur between noon and 3 p.m.

Volunteers will be needed to monitor the auction at the booth and also to promote the auction at the meeting. If you can't volunteer your time, come by the booth for a Silent Auction button and help publicize the event to friends and colleagues at the meeting.

If anyone would like to volunteer or has suggestions, please contact me at (410) 328-3113 or at lchin@smail.umaryland.edu or contact Laurie Singer of the AANS at (888) 566-AANS, ext. 526.

## Pediatric Neurosurgeons Should Treat Complex Cases

By A. Leland Albright, MD

At the completion of accredited neurosurgery residencies, most neurosurgeons probably have adequate training in the fundamentals of pediatric neurosurgery (PNS) to care for children with basic neurosurgical disorders such as trauma, hydrocephalus, Chiari I malformations or tight filum terminale. They are rarely adequately trained to treat children with lipomeningoceles, complex craniosynostosis or difficult pediatric brain tumors such as craniopharyngiomas. There are several reasons why children with more complex PNS disorders should be cared for by pediatric neurosurgeons (neurosurgeons with fellowship training who do pediatric cases for 75 percent of their practice or at least 125 pediatric cases a year).

The first reason is related to the variable—and often minimal—training neurosurgery residents receive in PNS. The American Board of Neurosurgery has no minimum requirement for training in pediatric neurosurgery (Mary Louise Sanderson, ABNS, personal communication, March 2001). The amount actually received varies widely between residencies; some residents have three months of PNS while others have eight to 12 months. Is it likely that a neurosurgeon with three months of pediatric training could remove a posterior fossa ependymoma as well as a pediatric neurosurgeon?

Without adequate training, neurosurgeons tend to think of and treat children as if they were little adults. Children's neurosurgery is profoundly different from adult neurosurgery. Their differential diagnosis is different, the operative techniques used are often different (e.g., hemispherectomies, decompression of Chiari II vs Chiari I, repair of myelomeningocele), the effect of extent of resection for many tumors is different (resection of malignant gliomas correlates with survival in children but not in adults), the recoveries from operations are different (usually more complete) and the adjuvant treatments are different (e.g., irradiation is rarely used after removal of a malignant brain tumor in an infant).

Secondly, there is a logical correlation between how frequently neurosurgeons do a particular operation and their outcome for that operation; in the vernacular, "the more you do, the better you get." General neurosurgeons perform relatively few pediatric operations and rarely operate on children with complex disorders. For example, although brain tumors are considered classic neurosurgical disorders, they occur in only three to four per 100,000 children. Thus, a general neurosurgeon may see only one to four children per year with a brain tumor.

Given the many types of brain tumors children develop, it would be exceedingly difficult for neurosurgeons in most practices to sustain technical excellence in treating all the tumor types.

Published data have demonstrated a correlation between surgical volumes/experience and outcomes for many medical conditions, including aneurysms, multiple trauma, carotid artery surgery and

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## Subspecialty Fellowship Training Is Not Necessary

By Kamal K. Kalia, MD

In the last year, there has been a clear effort by members of the pediatric neurosurgical community to have only fellowship trained pediatric neurosurgeons caring for pediatric neurosurgical patients. There have been recent articles comparing outcomes in patients operated on by pediatric neurosurgeons and non-pediatric neurosurgeons, as well as editorials, emphasizing the need for subspecialization and certification of pediatric neurosurgeons. A blanket statement or regulation from organized neurosurgery to restrict a well-trained, board-certified neurosurgeon's ability to care for children would be unfortunate and harmful.

Who will care for the many shunted patients in my community that have a problem? What will happen to the frequent pediatric cases that require immediate neurosurgical attention? Why should a patient travel two hours if they can get quality care in their local community? And why, if my results with particular difficult pediatric cases (i.e. posterior fossa tumors) are comparable to pediatric specialists that do this surgery, should I transfer my patients to them?

I completed my training in neurosurgery at the University of Pittsburgh and entered private practice in Springfield, Mass. I recently received my board certification. My clinical exposure in Pittsburgh was heavily weighted in microsurgery and intracranial work, and it prepared me well for a career in all spheres of neurosurgery. I perform approximately 250 neurosurgical cases a year, with about 30 percent intracranial procedures related to tumor or aneurysm. About 15 percent of my cases are pediatric.

In addition to pediatric neurosurgery, I do a number of spinal instrumentation procedures and clip about 30 aneurysms a year. I handle all of these cases without having completed fellowship training. I believe this is a credit to a strong, high volume residency program. Subspecialty training is not necessary to perform excellent caliber neurosurgery encompassing both adult and pediatric cases. The more important issues regarding what cases a neurosurgeon should and should not do has to do with their experience, comfort level and results with particular cases.

My conviction that pediatric fellowship is not necessary is based on my personal experience, comfort level with cases and outcomes in pediatric patients I have treated. I practice at a Level I trauma center with dedicated pediatric and neonatal intensive care units, and full-time pediatric intensivists and pediatric oncologists. We are not a free-standing children's hospital, but we provide high-level, full spectrum pediatric care. Also in my community is a Shriner's hospital. This has a regular myelomeningocele clinic that I staff.

Over the last three years I have operated on 20 pediatric patients with intracranial tumors, and, in all but two cases, was able to obtain radiographic gross total resections with no morbidity except for one case of CSF leak and meningitis. There was no permanent neurologi-

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craniopharyngiomas.<sup>1-4</sup> In a recently published comparison of outcomes of children with malignant brain tumors, pediatric neurosurgeons were significantly more likely to remove 90 percent or more of the tumor (removals that improve survival) and to have significantly lower neurological morbidity than general neurosurgeons.<sup>5</sup>

Thirdly, although direct comparison of outcomes of general and pediatric neurosurgeons has been done only for brain tumors, published data indicate that pediatric neurosurgeons have excellent outcomes for a variety of operations. For example, in one study of pediatric neurosurgical outcomes, the five-year function rate of first shunts was 70 percent, the three-year function rate of first-shunt revisions was 60 percent, the need for transfusion in sagittal synostosis operations was 21 percent, the risk of neurological morbidity after tethered cord release was 6 percent and the risk of permanent neurological morbidity after brain tumor removals was 10 percent.<sup>6</sup> These are data which other pediatric neurosurgeons and general surgeons can use to compare their own outcomes. Those who believe that children can be cared for as well by general as by pediatric neurosurgeons will need to provide comparable data.

A fourth reason for having children with complex PNS disorders cared for by pediatric neurosurgeons is the medicolegal one. If I do an endoscopic third ventriculostomy or remove an intramedullary tumor and have complications, it is probably easier for me to respond to the plaintiff's lawyer who asks, "Doctor, how many of these operations have you done in the past five years?" than if I had done few.

But it works both ways. I do not operate on children with aneurysms, which occur in children so rarely that I cannot maintain technical competence for that operation. Therefore, I ask our adult neurosurgical colleagues to do the clipping or coiling. Likewise, children with glomus jugulare tumors are referred to skull base neurosurgeons and those with deep AVMs are referred to radiosurgeons. None of us can maintain excellence across the entire spectrum of neurosurgical disorders.

Lastly, there is a personal reason: we should treat our patients, especially children, as we would our own families. General physicians and neurosurgeons whose children develop moderate or severe neurosurgical disorders almost always have their children taken care of by pediatric neurosurgeons. Should we treat our patients differently? My personal guiding principle is that if I cannot do an operation well enough so that I would do it on my own child (were we to operate on our children), I refer the child to someone better.

In my opinion, it is not acceptable for a general neurosurgeon to do a pediatric case that he or she rarely does and have to "bail out" in the middle because of being unsure of how the operation should be done. It is true that many children in the United States live in areas where no pediatric neurosurgeon is readily available. But if these children have complex neurosurgical disorders, there

are relatively few situations in which they cannot be stabilized by the local neurosurgeon and then be air-transported to a pediatric neurosurgical center for definitive treatment.

#### Footnotes

1. Solomon RA, Mayer SA, Tarmey JJ. "Relationship between the volume of craniotomies for cerebral aneurysm performed at New York state hospitals and in-hospital mortality." *Stroke* 1996; 27:13-17.
2. Nathens AB, Jurkovich GJ, Maier RV, Grossman DC, MacKenzie EJ, Moore M, Rivara FP. "Relationship between trauma center volume and outcomes." *JAMA* 2001; 285:1164-1171.
3. Cebul RD, Snow RJ, Pine R, Hertzler NR, Norris DG. "Indications, outcomes and provided volumes for carotid endarterectomy." *JAMA* 1998; 279:1282-1287.
4. Sanford RA. "Craniopharyngioma: Results of a survey of the American Society of Pediatric Neurosurgery." *Pediatr Neurosurg* 1994; 21[Suppl]:S39-S43.
5. Albright AL, Sposto R, Holmes E, Zeltzer PM, Finlay JL, Wisoff JH, Berger MS, Packer RJ, Pollack IF. "Correlation of neurosurgical subspecialization with outcomes in children with malignant brain tumors." *Neurosurg* 2000; 47:879-887.
6. Albright AL, Pollack IF, Adelson, Solot JJ. "Outcome data and analysis in pediatric neurosurgery." *Neurosurg* 1999; 45:101-106.

## RUNN Seminar Set

The renowned Research Update in Neurobiology for Neurosurgeons (RUNN) Course will be held from Oct. 15-22 in Woods Hole, Mass. It is sponsored by the Society of Neurological Surgeons.

This year's program highlights are developmental neurobiology, neuroregeneration, neuroprotection, apoptosis, molecular genetics, stem cells, microscopy techniques, grantsmanship, scientific methodology, neoplasia and signaling.

Course directors are Issam Awad, Charles Hodge, Ed Oldfield, Allan Friedman, Bruce Andersen and Robert Dempsey.

For information or to register, call Catherine Awad, course coordinator, at (303) 806-0777, e-mail her at caawad@hotmail.com, or visit the RUNN Web site at [www.societyns.org](http://www.societyns.org).

# Neurosurgery Research and Education Foundation

By Gail Rosseau, MD

The Neurosurgical Research and Education Foundation (NREF) is the sole mechanism by which organized neurosurgery supports its own research. Since its founding in 1981, the NREF has awarded more than two millions dollars to promising young neurosurgeons.

The NREF supports two programs that advance basic science in neurosurgery and, more recently, advance clinical research in neurosurgery as well. These are the Research Fellowship and the Young Clinician Investigator Award.

First awarded in 1983, the Research Fellowship grants two-year awards of \$35,000 per year for a total of \$70,000 for young researchers with promising scientific projects. Past grant recipients include:

Tord D. Alden, MD  
Lilyana Angelov, MD  
John J. Aryanpur, MD  
Gregory Brandenburg, MD  
E. Thomas Chappell, MD  
John Paul Elliott, MD  
Frank Feigenbaum, MD  
Gregory D. Foltz, MD  
Judith L. Gorelick, MD  
James D. Guest, MD  
Michael M. Haglund, MD  
Griffith R. Harsh IV, MD  
Samuel J. Hassenbusch, MD,  
PhD  
William D. Hunter, MD

Babak S. Jahromi, MD  
D. Kyle Kim, MD  
Mark S. LeDoux, MD, PhD  
Joung H. Lee, MD  
Sunghoon Lee, MD  
Robert M. Levy, MD  
Guy M. McKhann II, MD  
Richard G. Parker, MD  
Joseph M. Phillips, MD,  
PhD  
John H. Sampson, MD  
Steven J. Schiff, MD, PhD  
James M. Schuster, MD  
Stephen L. Skirboll, MD  
Charles J. Weitz, MD

The Young Clinician Investigator Award was first given in 1986. This award is a one-year commitment of \$40,000 to help the investigator pay for expenses associated with a research lab. Past grant recipients include:

Lawrence Chin, MD  
E. Sander Connolly, MD  
William Couldwell, MD  
Mark S. Dias, MD  
Kenneth Follett, MD, PhD  
Robert P. Glick, MD  
Robert E. Gross, MD  
Samuel J. Hassenbusch, MD,  
PhD  
Diana L. Kraemer, MD  
Frederic F. Lang, MD  
Carl Laurysen, MD  
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Frederic B. Meyer, MD  
Donald M. O'Rourke, MD  
Jeffrey J. Olson, MD  
Ian Pollack, MD  
Abbas F. Sadikot, MD, PhD  
John H. Sampson, MD  
Warren R. Selman, MD  
J. Marc Simard, MD, PhD  
Gray K. Steinberg, MD, PhD  
M. Christopher Wallace, MD  
Julian K. Wu, MD  
Eric L. Zager, MD

The NREF is a key initiative of the AANS. It is a highly successful program which has "launched" the careers of many promising young neurosurgeons. It is a source of funding which is unique in its administration—by and for neurosurgeons.

The beneficiaries of this program are young neurosurgeons in particular and our entire specialty in general. The Executive Council of the NREF, chaired by Julian T. Hoff, MD, is grateful to the Young Neurosurgeons Committee for their fund-raising efforts via the Silent Auction at the AANS Annual Meeting. The Council pledges to continue its efforts to increase the number of neurosurgeon researchers who can be supported by these grants, as well as the scope of the projects receiving support.

For further information please contact Gail Rosseau, MD, at [Grosseau@cinn.org](mailto:Grosseau@cinn.org).

## Subspecialty (continued from page 8)

cal morbidity. I am proud of these results and would stand them against the results of any other pediatric neurosurgeon. These are the cases, however, I have chosen to perform based on my skills and comfort level.

There are other cases when I do not feel comfortable caring for a patient (either pediatric or adult). For example, I would definitely transfer a patient with a large craniopharyngioma to a neurosurgeon that sees a higher volume of these tumors. In the private practice situation within a relatively small community, there is little room for error. The morbidity of surgery for a case like this is high even in the best of hands. In these cases I prefer to refer patients to surgeons who do these cases more frequently.

Personally, with my microsurgical experience, I feel I could do as good a job as the "specialist" down the road, but I will not take on this case. Unfortunately, the situation created by our litigious society and by our own colleagues emphasizing subspecialty care makes it very difficult for me to perform these cases with high risk for morbidity. Less skepticism is cast when a "pediatric" neurosurgeon's patient has a severe neurological complication. Parents and pediatricians would consider this an unavoidable consequence. If my patient, on the other hand, suffered serious morbidity, there may be a question raised if this could have been handled better elsewhere.

My community has significant pediatric neurosurgery needs that I fulfill: the treatment of neonates with intraventricular hemorrhage, children with shunts, pediatric trauma and tumors and spina bifida patients. If I encounter a child with a difficult management issue, significant resources are available to obtain consultations without having to transfer the patient. In this day and age with e-mail, phone consults, scanners and Internet medical searches, I can get an opinion of a neurosurgeon I trust that has a particular area of expertise very rapidly. This does not mean that I should not practice pediatric neurosurgery because I need to get consultations on difficult cases. In fact, because there are so many unusual and rare cases in the field of

*continued on page 11*

# Coding Corner

By Gregory Przybylski, MD

Over the past several years, the Current Procedural Terminology (CPT) Editorial Panel has devoted significant attention to a pair of important modifiers. These two digit codes are appended to the five digit procedure codes in order to identify special circumstances. Although the multiple procedure modifier –51 is most commonly encountered for use when two independent procedures are performed concurrently during the same operative session (for example, decompression and arthrodesis), two other modifiers that have undergone a significant amount of review are the –62 co-surgery modifier and the –22 unusual procedural services modifier.

Most of the discussion regarding the co-surgery modifier has focused upon its use in anterior thoracolumbar spine procedures. In CPT 2001, this modifier is used once during an operative session to designate a single code that is shared between two surgeons (an approach surgeon and a spine surgeon), each of whom is performing a portion of the work encompassed by that code as a primary surgeon. Since the approach to the anterior thoracolumbar spine is considered an integral part of the decompression and arthrodesis codes, the –62 modifier must be used on one of these codes if an approach surgeon performs this component of the procedure. Each surgeon is then reimbursed 62.5 percent of the allowable payment for that code (according to HCFA payment policy).

If the approach surgeon remains to assist for other procedures during that operative session, the –80 assistant at surgery modifier may be appended to the appropriate additional codes. The use of exploratory thoracotomy and laparotomy codes is considered inappropriate to describe the work of the approach. Both surgeons must dictate separate operative notes to document their respective components of work.

## Expanding the Use of -62

There has been significant concern among the approach surgeons regarding inadequate reimbursement for their work during more complex spinal procedures, given the limitation of –62 to a single code per operative session. Several alternative methods have been discussed and proposed at the CPT Editorial Panel including a new modifier for spinal surgery, revision of the existing –62 modifier language and development of anterior thoracolumbar approach codes similar to the codes developed for skull base surgery (approach codes and definitive procedure codes). Each of these methods was thoroughly discussed among the concerned groups.

During the February Panel meeting, a consensus group of approach and spinal surgeons again presented the rationale for a modification of the current –62 modifier. After examining the variability of work division observed nationally, the flexibility of the –62 modifier and its recognition by Medicare and many third-party payers, the consensus group concluded that the best method to describe this work was to expand the use of –62 to additional level codes (which likewise would include the additional approach work to expose another level). Although a similar proposal in November was tabled for reconsideration, it appears that the Executive

Committee of the CPT Editorial Panel will support a modification of the –62 modifier for CPT 2002.

It is important to note that during HCFA's examination of payment on actual claims, significant instances of inaccurate coding were identified. For example, one surgeon would not use the –62 modifier, receiving 100 percent payment of the allowable, whereas the other surgeon would correctly use the –62 modifier, receiving 62.5 percent payment of the allowable. It was suggested that these claims will be retrospectively reviewed for overpayment.

Substantial efforts have also been devoted by workgroups on the Panel regarding the description of surgical services in altered surgical fields. The Panel acknowledges the additional physician work that may be encountered in areas of prior surgery containing scarring, inflammation, adhesions, altered anatomy, areas of prior irradiation, surgery on low birth weight infants, and surgery after trauma.

## Reconsidering -22

Concerns about the varied reimbursement policies for the –22 unusual procedural services modifier led to the development of the new –60 altered surgical field modifier for CPT 2001. Essentially, these specific circumstances were excluded from use of the –22 modifier. However, HCFA developed a payment policy that would not recognize the –60 modifier. This posed a significant coding dilemma in that HCFA continued to recognize –22, but this modifier could no longer be used for altered surgical fields in 2001. Consequently, the Panel is currently considering return to the prior descriptor of –22 for all of these circumstances and eliminating the –60 altered surgical field modifier.

## Subspecialty (continued from page 10)

pediatric neurosurgery, I'm sure many of the academic pediatric neurosurgeons consult their partners frequently on these same difficult cases.

When I completed residency my mentor advised me to operate on cases where I felt comfortable and in situations where I could look parents in the eye and feel in my heart that I was giving high quality care. I have always and will continue to do that. These cases include pediatric neurosurgical cases. The issue here is comfort and competency of an individual surgeon dealing with a particular problem. The onus is on the surgeon to know what he or she can and cannot handle.

I am thankful I have a high quality children's hospital down the road. I am just as thankful to have a good interventional neuroradiologist down the road for certain types of aneurysms. It is good to have people out there to refer patients to when I don't feel I can "look the parents or family in the eye." It is comforting to know they are there to help me when parents or families doubt my ability or when I am uncomfortable about a child. But in other circumstances, let me practice my profession without fear of restriction by a regulatory agency or a national medical board.

**AANS Young Neurosurgeons Committee**  
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This highly interactive course will review basic science principles, clinical diagnosis strategies and operative techniques, and familiarize you with the oral board method of examination. Each day, experienced neurosurgeons will critique your skills in neurosurgical management and in organizing responses to oral board type questions. Faculty members for this course are not currently involved in giving the neurosurgical boards and the AANS has made no attempt to obtain questions from previous examinations.

To find out more about this course, or to register, call the AANS Department of Education and Practice Management at (888) 566-AANS.

***The American Board of Neurological Surgery does not require this course before taking the Boards.***