

About the Cover...

The movement away from traditional fee-for-service medicine brought on by the advent of managed care has caused unprecedented changes in the health care environment. To gauge the amount of change affecting neurosurgeons, particularly over the past three years, The American Association of Neurological Surgeons and the Congress of Neurological Surgeons jointly conducted a comprehensive survey of neurological practice in the United States in 1995.



Results of that survey show that managed care has indeed had an impact on neurosurgeons in terms of volume of services and procedures they provide. Further, sources of payment for neurosurgical services have changed significantly in the eight years since the 1987 comprehensive survey.

For highlights of the 1995 survey report, please read "Comprehensive Practice Survey Shows Impact of Change in Health Care Environment," beginning on page 9 in this issue of the *Bulletin*.

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AANS Bulletin

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Neurological Surgery 1996—At the Crossroads with Assessment and Accountability

Quality Improvement initiatives are not new. In 1942, W. Edward Deming was already lecturing on methods of statistical quality control for the benefit of our war effort. In post-World War II Japan, he taught those principles as management techniques to industrial leaders. Similar concepts were applied to medicine as part of the 1988 National Demonstration Project for Quality Improvement on Health Care (NDP). That same year, Arnold S. Relman, MD, (*NEJM*, 11-3-88, 319, No. 18), predicted the coming of a Third Revolution in Medical Care, an Era of Assessment and Accountability. That era is already upon us. We all need a better information base in order to knowledgeably act rather than passively react within this new environment.

Our AANS Membership should be aware of the possibility that their practice behavior—resulting from the application of various types of monitoring methods—is being assessed. They should also become better informed as to how that evaluation occurs and for what purposes. It has led, as a natural consequence, to both qualitative (patient satisfaction) and quantitative (medical or clinical result) outcomes research. In one way or another, it is going on all around us.

Changing Physician Behavior

The large medical organization with which my group is affiliated, Intermountain Health Care, Inc. (IHC), has, for some time, been employing Quality Improvement (QI) methodology. In 1987, they corroborated the work of John E. Wennberg, MD, (*Science*, 1973:142, 1102-8) in surgical variation analysis as it applied to TURP operations and have been performing similar studies in different clinical areas ever since. Demonstrated changes in physician behavior have convinced them that the considerable workforce, time and money they have invested in these studies has resulted in significant clinical quality improvement.

A recent IHC initiative, Patient Perception of Quality Monitoring System (PPQMS), studied, by telephone follow-up, all patients discharged from three IHC hospitals between September and December 1995. To any survey evaluation response of *fair* or *poor*, follow-up questions by the



J. Charles Rich, Jr., MD

interviewer focused carefully on problem areas—including physician services.

Why does physician behavior change? Suppose that you are in a departmental meeting and a slide is projected onto the screen entitled: *Caring and Concern of Physicians—Surgical Inpatients, Fall 1995*. The slide compares you with your peers on the basis of detailed encounters between your patients and well-trained, experienced interviewers. You note, having been informed only of your individual bar-graph number, that about 50 percent of your patients rated you as having shown *very good* or *excellent* caring and concern for them. One of your colleagues—identity unknown to you—has a bar-graph result signifying that more than 90 percent of his or her patients rated the care and concern rendered to them as *very good* or *excellent*. The patients whose responses are being compared were in the same hospitals, treated during the same 90 days, and underwent the same types of operations.

To IHC's credit, the data that has been assembled and the results of the comparisons have not been used for punitive purposes. Rather, they intend to change behavior—and have found a rather effective way to do that. The PPQMS study, therefore, exemplifies another effective application of QI and also the increasingly evident link between assessment and accountability.

Quality Clinical Outcomes

Patient encounters with hospitals and physicians continue to provide large

amounts of data obtained by increasingly sophisticated means. It is generally divided into three categories: patient satisfaction, cost comparisons, and clinical or medical outcomes. There are obvious applications presently feasible for the first two informational categories. Clinical outcomes, however, when subjected to rigorous scientific scrutiny, are difficult to accurately delineate. After several years of intense study and the expenditure of staggering amounts of money, the precise definition of what constitutes a *quality medical outcome* remains elusive.

Scientifically convincing outcomes data are of great potential value to payers. Physiologists, orthopedic surgeons, and neurological surgeons, for instance, sometimes differ in their approach to the diagnosis and treatment of cervical and lumbar radiculopathic syndromes. Since a given Health Plan Physician Board is likely to increasingly employ the reasonable criteria of *value = quality of outcome divided by cost*, in deciding about referral decisions, who will end up providing an accurate definition for the numerator on the right side of that equation and to whose advantage will that definition derive? The determination will be made—optimally with our collaboration and the input of our expertise, but no doubt it will be made by someone.

Coordinated Effort Needed

In concert with our sister organization, the Congress of Neurological Surgeons, we have assembled a highly competent Quality Assessment committee. The potential scope of their agenda, however, in both the breadth and depth of the information base they confront, is daunting. Unlike IHC, the AANS and CNS have neither the staff workforce nor financial resources necessary to employ the optimal methodology required to evaluate very large numbers of patients. A coordinated effort, mobilizing expertise from the various Joint Sections, will be necessary if we are to have any hope of success. Inter-organizational and inter-specialty cooperation will also be essential. Duplication of the enormous amount of work already done by others would constitute a luxury that none of the involved organizations can afford.

(continued on page 8)

The Physician Workforce and Its Impact on the Health Care System

By Anne Esposito, Legislative Director
Washington Office

Throughout the contemporary health care reform debate there has been a good deal of consideration given to the size of the U.S. physician workforce and its impact on the health care system. Two key organizations — the Institute of Medicine and Pew Health Professions Commissions — have stepped into the spotlight regarding physician workforce issues.

The Institute of Medicine (IOM), chartered in 1970 by the National Academy of Sciences to enlist distinguished members in the examination of policy matters pertaining to the public health, recently published the report, “The Nation’s Physician Workforce; Options for Balancing Supply and Requirements.” The Pew Health Professions Commission, with the mission to assist workforce policy makers and educational institutions in producing health care workers who meet the changing need of the American health care system, recently released their third report entitled, “Critical Challenges: Revitalizing the health Professions for the Twenty-Fist Century.” As the U.S. Congress continues to evaluate the federal government’s role in shaping the nation’s health care workforce, these two organizations will continue to play a key role in the ongoing debate.

IOM Report

The IOM established a Committee to examine physician workforce issues. The IOM study attempts to discover if there is an aggregate physician surplus, the impact of such a surplus on cost, quality, and access to health care, and what can be done to deal with any surplus that exists.

While the Committee was hesitant to label the current level of physicians as a surplus, there was consensus that at the present time the nation has an abundant supply of physicians. A debate over the use of the word surplus revolved around the need to view the data in the context of the overall health care system. However, the Committee notes that there is just cause to be concerned that supply in the future will be excessive due to the increase in the number of physicians in

training. The Committee also mentions concern about the increasing numbers of international medical graduates (IMGs).

Regarding the effect of an oversupply of physicians on key elements of the health care system, no beneficial effect can be seen on costs, access, or quality. It has not been shown that a surplus of physicians will improve the quality of patient care, and, in fact, a surplus may dilute quality. The Committee also commented on the possible underemployment and underutilization of future physicians and the waste of human resources. The high numbers of IMGs are thought of lower opportunities for able American young persons. However, the Committee does point out that too few physicians is more detrimental than too many. Ideally, society should strive for a balance between physician supply and societal requirements. The Committee strongly recommends some action be taken to moderate current growth in physician supply.

“...the Committee notes that there is just cause to be concerned that supply in the future will be excessive due to the increase in the number of physicians in training.”

The majority of the IOM report is then devoted to various strategies for addressing the issue of physician supply. Five major policy recommendations were advocated by the Committee. These recommendations were recently presented to the Congress at a hearing on graduate medical education convened by the House Ways and Means Health Subcommittee.

- ◆ No new schools of allopathic or osteopathic medicine should be opened.

- ◆ Class sizes in existing schools should not be increased, and public funds should not be used to expand class size or open new schools.
- ◆ The total number of first-year residency slots should more closely mirror the current number of U.S. medical school graduates, although specific parameters are not addressed. The Committee realizes, however, the importance of implementing a new mechanism for replacement funding for IMG-dependent hospitals that provide substantial care to the poor and disadvantaged.
- ◆ The U.S. Department of Health and Human Services should collect and make available information on physician supply, including the requirements and status of career opportunities. This information would be available to policymakers, educators, professional associations, and the public.
- ◆ The Department of Health and Human Services should provide resources for research on physician supply and requirements.

Pew Report

The view and intent of the Pew Commission Report is slightly different. The Pew report was intended as a guide for health care professionals. The report addresses survival and advancement in this changing health care environment. An assessment of the current reforms being undertaken in the health professions and specific examples of these reforms are included. However, the bulk of the report outlines a set of recommendations to serve as an early twenty-first century survival guide for America’s health care professions. The Pew Commission also presented these recommendations to the House Ways and Means Health Subcommittee.

In making its recommendations, the Commission differentiated between the actions necessary for medicine, nursing, dentistry, pharmacy, and public health.

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► Physician Workforce

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Some general recommendations related to physician workforce and training issues. For example, the Commission recommended the development of partnerships. These alliances would be with managed care organizations for training and clinical research, with computer companies to develop information systems, and with state governments to meet the health needs of the public. Recommendations for allied health professions include improved education and practice linkages with diverse delivery environments, and the creation of innovative collaborations between professional associations. It was also noted that the collection, evaluation and dissemination of data related to allied health education and training should also be improved.

The Pew Commission recommendations for physicians include the following key provisions:

- ◆ Decrease the number of graduate medical training positions to the number of U.S. medical school graduates plus 10%.
- ◆ Reduce the size of new medical classes by 20-25% over the next ten years. This goal should be met by closing medical schools and not by reducing class size.
- ◆ Graduate medical training programs should be redirected so that by the year 2000 a minimum of 50% of all programs are in primary care areas (which includes family medicine, general internal medicine, and general pediatrics).
- ◆ Create a public/private payment pool for funding health professions education. This pool would be tied to insurance premiums and would achieve public health policy goals.

The debate on graduate medical education and physician workforce will likely continue well into the future. While many believe there is an oversupply of physicians in this country, there is no agreement on how to precisely address this

potential problem. In the short term, the Congress will likely consider such remedies as restricting the number of IMGs eligible for graduate medical education funding and reduced funding for surgical residents. President Clinton has proposed the creation of an independent Commission to further study the issue and make specific recommendations. Regardless of the approach taken, the recommendations and proposals must be based on sound and reliable research and data. The AANS and CNS will monitor and be participants in this ongoing debate.

Addenda

Medicare Practice Expenses. The Health Care Financing Administration (HCFA) is continuing its data collection and research to develop new resource-based practice expenses for the Medicare Fee Schedule. The AANS and CNS continue to have concerns about this effort, particularly the timetable for implementation. HCFA is currently one year behind schedule, but is nevertheless required by law to implement the new values on January 1, 1998. We are concerned that the agency will use proxy data and formulas to create the values. The AANS and CNS, along with over 25 other medical specialties, are lobbying Congress to amend the new law and give HCFA an additional year to conduct the research. In the meantime, to ensure that neurosurgeon's practice expenses are adequately accounted for, the AANS and CNS are participating in the HCFA data collection process as well as a private study being conducted by the American College of Surgeons.

Medicare Fee Schedule. HCFA recently published a proposed rule for the "Five-Year Review" of the RBRVS, which will make changes to the current physician work values of the Medicare Fee Schedule. Overall, neurosurgery received a 0.2% increase in its values, and almost all of our recommendations were accepted by HCFA. All the Evaluations and Management (E/M - office visits, consults, etc.) were also increased. The proposed changes to all the relative values, however, will increase the total payments under the Medicare fee schedule. Therefore, to

maintain budget neutrality, HCFA will have to apply a -7.63% budget neutrality adjustment.

Despite the increase in the E/M codes, HCFA did not increase the E/M component of global surgical services. The AANS and CNS will urge the agency to make these adjustments when we submit our comments.

Medicare Conversion Factor. The current estimates for the 1997 Medicare conversion factor are as follows: \$41.66 for surgical services (+2.1%), \$36.41 for primary care (+2.8%), and \$34.42 for other services (-0.6%).

Copies of the Institute of Medicine report are available from:
National Academy Press
2101 Constitution Avenue, N.W., Box 285
Washington, DC 20055
(800) 624-6242



Copies of the Pew Commission reports are available from:
Pew Health Professions Commission
UCSF center for the Health Professions
1288 Sutter Street, Suite 805
San Francisco, CA 94109
(415) 476-8181

ATTENTION ALL NEUROSURGEONS

If you receive a survey in the mail from the Health Care Financing Administration and/or its contractor, Abt Associates, requesting data on your practice costs, please notify:

Katie Orrico
Washington Committee
for Neurosurgery
(202) 628-2072

Recent Actions of the Board of Directors

The AANS Board of Directors met on two occasions during the 1996 AANS Annual Meeting in Minneapolis. The highlights are presented here.

Membership. The Board of Directors welcomed 14 new Active members; 31 Active (Provisional) members; 36 transfers from Active (Provisional) to Active membership; and 53 Associates. In addition, the Board approved 20 nominations for International Associate membership, as all met the requirements for that category as set forth in the Bylaws.

It was recommended and approved that a subcommittee of the Membership Committee be established to promote and encourage ongoing communication with the neuroscience nurses, physician assistants and others who are Associate members of the Association. It was proposed that this subcommittee be named the Subcommittee on Health Science Professionals.

Annual Meeting Fees. Nearly every year, in response to member inquiries, the Board reviews the various fees charged for Annual Meeting attendance. Although the leadership always tries to be cognizant of the concerns of the members, it was decided that a reduction in Annual Meeting registration fees for retirees and/or those who attend only a portion of the meeting, are not feasible. Therefore, the current Annual Meeting fee structure will remain in place. It should be noted here that every effort has been made to reduce the overall expenses at Annual Meetings while continuing to make it attractive to attendees.

Relationships with Orthopedic Surgeons. The Board of Directors, recognizing the importance of maintaining a cooperative relationship with the orthopedic surgery community, accepted the suggestion that neurosurgery occupy three seats on the Council of Spine Societies' (COSS) Board of Directors. The AANS, the CNS, and the Joint Spine Section will each appoint a representative to the Council. It is expected that the American Academy of Orthopedic Surgeons and the American Academy of Physical Medicine and Rehabilitation will also become members of the COSS Board.

Four principles were set forth by the Board to govern the relationship with COSS: 1) COSS should function as coordinator for its member organizations, assisting with collaboration between medical and the surgical specialties that treat disorders of the spine. COSS should also coordinate outcomes studies; 2) The COSS role should be educational, advisory, and scientific; 3) Each specialty's Residency Review Committee, under the aegis of the ACGME, should continue to guarantee quality of education, but should remain independent; and 4) Since neurosurgeons are, by definition, spine surgeons, the treatment of complex spinal disorders, including instrumentation, must be part of an accredited residency program.

Quality Assurance Committee. CNS President Stephen Haines, MD, presented a comprehensive proposal for the future operation of a new Quality Assurance Committee. The proposal addressed the importance of doing quality assessment through sound methodology while adhering to high standards throughout the process. The proposal was carefully reviewed, and enthusiastically endorsed by the Board of Directors. Sidney Tolchin, MD, noted that the Quality Assurance Committee will be joint with the CNS, and its new Chairman will be Robert Florin, MD. If a proposed Bylaws amendment is approved by membership in the July balloting, this committee will be renamed the Quality Assessment Committee.

Task Force on Quality of Neurosurgical Practice. James Bean, MD, reported to the Board on the conclusions and recommendations of the Task Force on Quality of Neurosurgical Practice of which he is Chairman. The Task Force stressed the following: 1) The importance of collecting standardized practice outcome data; 2) The submission of that data via Internet access to a central repository; 3) The development of database elements and field design for specific conditions; 4) The trial and verification of initial databases by the Sections; 5) The eventual development of software that would be compatible with individual offices, hospitals, etc.; and 6) All pertinent information should be provided to the membership through AANS and CNS publications and through the JCSNS. The Board directed that the report of the Task

Force be forwarded to the Quality Assurance Committee for their input, and assured Dr. Bean of its commitment to implement these important recommendations.

Joint Washington Committee. Chairman Russell Travis, MD, and consultants Katie Orrico and Charles Plante apprised the Board of the current activities in Washington in such areas as pallidotomy, managed care, and the various legislation under consideration at this time. Ms. Orrico presented a proposal for establishing a Political Action Committee (PAC) for neurosurgery. This proposal was extensively debated, and members of the Board had many questions about the feasibility of this endeavor. It was decided that no action would be taken at present.

Professional Conduct Report. As recommended by the Professional Conduct Committee, a notice of censure can be read elsewhere in the *Bulletin*.

Joint Council of State Neurosurgical Societies (JCSNS). Several JCSNS Resolutions were presented to the Board for consideration by the Council's Chairman, Stanley Pelofsky, MD. These resolutions involved the following areas: a means to analyze the marketing needs of neurosurgery; adding information about the Expert Witness Transcript File to our home page NEUROSURGERY : //ON-CALL™; asking the Washington Committee to support legislation opposing gag clauses in managed care contracts; and changes in the election procedures of the JCSNS.

Task Force on Pain Medicine. Roberto Heros, MD, related the points which the Task Force discussed, and asked for Board approval of the resulting recommendations. Prior to voting, discussion illustrated that Board members held disparate opinions about pain medicine. However, they did approve the following elements: 1) Increase education and professional development opportunities in pain medicine for neurosurgeons; 2) Strengthen RRC and ABNS requirements in pain medicine; and 3) Promote and encourage basic and clinical research in the field of pain. There was a motion to refer the recommendation to support a conjoint board in pain

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A Progress Report on the AANS—The Year in Review

Dear Colleagues:

I am pleased to report to you on the operation and activities of our organization during the past year as it carries out its mission as the spokesperson representing interests and efforts of North American Neurosurgery. In filling this role, The American Association of Neurological Surgeons (AANS) continuously re-assesses the needs of the membership, utilizing the multiple channels of communication operational between the membership and our administration as we deal with the diverse issues that impact upon all of us.

Membership

Our organization remains healthy and continues to grow. Our total membership grew by 9.3% during 1995, bringing the total to 4,739 members, the largest percentage gain in recent history. During the past year, 462 new members were inducted, 12 members resigned, and we received notification of the death of 45 of our colleagues.

In keeping with our position representing North American Neurosurgery, a Bylaws amendment permitting certificants of the Mexican Council of Neurological Surgery, A.C., to become Active members of the Association was approved. Consequently, active membership in the AANS is now available to neurosurgeons who have been certified by the American Board of Neurological Surgery, the Royal College of Surgeons of Canada, as well as the Mexican Council. In accord with recent Bylaws changes, our Associate and International Associate member categories grew by 12% and 26%, respectively, reflecting the global influence of our Association.

Strategic Plan

Our new Strategic Long-Range Plan was unanimously approved by the Board of Directors at its November meeting. This living document reflects input from almost 1,500 of our members, who responded to the comprehensive strategic planning survey distributed to the entire AANS membership. This survey asked neurosurgeons about their perception of the present state of neurosurgery

as well as the anticipated future impacts upon our practice and specialty.

A new mission statement, along with four long-range goals supported by multiple strategies, was developed. A summary of the new strategic plan appeared in the Spring issue of the *Bulletin*.

Communications

Communication with the membership, as well as the neuroscience community throughout the world, remains an extremely important focus and effort of the Association. Our written communications are comprised of three primary efforts: The *Journal of Neurosurgery*, the *AANS Bulletin*, and our fax-broadcast communication, *Changing Times in Neurosurgery*.

The *Journal of Neurosurgery*, the preeminent and most-widely read neurosurgical journal in the world, continues to be the primary source of clinical and basic science dissemination. Once again, the evaluation of effectiveness of scientific communication by the Citation Index places the *Journal's* impact beyond all other published neurosurgical journals combined. Ranking of the *Journal of Neurosurgery* amongst all scientific peer-reviewed journals published in the world, based on the impact analysis for published peers, rose from 37th to 36th in global ranking. By comparison, our nearest competitor fell from the 87th position to 90th during the same time period. Clearly, the *Journal of Neurosurgery* remains "the" medium in which to present quality scientific information.

Four issues of the *AANS Bulletin* were published during 1995. The focus of this publication, in response to a readership survey completed last year, has increased coverage in the areas of practice management and socioeconomic issues. At the suggestion of Immediate-Past President Sidney Tolchin, MD, a new feature called "Menu for Success," was added. This feature is devoted to suggestions for development of specialty neurosurgical practice configurations that are responsive to the managed care environment in which we now practice.

Four issues of *Changing Times in Neurosurgery* were also disseminated to our membership via broadcast fax. They focused on such issues as Medicare reform, graduate medical education, pedicle screw litigation, and CPT coding information.

The membership has expressed its desire for enhanced organizational communication and your Board has responded to make certain that all of its activities and peripheral influences are rapidly and efficiently communicated to the membership.

Professional Development

In keeping with strategies defined in our strategic plan of 1990, the professional development and publications programs continue to thrive. Twenty-six professional development courses were presented, attracting approximately 1,100 participants. Twenty-two courses are planned for presentation this year.

Four new books in the *Neurosurgical Topics* series and two new books in the *Special Topics* series were published. Of particular interest to practice development, two new patient education brochures were produced. They are: "Understanding Problems With Your Cervical Spine" and "Understanding Hydrocephalus."

Washington Committee

Members of our Washington Committee, along with staff, have been actively involved in a number of Medicare and federal issues. These dedicated volunteers and staff have participated on numerous panels convened by HCFA.

One particular accomplishment during this past year was clarification of organized neurosurgery's position with respect to reimbursement for pallidotomy, which resulted in HCFA approval of payment for performance of this procedure. We are particularly indebted to the vigorous efforts of Dr. Tolchin, Art Day, MD, and Robert Grossman, MD, in pursuing a positive conclusion to this issue.

(continued on next page)

SECRETARY'S LETTER

► Progress Report

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Internet Project

NEUROSURGERY : //ON-CALL™, the new neurosurgery site on the World Wide Web of the Internet, was developed and is jointly owned by the AANS and CNS. It is managed under the direction of an editor, editorial board, and an oversight committee.

This system allows for an unprecedented opportunity for information transfer, education, and data collection. This remarkable service was demonstrated to the membership for the first time at the Annual Meeting in Minneapolis.

Professional Conduct

The Professional Conduct Committee continues to provide a resource to our members who may have been aggrieved by another member of the organization in a tort proceeding. Unfortunately, the Committee's level of activity has undergone a major increase during the past year.

Five additional hearings have been conducted by the Professional Conduct

Committee over the past several months. Three of their recommendations were forwarded to the Board in April for action, and two additional recommendations for action will come before the Board in November.

CME Activities

More than 900 abstracts were submitted for consideration for presentations at this year's Annual Meeting. Our Scientific Program Committee provided a forum for presentation of 131 oral papers, 15 more than in 1995. In addition, 73 of these presentations were assigned discussants to enhance the scientific consideration.

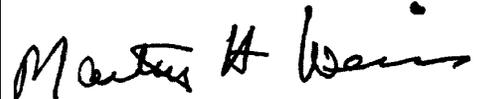
Our Coordinating Committee for Continuing Education continues to magnificently serve as the communications conduit through which all of our educational activities are coordinated. Not only does this committee oversee the educational programs of the Association, but it also jointly sponsors CME offerings for non-ACCME accredited neurosurgical organizations. During 1995, our Association jointly sponsored CME activities for 10 organizations including four Section meetings.

Conclusion

Finally, we remain extremely proud of our National Office staff and all they have done on behalf of all organized neurosurgery. This group of dedicated individuals labors long and hard on our behalf to make certain that the needs of the Association and each of its members are served.

I am saddened to inform you of the retirement, after 19 years of outstanding service to the AANS, of Mr. Carl Hauber, CAE, our Executive Director. Carl has been the "glue" of this Association and has provided wise counsel to us through two decades of unprecedented growth. A search committee has selected Robert Draba, PhD, as successor to Mr. Hauber. We wish Dr. Draba well in his efforts to continue this extraordinary effort.

Sincerely,



Martin H. Weiss, MD
Secretary

► Recent Actions

(continued from page 5)

medicine back to the Task Force regarding an alternative to a conjoint board.

Nominating Committee. In compliance with the Bylaws, John Kusske, MD, resigned from the Nominating Committee because of his election to the Board of Directors. Therefore, at the Adjourned meeting, the Board voted to select Robert Florin, MD, to serve the remaining year of Dr. Kusske's term on the Nominating Committee.

New Board Members. At the Adjourned Board meeting, J. Charles Rich, Jr., MD, welcomed four new Board members: Edward Laws, Jr., MD, President-Elect; Arthur Day, MD, Director-at-Large; John Kusske, MD, Southwest Quadrant Director; and Robert Schwetschenau, MD, Northwest Quadrant Director. In addition, Russell Travis, MD, moved from Director-at-Large to the position of Vice President.

Professional Conduct Notice

On April 26, 1996, the AANS Board of Directors approved the recommendation of the Professional Conduct Committee that a New York neurosurgeon be given a letter of censure for unprofessional conduct in connection with deposition testimony in a medical malpractice case.



Call for Humanitarian Award Nominations

Here is your opportunity to nominate a deserving member of the Association to receive the Humanitarian Award. Look for information and an application form enclosed in this issue of the *AANS Bulletin*.

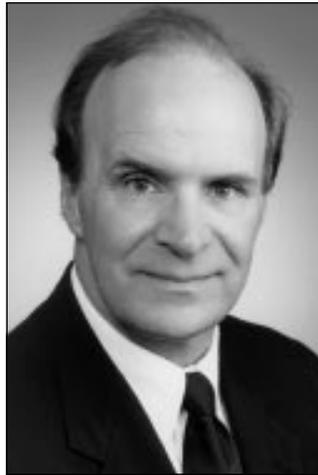
Robert E. Draba, PhD, Named Executive Director of AANS

Robert E. Draba, PhD, has been named Executive Director of The American Association of Neurological Surgeons (AANS). The announcement of his appointment was made by AANS President J. Charles Rich, Jr., MD, during the Association's Annual Meeting. Dr. Draba's appointment became effective on May 1.

"We are very pleased to have Dr. Draba join the AANS," said Dr. Rich. "He comes to us with outstanding credentials in both graduate medical education and association management. His considerable skills in long-range planning and personnel management, experience with medical specialty accreditation, and knowledge of health care financing and administration also will be significant assets to the Association."

Dr. Draba succeeds Carl H. Hauber, JD, CAE, who retired after 19 years of service as AANS Executive Director. His appointment came after a five-month national search by a specially-appointed Search Committee, chaired by Immediate-Past President Sidney Tolchin, MD. Other committee members were Dr. Rich, Edward Laws, MD, William Buchheit, MD, Martin Weiss, MD, Stewart Dunsker, MD, Edward Seljeskog, MD, and Julian Hoff, MD.

A recognized expert in the field of medical education, Dr. Draba has written extensively on such topics as evaluating medical school applicants and physician interns, test bias, physician placement, impact of medical school on marriage, and gender-related attitudinal differences in the



Robert E. Draba, PhD

learning environment. He also has been a frequent speaker at medical seminars and conferences, addressing such concerns as residency training, faculty and curriculum development, and improving evaluation methods for educational programs.

Dr. Draba's academic preparation includes earning an MBA, as well as an MST and PhD in education administration and psychometrics from the University of Chicago. He also holds a BS in English and social studies from Indiana University.

Dr. Draba began his professional career in 1968 with a three-year tour of duty in the Peace Corps. He was stationed in the Republic of the Philippines, where he was responsible for developing language and

volunteer training programs. He subsequently returned to his native Indiana and joined the Gary Community School Corporation as an English and journalism teacher.

In 1981, following an 11-year affiliation with the Gary school system, Dr. Draba joined Chicago Osteopathic Health Systems (COHS) as Director of Evaluation and Management. Over the next decade, he held progressively more responsible positions at COHS, including Director of Educational Resources and Administration/Basic Sciences; Assistant Director of Intern and Resident Training, College of Osteopathic Medicine (the educational subsidiary of COHS); and Vice President of Administration.

In 1992, he was appointed Executive Director of the American Osteopathic Association (AOA), a position he held until 1996. As Executive Director, Dr. Draba worked closely with AOA leadership to enhance the organization's financial and administrative structure. He also implemented new programs in public affairs, managed care, and reimbursement.

Commenting on his appointment as AANS Executive Director, Dr. Draba said, "What a great opportunity to work with some of the best and brightest in organized medicine. Based on my contacts with our membership and leadership, my expectations for their intelligence and integrity have been completely fulfilled. It is a great honor to serve our leadership, membership, and our important partners like the Congress of Neurological Surgeons."

► Crossroads

(continued from page 2)

Our membership represents only 4,700 out of more than one-half million health care providers in the United States. Though our numbers are small, the role we play in our local medical environment is usually one of crucial importance. That makes it all the more important that we become an integral part of this process—already initiated by others—of clinical outcomes assessment. Neurosurgeons, after all, understand the context of what is being

evaluated better than those who, heretofore, have been performing that assessment.

It is imperative that we vigorously define—with as scientifically valid and methodologically convincing outcomes data as possible—why our neurosurgical treatment modalities are efficacious and cost-efficient. By doing so, we, North American Neurosurgery, will have discharged our responsibility and been truly accountable to our patients. Ultimately, it is to them that we owe our allegiance and it is to them that we are accountable.

The dimensions of this Herculean task are hard to comprehend. Accordingly, it is very likely that each and every member of this organization will be asked to assist in contributing to the database necessary for a scientifically valid assessment of clinical outcomes in neurosurgery. For the reasons outlined above, it represents our most important and challenging assignment.

A handwritten signature in black ink, appearing to read "J. Charles Rich, MD". The signature is stylized and cursive.

J. Charles Rich, MD
President

Comprehensive Practice Survey Shows Impact of Change in Health Care Environment

In summer 1995, The American Association of Neurological Surgeons (AANS) and the Congress of Neurological Surgeons (CNS) joined together to conduct a comprehensive study of neurosurgical practice in the United States. In the past, the practice survey as done every five years. However, the movement away from traditional fee-for-service medicine has caused unprecedented changes in health care during the last few years. So, to gauge the amount of change that has occurred in neurosurgery practices, the survey was done three years following the 1992 survey and two years ahead of schedule.

Data collected from the 1992 survey was used to benchmark the 1995 survey results, measuring the changes that continue to occur in the health care environment. Comparisons were also made to data collected in the *1987 Comprehensive Survey*.

The survey instrument was designed, jointly, by the Gary Siegel Organization, Inc. and Byron Pevehouse, MD. The questionnaire was divided into four parts:

- ◆ Current practice status.
- ◆ Biographical information concerning medical school, residency and fellowship training, specialty certification, membership in professional organizations, etc.
- ◆ General practice questions, including questions on prepaid and contractual agreements, practice activities and patient profiles, revenues and expenses, and professional liability.
- ◆ Frequency and type of office services and surgical procedures, fee and payment questions.

This report contains highlights from key sections of the survey judged to be of greatest overall interest to neurosurgeons. More detailed information can be found in the 460-page survey report, *1995 Comprehensive Neurosurgical Practice Survey*. AANS and CNS members who participated in the survey automatically received copies of the report. Non-participants may order single copies of the report from the AANS Order Fulfillment Department at the National Office. The cost to members is \$125; non-member physicians may purchase copies for \$195 and institutions/corporations can order the report for \$300.

Methodology

The universe, for purposes of this study, was all neurosurgeons with valid professional mailing addresses in the United States as defined by the AANS and CNS membership records, the American Medical Association (AMA) masterfile of physicians, and registrants for the AANS/CNS annual meetings who identified themselves as neurosurgeons. Residents in-training were excluded.

A total of 4,003 questionnaires were mailed in May 1995 to neurosurgeons with a practice or residential address in the United States and Puerto Rico, requesting personal and practice information for the 12 month period of fiscal year 1994. For the majority, the time frame was the calendar year 1994, but could also have been as recent as December 1, 1994 to November 30, 1995.

By the end of November, 1,423 questionnaires were returned. Of these, 1,421 were judged sufficiently completed to be acceptable for the study, representing a response rate of 36 percent of the universe.

Geographical and Age Distribution of Neurosurgeons

There has been relatively little change over the past five years in terms of practice location. As in 1987 and 1992, the largest percentage of respondents practice in California (11.3%). The 1995 results show that California is followed by Texas (8.2%), New York (7%), Florida (6.1%), Pennsylvania (5%), Illinois (3.8%) in terms of numbers of neurosurgeons. More than 41% of the respondents practiced in these six states.

A plurality of respondents (34%) practice in metropolitan areas with a population in excess of one million. In contrast, cities and towns with a population under 50,000 are home to just 6.9% of respondents' practices.

Based on our estimate of the U.S. population of neurosurgeons, there are approximately 15.2 neurosurgeons per 1 million population. This number is up slightly from 1987, when there were 14.7

neurosurgeons per million but less than the estimate of 16.3 neurosurgeons per million in the 1992 comprehensive survey.

The mean age of respondents in 1995 was 49.6 years; in 1992 the mean age of respondents was 49.8 years, and in 1987 the mean age was 48 years.

Professional Activity and Practice Characteristics

This section of the survey includes information on a wide array of practice characteristics: the mode of practice, legal structure of the practice, years in practices, size of practice, subspecialization, patient characteristics, and membership in professional associations.

The majority of respondents (69.6%) are engaged in the full-time private practice of neurosurgery. Of the rest, 15.4% are engaged in a combination of clinical neurosurgery, teaching, administration and research.

In terms of practice setting, 69.5% of respondents report their principal work organization to be a private office neurosurgical practice, 19.2% report it to be a medical school or university, and 6.6% report it to be a hospital, foundation, or other institution, all showing minimal difference from 1987 and 1992.

Nearly 46% of respondents in private practice work in solo practices, 42.2% practice as part of a neurosurgical group, 8.6% are in a combined neurosurgery/neurology group practice, and 3.4% are in a multi-specialty group. In 1995, younger respondents show a distinct tendency to practice in a neurosurgical group as compared to those above age 55 who are predominately in solo practice.

In the years from 1987 to 1992 there was an increase in the limitation of practice to a subspecialty from 11.3% to 16.1% of responding neurosurgeons. In 1995, only 15.9% limit practice to a special interest, predominantly in large communities. (See Figure 1.)

(continued on next page)

► Practice Survey Report

(continued from previous page)

In 1992, 48.4% of respondents were either too busy to accept all new patients or felt that they worked too much. In 1995, that number decreased to 41.9%. A plurality of 1995 respondents (43.8%) accept all appointments and referrals and feel that they have the right amount of work. In contrast, 14.3% would like to see more patients, compared to 9.4% in 1992.

In terms of surgical work, 66.0% of respondents perform between 3 and 6 operations per week. The mean is 5.0, compared to 5.3 in 1992. Slightly more than 34.4% of respondents feel that they have the right amount of surgical work and accept all patients, 35.4% have time for more surgical volume, and 24.9% accept all surgery patients, but work more hours than they would like. There was little difference in the 1987, 1992 and 1995 responses to this questions.

Manpower and Competition

Respondents were asked to describe the number of neurosurgeons in their practice community relative to the number of patients needing neurosurgical care. Fifty percent think that there are the right number of neurosurgeons currently in practice; 45% feel that there are too many neurosurgeons in practice, and 5% say there are not

enough. This represents a significant change since 1992 when the percentages were 56%, 34% and 9% respectively. These opinions differ based on size of practice community, location of practice and mode of practice.

Respondents were asked about competition levels between neurosurgeons and orthopedic surgeons compared to five years ago. Sixty-seven percent feel that there is more competition between neurosurgeons and orthopedic surgeons than there was five years ago, while 27% feel that competition has remained the same. These opinions also differ, based on size of the practice community, location of practice and mode of practice. In 1995, respondents in cities with populations between one and two million are most likely to perceive competition as increasing.

Managed Care

In terms of relationships with various health care organizations, 90.8% of respondents in full-time private practice maintain contractual agreements with an HMO, IPA or PPO. The percent of respondents that have these agreements differ slightly based on the mode, legal structure and geographic location of the practice. (See Figure 2.)

Respondents were asked about the impact of managed care and its policies, over the preceding three years, on the volume of services and procedures they provide. For

example, 27% of respondents state that exclusion from managed care network contracts has caused a decrease in practice volume while 36% reported there was no change. For those who are part of managed care networks, 35.2% reported increased volume, while 52.3% said there was no change. Finally, those in networks said that they experienced a 17.5% increase in gatekeeper referrals, while 48.2% reported no change.

Medicare participation

From the time of the 1987 survey, through 1995, the number of physicians participating in Medicare rose significantly. Whereas 50% of respondents were participating physicians in Medicare programs in 1987, 90% are participating physicians in 1995.

The average charge in 1995 for a new patient consultation (Medicare patient) was \$190, while the average allowable payment was \$134. Nearly 79% of respondents in full-time private practice reported reduced reimbursement after the 1992 implementation of the Medicare Fee Schedule. State level changes in Medicaid fees resulted in reimbursement decreases for 65.2% of respondents. In addition, 83.3% reported lower reimbursement rates due to managed care payment arrangements and discounts.

Patient Fees and Source of Patients

Respondents say that most of their patients are referred by other physicians, followed by contractual agreements and by referral from other patients.

Sources of payment for neurosurgical services has significantly changed during the eight years from 1987 to 1995. "Private pay" (from the patient or personal insurance policy) has decreased from 42.4% to 27.4%, while prepaid and contractual payments have increased from 12.9% to 21.6%. Workers' compensation and Medicare have remained fairly stable at about 20% each. Medicaid has increased from 6.9% to 9.6% of total revenue.

Lumbar/thoracic spine problems continue to be the most common condition seen by neurosurgeons.

(continued on page 13)

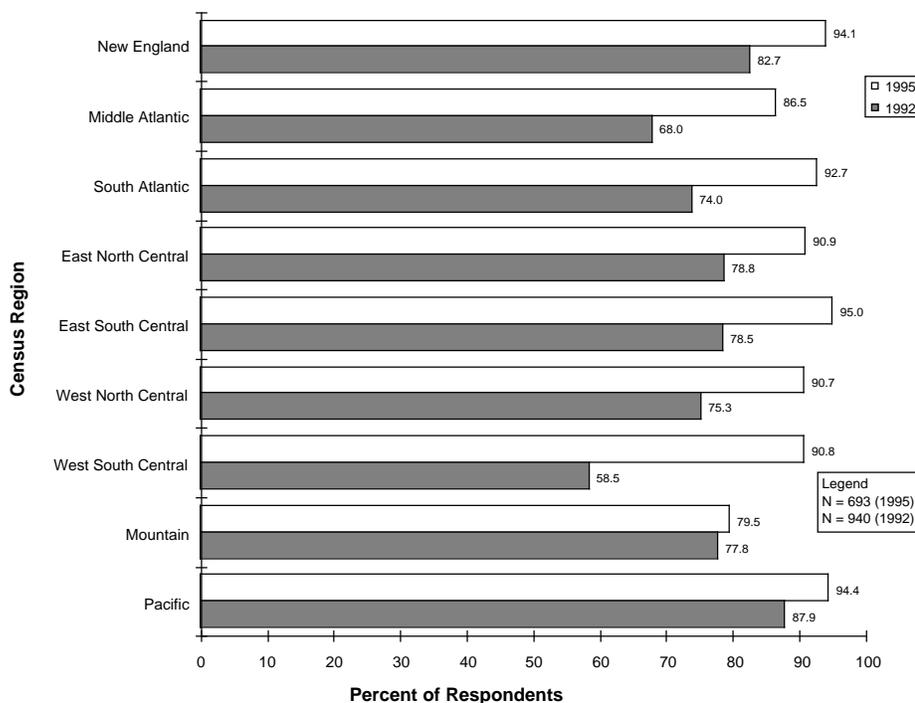
Figure 1
SELF-DESIGNATED SUBSPECIALTY INTEREST
1992, 1995

	1992		1995	
	Number	Percent	Number	Percent
ALL RESPONDENTS	213	100.0	175	100.0
SUBSPECIALTY				
Spinal surgery	76	35.7	64	36.6
Neurosurgical Oncology	26	12.2	8	4.6
Pediatric	70	32.9	54	30.9
Stereotactic / Brain Tumors	17	8.0	6	3.4
Pain / Trauma	10	4.7	5	2.9
Vascular	3	1.4	10	5.7
Cerebrovascular	6	2.8	12	6.9
Epilepsy	5	2.3	3	1.7
Neurology			2	1.1
Skull Base			8	4.6
Peripheral Nerve			3	1.7
NUMBER OF RESPONDENTS				
1992	213			
1995	175			

► Practice Survey Report

(continued from page 10)

Figure 2
AGREEMENTS WITH HMO, IPA, PPO, MANAGED CARE OR
CAPITATION BY CENSUS REGION 1992, 1995



In 1995, 89% of respondents reported they provide free care to indigent persons. That is down slightly from 1992, when 93% of doctors reported they provide free care. The overwhelming majority (90%) of indigent patients are referred by another doctor or come into the emergency room. The mean estimated dollar value of free care provided to indigent persons by 1995 respondents amounts to \$70,200 per neurosurgeon.

Professional Liability Insurance and Malpractice Claims

Ninety-four percent of respondents reported that their hospitals required professional liability insurance of specified limits for medical staff appointments. However, 6.6% of 1,212 respondents did not carry professional liability insurance and a majority had been "bare" for a significant number of years.

The most common form of liability insurance carried by respondents is physician owned insurance, as reported by 54.7%. Fifty percent report carrying liability coverage from a commercial insurance company, and 20.8% are covered by institutional self-insurance/off-shore trust.

The mean annual premium for liability insurance for all respondents was \$41,400, no significant change from 1992. The mean amount of basic coverage per policy year for all respondents was \$2,470,000 and the mean limit per claim for all respondents was \$1,496,000. Nearly 36% of respondents had excess limits (umbrella) coverage. The amount of umbrella coverage above basic policy limits was an average \$3,247,000 for all respondents who had such coverage.

The number of malpractice claims were up slightly in 1994 (0.44 claims per respondent) from 0.31 claims per respondent in 1993 and up 0.2- in each of the previous six years.

Professional Revenue and Net Income

Ninety-one percent of the respondents report that the majority of revenue for neurosurgical services is derived from surgical practice, with 48% stating that more than 75% of revenue and 43% state that 51% to 75% of revenue comes from surgical practice. Distribution of revenue generated from various types of neurosurgical services changed little between the 1987, 1992, or 1995 surveys. (See Figure 3.)

Figure 3

	1987	1992	1995
Surgical Practice	75%	71%	72%
Office-based Services	19%	21%	20%
Diagnostic Services	6%	4%	3%
Medical-Legal Work	4%	5%	3%

Between 1987 and 1992 there was little change in the distribution of payment sources for neurosurgical services. Private (self or insurance) was the principal source of payments. This changed in the 1995 survey, with prepaid and contractual agreements becoming a significant portion of gross revenue for neurosurgeons in private practice settings. (See Figure 4.)

Figure 4

	1987	1992	1995
Patient Payment	8%	8%	8%
Blue Cross/Blue Shield	19%	17%	14%
Other Private Insurance	26%	29%	23%
Medicare	19%	19%	20%
Medicaid	6%	7%	6%
Workers' Compensation	19%	20%	19%
Pre-paid Contracts	7%	11%	12%
PPO Contracts	4%	9%	10%

In 1995, mean net income as reported by respondents in full-time private practice increased 11% as compared to 1992 and increased 57% as compared to the 1987 survey. However, there was great variation according to geographic location of practice, with New England and Pacific Coast areas reporting marked decreases. In 1995, 39% of respondents indicated a greater than 10%

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1996 Annual Meeting Draws 5,025 Attendees

It marked the first time the AANS took its Annual Meeting to Minneapolis, but more than 5,000 neurosurgeons, residents, clinical specialists, neuroscience nurses, nurse/physician assistants and other allied health professionals, as well as exhibitors and guests, flocked to the Midwestern city for the Association's 1996 Annual Meeting.

The Scientific Program Committee, under the direction of Robert A. Ratcheson, MD, assembled an outstanding program that included 8 symposia, 131 research papers, 548 poster exhibits, 25 hands-on clinics, and 84 educational seminars. In addition, 495 technical and institutional exhibits showcased the latest neurosurgical instrumentation and equipment. The program emphasized new technology applications in the field of neurological surgery. Highlighting the meeting was the premier of the new Internet site **NEUROSURGERY: //ON-CALL™**.

On Monday, April 29, Patrick J. Kelly, MD, Ransohoff Professor and Chairman of the Department of Neurological Surgery at New York University Medical Center, delivered the 1996 Richard C. Schneider Lecture. His topic was "The Computer as the Engine of Hyperchange in Neurosurgical Technology." Dr. Kelly's remarks covered the development of computer-assisted surgical technology and assessed the impact of networked high-speed systems on neurosurgical practice, scientific databases, and patient care.

Sidney Tolchin, MD, the 63rd President of the AANS, delivered his Presidential Address following the Schneider Lecture. In his remarks, Dr. Tolchin focused on worth, "... how we value ourselves as neurosurgeons and individuals, and how we can measure that value." He stated that, "When we become 'vendors' or 'deliverers' of health care and purveyors of the industrialization of medicine we demean and dehumanize our patients and ourselves and miniaturize our worth.

"When patients become 'lives' to be traded like pork bellies, the worth of these patients become compromised. How we respond to this danger in the evaluation of

our risks of survival weighed against the benefits to society will determine not only our own worth as neurosurgeons, but the future of our society."

Dr. Tolchin issued a call for his colleagues to say no to the abuses of managed care. "We are the most highly competitive group in history. We must temper that competition and sustain the least of us to maintain the humanity that separates us from competitive shareholders, lawyers, and producers of widgets. We must entertain a new paradigm, the ability to say, 'No, this is not right,' and fulfill the social contract to protect the lives and functions of our patients *and* our colleagues. We must not rush to sign contracts designed to denigrate our worth to patients to get a small piece of the available pie before our colleague does. There has to be another way."

The full text of Dr. Tolchin's address will be reprinted in a future issue of the *Journal of Neurosurgery*. In the meantime, his remarks, as well as the complete Schneider Lecture, are available on audiotape. To order, write InfoMedix at 12800 Garden Grove Blvd., Suite F, Garden Grove, CA 92643, or call (800) 367-9286.

The Annual Business Meeting was held later that day, where Secretary Martin Weiss, MD, reported on the Association's activities for the year past, and Treasurer Stewart Dunsker provided an update on AANS finances. In addition, J. Charles Rich, MD, was installed as the 64th President of the AANS.

On Tuesday, April 30, author, columnist, and television personality William F. Buckley, Jr., gave the Cushing Oration, speaking on the topic "Reflections on the Current Contentious." The Tuesday program also featured a special lecture on the "Emergency Management of Stroke," given by Thomas Brott, MD, the principal designer of the National Institutes of Health Stroke Scale. Concluding the day's program was a special Decade of the Brain Symposium, which took an in-depth look at the latest developments in mapping the brain and, through the use of high technology tools, watching it work.

On Wednesday, Dennis D.M. O'Leary, MD, the 1996 Decade of the Brain Medalist, offered his insights on the mechanisms which direct the correct anatomical and functional organization of the cerebral cortex of the brain. In his lecture, entitled "Developmental Mechanisms Regulating the Differentiation of the Mammalian Neocortex," he described his findings regarding aberrant development, neurodegenerative disease, and the consequences of injury.

The concluding event of the day was a special technology session, "Virtual Reality Meets Neurosurgery: The Impact of Advanced Three-Dimensional Imaging and Robotics in the Future Practice of Neurosurgery." It included presentations on three-dimensional imaging and robotics, remote telepresence surgery, a virtual working environment, and 3-D ultrasound imaging.

Scientific sessions presented by the various Joint Sections of the AANS and the Congress of Neurological Surgeons, were offered throughout the day on Tuesday and Wednesday. Research papers covered such topics as persistent pain after spinal surgery, pallidotomy for Parkinson's disease, the latest treatment for central nervous system tumors, and gene therapy.



Dennis D.M. O'Leary, MD, recipient of the Decade of the Brain Medal.

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▶ Meeting Highlights

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A new aspect of the Scientific Program was a session entitled “Contemporary Neurosurgery.” This panel presentation highlighted the important and developing facets of modern neurosurgery. Topics included the resurgence of neurosurgical treatment for movement disorders, the computer literate neurosurgeon, gene therapy, and strategies for how neurosurgeons can recapture the carotid market.

In addition to the scientific programming, two members were honored for their contributions to neurosurgery and the AANS during the meeting:

- ◆ **Shelley Nien-Chun Chou, MD, PhD**, received the Association’s highest honor—the Cushing Medal. Dr. Chou, Professor Emeritus of Neurosurgery at the University of Minnesota Medical School, was recognized for his very distinguished career and many years of outstanding leadership and dedication to the field of neurological surgery.
- ◆ **Robert E. Florin, MD**, received the 1996 Distinguished Service Award. Dr. Florin was honored for his decades of dedicated service to the AANS. In



Shelley Chou, MD, was the Cushing Medalist.

particular, he has performed an especially valuable service to Association members through his participation in the American Medical Association’s five-year review of Medicare’s Resource-Based Relative Value Scale (RBRVS). As the AANS member of the Committee performing the review, his personal efforts played a crucial role in producing the recommendations that were submitted to the Health Care Financing Administration (HCFA).

In a special presentation, two non-neurosurgeons were recognized for their extraordinary efforts to prevent head injury and to advance the cause of brain research:

- ◆ **Ralph and Ala Isham** were presented with a Distinguished Service Award. Mr. and Mrs. Isham have been instrumental in the development and continuing success of two organizations dedicated to head injury prevention and brain research—the Brain Trauma Foundation and the Aitken Neuroscience Institute. They have also played important leadership roles in the THINK FIRST Foundation and the Research Foundation of the AANS.

The meeting also featured three award-winning research papers:

- ◆ **Preuss Resident Award:** “Antisense Oligonucleotides in Insulin-Like Growth Factor 1 Receptor (IGF-1R) Mediate a Systematic Defense Against C6 Rat Glioma Tumors”—Margaret A. Wallendriedman, MD, John Conrad, MD, Ian Chian, MD, Eric P. Flores, MD, Dennis Wen, MD, Walter A. Hall, MD, Walter C. Low, MD
- ◆ **Mahaley Clinical Research Award:** “High Levels of Speech Recognition with Multi-Channel Electrical Stimulation of the Human Auditory Brainstem”—William E. Hittselberger, MD, Derals E. Brackmann, MD, Steven Otto, Robert V. Shannon, MD.
- ◆ **William H. Sweet Young Investigator Award in Pain Medicine:** “Expression of Neurotrophin



William F. Buckley, Jr., was the 1996 Cushing Orator.

Receptors in Medulloblastoma and the Developing Cerebellum”—Lilliana C. Goumnerova, MD, Scott L. Pomeroy, MD, Lyuda Goritchienko, MD, Rosalind A. Segal, MD.

In addition, Howard L. Weiner, MD, was named the 1996 Van Wagenen Fellow. Dr. Weiner’s research interests have centered on the role of growth factor-mediated signaling pathways in brain tumor oncogenesis. He will use the fellowship to study in the laboratory of Professor Nicole LeDouarin, Director of the Institut d’Embryologie Moléculaire et Cellulaire des CNRS et du Collège de France, investigating the molecular biology of normal brain development.



Robert Florin, MD, (R) recipient of the Distinguished Service Award is congratulated by AANS Past President Sidney Tolchin.

Course Schedule "At-A-Glance" July–December 1996



The American Association of Neurological Surgeons

Socio-Economic Courses

'96 Reimbursement Update for Neurosurgeons

August 23–25, San Francisco, CA
November 8–10, Chicago, IL

Chairman: Richard A. Roski, MD
Faculty: Kimberly Pollock, RN, and Kathleen Redelman, RN

This course, designed specifically for neurosurgeons and office staff, will teach tips for modifying office systems that should increase reimbursements. You will also review challenging coding cases with expert faculty. Two pre-courses are featured: Understanding Anatomy and Terminology, and Accounts Receivables.

How To Prosper in Managed Care for Neurosurgeons

November 2–3, Chicago, IL

Chairman: John A. Kusske, MD
Faculty: T. Forscht Dagi, MD, and Karen Zupko

This comprehensive course will provide you with the opportunity to learn about practical aspects of dealing with contracts, re-engineering practice business systems, understanding capitation, and negotiating contracts.

Clinical Skill Courses

Advanced Thoracic and Lumbar Spine Management: Hands-On

October 18–20, Chicago, IL

Chairman: Charles B. Stillerman, MD
Associate Chairmen: Edward C. Benzel, MD, and Eric J. Woodard, MD
Faculty: Paul Arnold, MD, Kevin T. Foley, MD, Michael Gallagher, MD, Iain H. Kalfas, MD, Paul C. McCormick, MD, Wade Mueller, MD, Noel Perin, MD, and Dennis G. Vollmer, MD

During this course, an emphasis will be placed on anatomical, biomechanical and clinical considerations that cover a variety of thoracic and lumbar spine techniques. Operative indications and surgical algorithms will be discussed with expert faculty utilizing cadavers and sawbones.

Stereotactic Neurosurgery

November 15–16, San Francisco, CA

Chairman: Philip L. Gildenberg, MD, PhD
Faculty: David Andrews, MD, Allan J. Hamilton, MD, Douglas S. Kondziolka, MD, Andres Lozano, MD, and William Tobler, MD

During this course, you will address CT and MR scanning procedures, as well as other stereotactic techniques that can be readily added to your practice. There will be ample time for hands-on practice utilizing various types of apparatus from several manufacturers. See detailed course listing on following page.

Clinical Skill Courses

Minimally Invasive Neurosurgery—Neuroendoscopy: Hands-On

October 25–26, Cleveland, OH

Chairman: Alan R. Cohen, MD
Faculty: Jacques Caemaert, MD, Kim H. Manwaring, MD, and Axel Perneczky, MD

This state-of-the-art, hands-on course will provide an in-depth overview of current indications for neuroendoscopy, as well as the surgical pitfalls to be avoided. You will gain expertise through setting up the equipment and performing a series of orientation and dissection exercises. See ad on following page.

Transsphenoidal, Transoral and Transfacial Surgery for Pituitary and Clivus Lesions: Hands-On

November 1–2, St. Louis, MO

Chairman: William F. Chandler, MD
Faculty: Ivan Ciric, MD, Mary Louise Hlavin, MD, and David W. Stepnick, MD

Presented for the first time, this course will feature step-by-step instruction on the transsphenoidal and transoral approaches to a variety of lesions. You will also have the opportunity for hands-on cadaver experience involving transfacial and intracranial approaches to pituitary and parasellar lesions. For more information about this course, see the boxed item on following page.

The American Association of Neurological Surgeons is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The American Association of Neurological Surgeons designates these continuing medical education activities for the designated hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

To register for an AANS course, call the PDP Department at (847) 692-9500.

**New
Professional
Development
Course!**

Transsphenoidal, Transfacial, and Transoral Surgery for Pituitary and Clivus Lesions: Hands-On

November 1-2 ♦ St. Louis, Missouri

Faculty:

William F. Chandler, MD, Chairman, *Ann Arbor, Michigan*
Ivan Ciric, MD, *Evanston, Illinois*
Mary Louise Hlavin, MD, *Cleveland, Ohio*
David W. Stepnick, MD, *Cleveland, Ohio*

Plan now to attend the newest course in the 1996 AANS Professional Development Program! This two-day course is designed to provide the opportunity to interact with expert faculty while performing hands-on transsphenoidal and intracranial techniques on human cadavers. After this course, you will be able to:

- ♦ Make informed judgments about surgical approaches that are best suited for the patient.
- ♦ Perform transsphenoidal and transoral techniques.
- ♦ Evaluate various transfacial approaches and work with ENT surgeons to perform procedures.
- ♦ Apply your intracranial experience to lesions in the region of the sella.

Stereotactic Neurosurgery

November 15-16 ♦ San Francisco CA

Faculty:

Philip L. Gildenberg, MD, PhD, Chairman, *Houston, Texas*
David Andrews, MD, *Philadelphia, Pennsylvania*
Allan J. Hamilton, MD, *Tucson, Arizona*
Douglas S. Kondziolka, MD, *Pittsburgh, Pennsylvania*
Andres Lozano, MD, *Toronto, Ontario*
William Tobler, MD, *Cincinnati, Ohio*

This course is specific to neurosurgeons who are contemplating adding stereotactic surgery to their practice or have just started performing stereotactic neurosurgery. After this course, you will be able to:

- ♦ Recognize what can be accomplished with stereotactic techniques.
- ♦ Determine how to integrate stereotaxy into a general neurosurgical practice.
- ♦ Identify the similarities and differences between various types of apparatus.
- ♦ Determine which apparatus might best meet your needs.
- ♦ Anticipate the budget necessary to purchase and maintain this equipment.

Don't delay! For more information, please call the Professional Development Department at (847) 692-9500.

Minimally Invasive Neurosurgery—Neuroendoscopy: Hands-On

October 25-26 ♦ Cleveland, Ohio

Faculty:

Alan R. Cohen, MD, Chairman, *Cleveland, Ohio*
Jacques Caemaert, MD, *Ghent, Belgium*
Kim H. Manwaring, MD, *Phoenix, Arizona*
Axel Perneczky, MD, *Mainz, Germany*

This hands-on course is designed for neurosurgeons who wish to obtain a comprehensive review of the state-of-the-art of neuroendoscopy. In addition to the opportunity to work with leading experts on neuroendoscopy, you will gain expertise through a series of orientation and dissection exercises using anatomic models, as well as cadaver material. You will also review endoscopic neurosurgery during interactive discussions and video presentations.

Course attendance is limited, so register today!

Chairman's Report

By Stanley Pelofsky, MD, Chairman JCSNS

The Joint Council of State Neurosurgical Societies (JCSNS) met in Minneapolis, April 26–27, to debate and discuss issues of current concern to neurosurgeons. The meeting was extremely productive in that a number of key proposals were brought to the floor for consideration and action. The JCSNS streamlined its election process as well.

Financial Support

Delegates to the JCSNS voted to establish a neurosurgical PAC and then pledged

significant financial aid to get the job done. It is hopeful that a neurosurgical PAC will be functional in the very near future.

The JCSNS also passed, overwhelmingly, a resolution asking state neurosurgical societies to voluntarily contribute \$250 per delegate to support future JCSNS projects. This money will help defray some of the cost of major AANS and CNS projects such as public relations and marketing of neurosurgical talents and skills.

Resolutions

The JCSNS passed several resolutions that

urged action in the following areas: a means to analyze the marketing needs of neurosurgery; adding information about the Expert Witness Transcript File to NEUROSURGERY : \ON-CALL™; asking the Washington Committee to support legislation opposing gag clauses in managed care contracts; and changes in the election procedures of the JCSNS.

We invite all membership of the AANS and CNS to join us in Montreal to discuss and debate the socioeconomic and political issues which are threatening our profession.

SECTION NEWS

Cerebrovascular Section Expands Membership, Holds First Annual Meeting

By Philip E. Stieg, MD

The Joint Section on Cerebrovascular Surgery has had a very active year and has great plans for the future. We need an active membership and Issam A. Awad, MD, has provided stellar leadership with regard to increasing the number of members who participate in the group's activities. Since initiating his membership drive, we have added 162 new members.

The Section has also formed an Outcomes and Guidelines Committee headed by Robert Harbaugh, MD. It will have three subcommittees focusing on intracranial aneurysms, ischemic cerebrovascular disease, and vascular malformations, respectfully. In addition, the size and complexity of the Executive Committee has grown and the activities of the Section, as a whole, have grown.

Annual Meeting

The Section's first Annual Meeting was held in San Antonio, Texas, January 23–25, 1996. Dr. Awad coordinated the meeting and we are happy to report it was a complete success. The number of partici-

pants far exceeded our expectations and the feedback from those attending the meeting was also very gratifying.

Next year's meeting will be held February 4–6, 1997, at the Disneyland Hotel in Anaheim, California. Linda Sternau, MD, will coordinate the meeting.

AANS/CNS Meeting Section Programs

The Joint Section has also been actively involved in the Annual Meetings of the AANS and CNS. The Section meeting in Minneapolis focused on skull base approaches to vascular disease and featured Robert Spetzler, MD, as the Donaghy Lecture and Laligam Sekhar, MD. The meeting, which was organized by Julian Bailes, MD, was a great success.

Looking to the future, the Section program at the 1996 CNS Meeting in Montréal will focus on carotid occlusive disease and is being coordinated by Joshua Bederson, MD.

Professional Outreach

Discussions between neurosurgeons and endovascular neuroradiologists have also

been occurring at an ever increasing rate. L.N. Hopkins, MD, Immediate Past-Chairman of the Joint Section, has greatly facilitated this dialogue and has participated in organizing the training program for interventional radiology.

In addition, meetings have been arranged in conjunction with the American Heart Association International Stroke Meeting as a means to facilitate our interactions.

New Leadership

New officers of the Section have recently been elected. They are Steven Gianotta, MD, Chairman; Christopher Loftus, MD, Chairman-Elect; and Issam A. Awad, MD, Secretary.

We would like to express our appreciation to the Past-Chairman and Secretary L.N. Hopkins, MD, and Christopher Loftus, MD, respectively. We are indebted to their calm and steady leadership. It has been a delight working with them. If you have any questions regarding this report, please feel free to contact me.

Pediatric Section Broadens Program Activities

By **Harold L. Rekate, MD, Chairman**
Joint Section on Pediatric
Neurological Surgery

Effective at the time of the most recent meeting of the Executive Committee of the Congress Neurological Surgeons (CNS), we are now a Joint Section of both major neurosurgical organizations. There are two significant effects of this change. The first is that Section membership is now open to CNS members as well as AANS members. This will slightly broaden our membership. The second effect will be on the influence we will have on the education mission of both organizations, particularly as it relates to the Annual Meeting of each organization.

In these rapidly changing times of scrutiny and revolution in reimbursement there will be progressively greater pressure on us as neurosurgeons to justify the decisions we make related to patient care. This is particularly true in areas where controversy continues to exist and practice patterns are at great variance.

Outcome Studies

Along with the other Joint Sections, the Pediatric Section has been challenged by its parent organizations to perform outcome studies to bring a semblance of science to clinical decision making. These studies will require a great deal of time and energy and some money to be successful. The AANS is providing consultative resources to make these a success. Several studies are presently being performed by interested pediatric

neurosurgeons, the most compelling being the shunt outcome study comparing short-term outcomes from the implantation of various valves under the direction of James Drake, MD, and John R. W. Kestle, MD.

The section has committed resources to outcome-related projects in three areas:

1. Scientific analysis of the data on severe closed head injury in children as they differ from adults. This task is jointly sponsored by the Joint Section on Neurotrauma and Critical Care, as well as the Pediatric Section. It is intended that this take the form of a document either as a "stand-alone" or as annotations to the Adult Severe Head Injury Guidelines. This work is under the direction of Thomas Luerssen, MD.
2. With the support of the Section, there will be a National Institutes of Health (NIH)-sponsored consensus conference to be held October 17–19, 1996, in Salt Lake City, Utah, under the direction of Marion Walker, MD. The conference will deal with six specific questions about the treatment of hydrocephalus, including how the shunt-dependent patient's treatment is optimized under managed care. We intend to use this opportunity to generate questions that can be answered using randomized prospective trials.
3. Finally, we are exploring the feasibility of performing a study on the indications and outcomes of surgery for tethered cord release following the repair of a patient with a myelomeningocele.

Pediatric Neurosurgery Meetings

The Joint Section on Pediatric Neurological Surgery portion of the AANS meeting in Minneapolis, Minnesota, held April 27–May 2, 1996, was successful with a full afternoon devoted to Scientific Papers. Harold Hoffman, MD, presented the Special Lecture on the topic of "Separation of Cephalopagus Twins." The Shulman Award was presented to Seyed M. Emadian, PhD, for his paper "Correlation of Chromosome 17p Loss with Clinical Outcome in Patients with Primitive Neuroectodermal Tumors." The Matson Award was given to a team of researchers led by Kent D. Yundt, MD, for their paper entitled "Neonatal Cerebral Blood Flow Inversely Correlates with Long-Term Neurological Outcome in Full-Term Infants Surviving Hypoxic-Ischemic Encephalopathy."

The 1996 Annual Meeting of the Joint Section on Pediatric Neurological Surgery is scheduled to be held in Charleston, South Carolina, December 10–13, 1996.

The primary focus of the activity of the Joint Section on Pediatric Neurological Surgery is on the continuing education of its members, non-member neurological surgeons, the families of the patients we treat, and the community at large. If you see areas which need emphasis or opportunities to fulfill this purpose, please notify one of the members of the Section's executive committee. We will listen.

Tumor Section Plans Satellite Symposium

By **Raymond Sawaya, MD**

The second tumor satellite symposium of the Joint Section on Tumors is scheduled to take place in conjunction with the Congress of Neurological Surgeons (CNS) meeting in Montréal, Canada, on October 3rd and 4th, 1996. The conference chairmen are Bill Chandler, MD, and Peter Black, MD, and the Scientific Program Chairman is Raymond Sawaya, MD.

Four general topics will be covered. These include: epidemiology, radiobiology, cell cycle control, and molecular therapy. In addition, there will be three open scientific sessions, during which competitively selected abstracts will be presented.

The design of this symposium was developed with input from Mitch Berger, MD, who successfully managed the first tumor symposium. Strong participation by the neurosurgical community was evident in the

first symposium and resulted in the exposure of advanced research in brain tumors. A similar experience is anticipated this time, and in addition, extra efforts are being made to encourage the participation of all related disciplines.

For any questions concerning this program, please contact: Raymond Sawaya, MD, at (713) 792-2400; fax: (713) 794-4950; or by E-mail at: raymond_sawaya@qksurg.mda.uth.tmc.edu.

SECTION NEWS

Neurotrauma Section Announces Residents Award, Elects Officers

**By Jack Wilberger, MD,
Immediate-Past Chairman
Joint Section on Neurotrauma and
Critical Care**

The Joint Section on Neurotrauma and Critical Care announces the establishment of the Neurotrauma Residents Award. A \$1,000 prize and recognition will be given to the most outstanding contribution to the papers presented at the annual sectional meetings held in conjunction with the CNS and AANS. All neurosurgical residents in training, in fellowship, or within

one year of completing their residency will be eligible. A short manuscript (5-10 pages) must be submitted to qualify for consideration of this award. Beginning with the 1997 AANS meeting, abstract submission forms will have specific information on applying for this award. In the meantime, further information is available from Jack Wilberger, MD, (412) 359-6200.

Kent Yundt, MD, has been awarded the annual \$50,000 Brain Trauma Foundation Fellowship for 1996. Dr. Yundt will study the effects of acute hyperventilation on

regional cerebral ischemia in human traumatic brain injury using PET scanning. This research will be done under the direction of Ralph Dacey, MD, Chairman of Neurosurgery at Washington University in St. Louis.

The Joint Section elections for 1996-1998 produced the following results: Chairman, Charles H. Tator, MD; Chairman-Elect, Brian Andrews, MD; Secretary-Treasurer, Don Marion, MD; Executive Council Members-At-Large, Ross Bullock, MD, and Dan Kelly, MD.

COMMITTEES

We Need Your Help

**By Robert Florin, MD, Chairman
Quality Assurance Committee**

The Quality Assurance Committee will soon be reorganized as the Quality Assessment Committee in order to provide prompt and organized responses to various agencies, insurance companies, and bureaus that periodically raise challenges to the services, drugs, and devices that we use. Frequently, recognition of the need for a position on behalf of organized Neurosurgery to such a challenge comes so late that our ability to develop a response based on the best evidence is compromised. We need your help to increase our time margin in this process.

If you become aware of an issue, problem, or challenge to something that we do or see in care of our patients, please call one of the Committee members listed below, or call in notice to the National Office of AANS. This will allow extra time to assemble a work group that can develop a position to offer in response to the challenge.

This approach has been effective in the recent past in persuading the Health Care Financing Administration (HCFA) that they should not take a national position that would preclude reimbursement for stereotactic pallidotomy in treatment of certain patents that have failed to sustain improvement with drug therapy for Parkinsonism.

Use of such positions, that are developed using the best available evidence, can be very effective in countering threats to reimbursement for a particular service or device. Remember to call early when such problems begin.

You may direct your calls to one of the following committee members: Stephen Haines, MD, Vice Chairman; Allan Friedman, MD, Drugs Devices and Procedures; Beverly Walters, MD, Guidelines; Richard Toselli, MD, Outcomes; Thomas Flynn, MD, Practice Assessment. You may also wish to contact the Consultant to Committee, Nancy Heath, PhD, at (708) 852-1630.

ORGANIZATIONAL LIAISON

Actions of the ACS Board of Regents

The Board of Regents of the American College of Surgeons (ACS) met in June, 1996 in Chicago, the last meeting at the old headquarters. The College has acquired a new building very near Northwestern Hospital and plans to relocate in a phased-in fashion over the next two years.

Currently the College of Surgeons represents 54,636 surgeons in the United States and Canada and attempts to speak with a united voice for the concerns of all surgeons.

Socioeconomic Issues

Socioeconomic affairs continue to occupy a significant portion of ACS activities and finances. Reimbursement issues have received top priority and a number of changes are coming in the near future that could seriously alter Medicare reimbursement policies for surgical services.

The College has fought hard for a separate volume performance standard for

surgery, which certainly has been beneficial in terms of percent reimbursement, as surgeons have not attempted to increase their reimbursement by increasing the volume of their services. The Health Care Financing Administration (HCFA) has made a decision to revert to a single conversion factor and to eliminate the separate performance standards. The College has argued vigorously for a delay in implementation over a period of

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► Action of the ACS

(continued from previous page)

three years, and it is hoped that this delay will take effect.

The combination of the reversion to a single factor, and the possibility that the component of surgical fees related to practice expense will be decreased could potentially result in a 13–20% loss in Medicare reimbursement for surgical procedures. The HCFA Practice Expense Study is felt to be seriously flawed and the American College of Surgeons has invested nearly \$700,000 in a separate practice expense determination for surgeons which we hope will result in less of a decrement in funding than the study supported by HCFA and endorsed by the American Medical Association (AMA). On this issue as well, arguments are being made for a delay in implementation of the new practice expense relative value determinations. This delay, however, has been opposed by the AMA.

A window of opportunity exists in the re-evaluation of evaluation and management (E+M) codes. The primary care physicians are in the process of updating their E+M codes and gaining an increase. The American College of Surgeons feels that the E+M component of global surgical fees should also receive an equivalent update and increase. It is probable that this will not occur, however, the issue is being argued before the PPRC.

Legislative Initiatives

The ACS continues to be active in the field of tort reform, encouraging both federal- and state-based legislative initiatives in this area. Modest gains continue to occur on a state-by-state basis and the federal initiatives, unfortunately, have been excised from the current bills before the Congress. The College also has successfully supported legislation to oppose patents being granted for surgical procedures.

The activities of the National Physicians Data Bank (NPDB) have been monitored very closely and we have a surgeon on the Review Commission. Major attempts are being made to prevent resi-

dents from being reported to the NPDB because of their peripheral involvement in malpractice suits.

One of the biggest recent victories for surgery came under the leadership of Paul Ebert, MD, FACS, Director of the American College of Surgeons, who argued successfully for a final interpretation of the Medicare rules on the activities of teaching physicians involved in surgical procedures performed with the assistance of residents. The current rules for implementation represent a very satisfactory compromise, and it is important that the membership understand that these are the rules that will be applied as opposed to the original statements made in the *Federal Register* when this issue was first introduced. We have every confidence that these are the standards that will actually be implemented.

Young Investigators

A Young Surgical Investigators' Conference, which teaches young surgeons how to apply successfully for research grant funding, was convened again this year. This ongoing activity has been very well received by the National Institutes of Health, who continue to provide tremendous cooperation in putting on these programs.

The Committee on Young Surgeons has remained active and received good input from Neurosurgery. They have developed an effective Washington liaison, and have published and distributed the "Practice Handbook," which has been so well received that a second edition is about to be published. The Young Surgeons "Group of 100" represents a focus group designed to continue to keep the College informed about the concerns of Young Surgeons, most of which are socioeconomic. This has resulted in very helpful input in the past.

Research Activity

The Finance Committee of the American College of Surgeons has considered developing College-sponsored research grants for the support of clinical research in surgery. The details of funding and whether

this will come in the form of a foundation or not have yet to be determined.

Neurosurgeon Philip H. Gutin, MD, serves on the Surgical Research and Education Committee of the American College of Surgeons, and they have been doing a fine job in promoting continued funding for both basic and clinical research. A corporate research roundtable has been developed and the goal is to obtain corporate sponsorship for four-year sustained research grant projects for individual surgeons.

A clinical trial initiative on behalf of the American College of Surgeons has moved forward at the National Cancer Institute, and there is optimism about funding this activity which would allow the College to be the central organization for multicenter trials in surgical treatment areas. Initial emphasis will be placed on maintenance of tissue banks, on the study of genes related to colon cancer, and on the management of prostate cancer. We do have neurosurgical input into these clinical trial activities, and will watch their development carefully.

Guidelines and Accreditation

Guidelines for Optimal Office-Based Surgery have been prepared and were formally adopted. These are available from the ACS office in Chicago upon request.

There is mounting concern about the difficulty of obtaining accreditation through the processes mandated by the ACGME. This is a particular burden for smaller surgical societies and surgical subspecialty societies, where going through the processes can be time consuming, very expensive, and not obviously useful in improving the quality of education delivered. The American College of Surgeons is seriously considering independently becoming the organization through which the CME accreditation can be obtained.

Technology

The Committee on Emerging Surgical Technology and Education is concerned with the area of technology assessment.

(continued on next page)

Utah Surgeon Elected AANS President

J. Charles Rich, Jr., MD, of Salt Lake City, Utah, became the 64th President of The American Association of Neurological Surgeons (AANS) during ceremonies held at the Association's 1996 Annual Meeting in Minneapolis, Minnesota.

An active member of the AANS since 1975, the Utah native has held such leadership positions as Secretary (1991-94), Chairman of the Strategic Planning Committee (1995), Chairman of the Task Force on Orthopaedic Relations, and Chairman of the Membership Committee (1989). He has been a member of the Board of Directors since 1991.

Dr. Rich, who is in private neurosurgical practice in Salt Lake City, is also Chairman of the Neurological Surgery Division of Latter Day Saints Hospital, and holds an appointment as Assistant Clinical Professor of Neurological Surgery at the University of Utah Medical Center.

Following his freshman year of undergraduate studies at the University of Utah, Dr. Rich served a tour of military duty with the Army Security Agency from 1956-58 in Heilbron, Germany. He went on to earn his medical degree from the University of Utah School of Medicine in 1965 and served his internship and residency in general surgery at Johns Hopkins University in Baltimore from 1965-67. He completed his four-year residency in Neurological Surgery in 1971 at Massachusetts General Hospital in Boston.

In addition to his work with the AANS, Dr. Rich has held leadership roles in several other professional organizations, including an appointment to the Executive Committee (1977-87) of the Congress of Neurological Surgeons (CNS). He also served as Vice Chairman of the American Board of Neurological Surgery (1986-87), and as Trustee, Speaker of the House of Delegates, and as a member of the Executive Committee for the Utah Medical Association. He also holds memberships in the Western Neurosurgical Society of America, and Neurosurgical Society of America. In recognition of his work with CNS, he was given the organization's 1986 Distinguished Service Award.

Dr. Rich and his wife, Jasmine, have five sons.

Following are some brief musings from Dr. Rich as he embarks upon his year as President of the AANS. If you have questions of Dr. Rich, he may be reached at his E-mail address: jcr@neurosurgery.org.

Q. Describe your current practice, including any special interests.

A. I am part of a fairly busy general group neurosurgical practice, somewhat altered since I became president of the AANS in that I can no longer cover our very busy ER and Trauma Service this year.

Q. Do you have any specific goal(s) you would like to accomplish during your year as President?

A. One year is a brief stewardship, but I am committed to getting all of the component parts of American Neurosurgery traveling in the same direction, in common cause.

Q. As you begin your Presidential year, do you have any message(s) for the membership?

A. My primary message to our membership is to be sure that you are well-informed about the issues facing Neurosurgery today and urge that you get involved locally and nationally. You *can* make a difference.

Q. Early in your college career you dabbled in cartooning. Are you still interested in artistic endeavors?

A. I have always done cartoons, caricatures, and life drawing. In fact, I had a regular cartoon feature in my university newspaper, *The Daily Chronicle*, during my freshman undergraduate year and did artwork on our yearbook, the *Utonian*. However, in order to earn a decent living as an artist, you have to be a lot better, relative to your peers. Artists have my great respect, they have one demanding profession.

► Action of the ACS

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They have obtained funding to perform a multicenter trial of laproscopic hernia repair, and hope that this will be a prototype for the evaluation of new surgical procedures and technological advances. They are also investigating the use of surgical simulator technology for the teaching of new surgical techniques.

The College has launched a web site on the Internet and it will function in a way essentially

similar to NEUROSURGERY://ON-CALL™, but will include activities and information related to the American College of Surgeons and its various programs and services.

Finally, I am happy to report that among the seven ACS Faculty Research Fellowships awarded this year, two went to neurosurgeons, namely R. Loch McDonald, MD and Peter LeRoux, MD.

It is evident that Neurosurgery maintains a significant voice in the

American College of Surgeons, and that the College represents a powerful group working hard for the benefit of all surgeons.

Respectfully submitted,



Edward R. Laws, Jr., MD, FACS
Regent for Neurosurgery
American College of Surgeons

AANS Welcomes New Members

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 Steven Morrell Bailey
 Frank David Barranco
 Kenneth S. Blumenfeld
 Henry Bushnell Clarke
 Hans C. Coester
 Gregory Richard John Criscuolo
 Peter K. Dempsey
 Werner K. Doyle
 James M. Ecklund
 Henry J. Elsner
 Duncan Kinnear Fischer
 Herbert E. Fuchs
 John Joseph Gartman, Jr.
 Isabelle M. Germano
 Thomas W. Graham
 Souheil F. Haddad
 Michael Alan Healy
 Jaime A. Inerni
 Theodore R. Jacobs
 Sean Raymond Logan
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 David Scott Malloy
 Thomas E. Melin
 James W. Melisi
 Mark E. Meyer
 Donald J. Moyer, Jr.
 Michael G. Mohonen
 Alexis Norelle
 Stephen T. Onesti
 Noel I. Perin
 Joel D. Pickett
 Victoria R. Samuels
 Howard J. Silberstein
 Hugh F. Smisson III
 Lenwood P. Smith, Jr.
 Clifford T. Solomon
 Rafael J. Tamargo
 Hani J. Tuffaha
 Howard Tung
 Alex B. Valadka
 Roy D. Vingan
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 Dennis Yung K. Wen
 Donald M. Whiting
 Owen Robert Tudor Williams
 Claude Watson Wilson

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 Mokbel K. Chedid
 Bret A. Dirks
 E. Hunter Dyer
 Stephanie L. Einhaus
 Richard D. Fessler
 Ramsis F. A. Ghaly
 George D. Giannakopoulos
 Jaimie M. Henderson
 Abraham Kader
 Joseph M. Koziol

David I. Levy
 Stanley B. Martin
 Gary W. Mathern
 Jacques J. Morcos
 Christopher G. Paramore
 Guillermo A. Pasarin
 Craig H. Rabb
 Stuart G. Rice
 Szymon S. Rosenblatt
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 and/or an application for
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 please contact the
 AANS National Office at:

22 S. Washington St.
 Park Ridge, IL 60068-4287
 Phone: (847) 692-9500
 Fax: (847) 692-6770

Research Awardees Report on Foundation-Funded Projects

The AANS Research Foundation awardees who were coming to the conclusion of their funding cycle, as of June 1996, were honored at the Annual Meeting in Minneapolis. If history is any guide, they will go on to great success, as evidenced by the experience of previous grant recipients (please see accompanying article on page 32).

The AANS membership, through its generous donations, may claim much of the responsibility for making these awards a reality. We are pleased, therefore, to share with you brief summaries of these researchers' work.



1994 Research Fellow

William D. Hunter, MD
Georgetown University Hospital
Sponsor and Chairman: Robert Martuza, MD

Project Title: Genetically Engineered Herpes Simplex Virus Containing G IL-4, IL-6, and Antisense IGF-I and Its Effects on Glioblastoma Cells

G207 is a double mutant virus of herpes simplex virus type 1 which has been constructed in our laboratory. Subcutaneous or intracranial injection of G207 has shown prolonged survival of mice compared with controls. The aim of my project has been

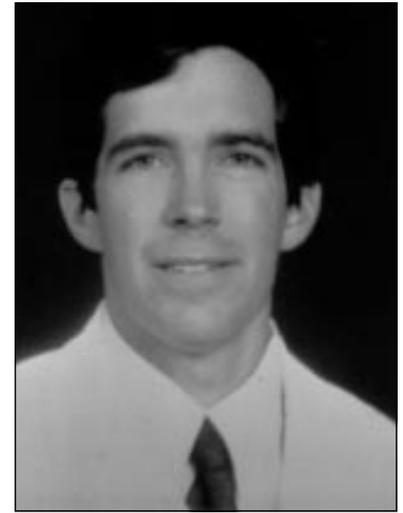
- 1) to further test the abilities of G207 to mediate an antitumor response to gliomas in nude mice,
- 2) to test G207 for safety prior to human use,
- 3) to study the acute and long term neuropathology of G207, and
- 4) to establish a method to enhance delivery of the mutant virus.

The focus of my research has been to perform safety experiments with G207. G207 was intracranially injected into 12 *Aotus nancymae* monkeys. This species is extremely sensitive to HSV. So far, no toxicity has been seen from the mutated virus. At different times post injection of G207, monkeys were sacrificed and the organs tested for evidence of HSV infection using standard pathological techniques, H&E staining, immunocytochemistry, and currently, PCR. Animals were injected over one year ago without adverse effects. MRIs have been performed preoperatively and postoperatively which show no abnormalities consistent with herpes infection.

Other mutant viruses have been shown to have detrimental effects when placed in the cerebral spinal fluid. After developing conditions for stereotactic intraventricular injections of either G207 and control substance into mice, survivals were noted to be no different between the two groups.

There are two additional issues for evaluation of G207 which I am currently examining. One is the possibility of reactivation of an existing latent virus after inoculation of G207. Experiments were performed to obtain and intracranial LD₅₀ for wild type herpes virus, in order to establish a dose required to obtain latent HSV in the cortex. Inoculation of G207 intracranially and evaluating the animals for reactivation of the latent wild type virus is ongoing.

The last issue which my project entails is enhancing the delivery of G207. After developing a surgical procedure for disrupting the blood brain barrier in mice, ongoing experiments may show better distribution of G207 throughout the tumor compared to stereotactic inoculation.



1994 Research Fellow

James D. Guest, MD, PhD
Miami Project to Cure Paralysis
Sponsor: Richard P. Bunge, MD
Chairman: F.A. Durity, MD
Co-funded with the Joint Section on Spine

Project Title: Demyelination in the Human and Primate

Neuropathological Study—The distribution of peripheral and central myelin in human contusive spinal cord injury epicenters has been studied. Evidence was obtained that human Schwann cells which enter the spinal cord following trauma may contribute to remyelination of CNS axons. Immunohistochemical evidence has also obtained that demyelination at the injury epicenter may persist following human spinal cord contusion for at least two years.

Experimental Study—The ability of purified, expanded human Schwann cells (HSC) to influence neuronal regeneration following lower thoracic spinal cord transection was investigated in the nude rat. Tissue cable composed of HSC and

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► Research Awardees

(continued from page 28)

Matrigel within PAN/PVC guidance channels 10 mm in length were apposed to spinal cord stumps following T8-T11 resection. The survival of transplanted Schwann cells was confirmed for up to 40 days. The cables were able to unite the two ends of the transected spinal cord and provide a highly linear substrate for the regeneration of several thousand axons, some of which were enveloped by immunohistochemically specific human myelin.

Extensive anterograde and retrograde tracing studies were performed to elucidate the response of various neuronal systems to the grafts and were supplemented with immunohistochemical evidence. Unexpectedly, a significant regenerative response from brainstem neurons of the vestibular, raphe and reticulospinal systems as well as from propriospinal and sensory neurons was found. Identical control experiments employed nude rat Schwann cells instead of human Schwann cells. The response from brainstem neurons was not significantly different in these experiments.

Propriospinal neurons respond strongly to the grafts and were retrogradely labeled as much as 12 segments rostral to the graft. Propriospinal neurons can regenerate throughout the entire length of the graft and then re-enter the host spinal cord for up to 2 mm. The adrenergic and dopaminergic systems regenerate fibers into the graft and such fibers have been detected up to 2 mm distal to the graft. Transected corticospinal characterized by end bulbs between 1 and 1.5 mm above the grafts.

Ongoing investigations involve subarachnoid delivery of tissue culture supernatant containing an antibody known to reduce inhibitory properties of adult white matter in the rat in conjunction with open-ended human Schwann cell grafts. An improved response from the sensory and corticospinal systems has been observed.



1995 Young Clinician Investigator

Lawrence S. Chin, MD

University of Maryland
Sponsor: J. Marc Simard, MD, PhD
Chairman: Howard Eisenberg, MD

Project Title: Potassium Channel Activity in Malignant Astrocytoma

The role of ion channels and pumps in malignant brain tumors is largely unknown. Preliminary results from our lab suggested that the K⁺ channel blocker, 4-aminopyridine (4-AP), inhibited cell proliferation. Examination of this hypothesis in greater detail has occurred over the past year. Detection of the presence of a delayed outward rectifier K⁺ channel that is sensitive to 4-AP (ED₅₀=3.87 mM) in the gliomas cell lines U87 and A172 has been found. This 4-AP effect may be therapeutically relevant because the channel effects are observed at the resting membrane potential of these tumor cells. Cell proliferation in three glioma cell lines was measured using the MTS assay in 96-well microtiter plates. A dose-dependent inhibition of cell proliferation was observed in U87, A172, and T98G cells following treatment with 4-AP; a half-maximal inhibition of cell growth was observed at 2-3 mM. The terminal dUTP transfease end-labeling (TUNEL) technique was used to determine that the

mode of cell death was apoptosis. These results are being submitted for publication. Future studies will examine other ion channels and their role in the regulation of apoptosis in gliomas. Results from these studies will provide a scientific basis for new treatment approaches to malignant gliomas.



1995 Young Clinician Investigator

Mark Dias, MD

State University of New York/Buffalo
Sponsor and Chairman: L.N. Hopkins, MD
Co-Funded with the Section on Pediatric Surgery

Project Title: Neuronal Proliferation and Programmed Cell Death of Spinal Motoneurons in a Chick Embryo Model of Neural Tube Defects

Neural tube defects (NTDs) such as myelomeningocele constitute the most common developmental central nervous system (CNS) abnormality and afflict approximately 1:1000 newborns annually. While the thrust of research efforts have thus far been directed toward understanding both the embryogenesis and prevention of the disorder, remarkably little is known about the impact of the NTD once

(continued on next page)

RESEARCH FOUNDATION

► Research Awardees

(continued from page 31)

it has occurred, on the subsequent development of the nervous system. A number of clinical and experimental observations suggest that:

- 1) anatomical and functional connections from the placode to the lower limb musculature are remarkably preserved in many children with complete muscular paralysis,
- 2) some spinal cord function may well be retained until late in gestation, and
- 3) some evidence of spinal cord function is present even post-natally in many children with this disorder.

Despite these exciting observations, the anatomical and physiological substrate for sensorimotor paralysis in these children remains an important and uncharted area of investigation. In contrast, the normal development of the spinal cord has been extensively studied in several animal models; how these normal processes are altered in the face of an NTD is unknown.

Currently, the project continues by examining the histogenesis of the spinal cord in a chick mode of NTD. Initial studies are focusing on both proliferation and programmed, or apoptotic, cell death in chick spinal cord motoneurons. A simple mechanical model of NTD in

chick embryos was employed, and are currently obtaining embryos with NTDs that we will be examining at various embryonic stages to determine the extent of both neuronal proliferation and apoptosis in these embryos. Ultimately, it is hoped to examine the directed out-growth of axons from spinal cord motoneurons to lower limb muscle targets. These studies will provide a much better understanding of neuronal growth and development in the face of an NTD, and hopefully will lead to experimental and, ultimately, clinical interventions whose goal is to improve motoneuron survival and spinal cord function for children with these disorders.

► Practice Survey Report

(continued from page 13)

**Figure 5
GATEKEEPER REFERRALS WHICH AFFECTED OUTCOME FOR PATIENTS
(NEUROSURGEONS IN FULL-TIME PRIVATE PRACTICE)**

	Number	Mean %	Median %
Inappropriate timing of referral	494	10.5	5.0
Lack of referral to the appropriate specialist	484	7.4	3.0
Over-involvement of the gatekeeper after referral	445	5.5	0.0
Under-involvement of the gatekeeper after referral	449	9.3	1.0
Misdiagnosis of patient by gatekeeper	472	8.7	5.0
Improper care provided by gatekeeper	457	7.8	1.0

decrease in net income, while 21% indicated a greater than 10% increase in net income, mean average in the U.S.

Gatekeeper Referrals

Physicians were asked about the number and percentage of respondents' referral patients who required managed care primary care gatekeeper authorization. The plurality (23%) reported that 21-49% of all their referral patients required gatekeeper authorization.

When asked about six possible outcomes of gatekeeper referrals, the least-occurring effect (6%) is over-involvement of the gatekeeper after referral. (See Figure 5.)

Finally, respondents were asked what they see as the major challenges facing the neurosurgical specialty in the next two to three years. The most frequent responses were the development of managed care, competition with orthopedic surgeons, oversupply of neurosurgeons, and decrease in reimbursement.

Research Foundation

AWARDEE ACCOMPLISHMENTS

A survey was undertaken during 1995 of the continued research activities of 30 past Foundation awardees (13 Research Fellows and 17 Young Clinician Investigators). As of May 1995, the following accomplishments were revealed:

- ◆ Approximately \$18.75 million in subsequent research funding has been generated by the awardees—an additional \$13.55 for each dollar granted to them by the Research Foundation.
- ◆ Cumulatively, they have 16,700 square feet in laboratory space with 60 support personnel and 14 are directors of research laboratories.
- ◆ They serve on the editorial boards of 52 peer-reviewed journals.
- ◆ Research Foundation-funded results at national and international meetings have been presented on 78 occasions.
- ◆ There have been 86 journal publications and 10 book chapters published with Research Foundation-funded results.

Annual Meeting Exhibit Focused on Transsphenoidal Surgery and the Cushing Tumor Registry

The AANS Archives Committee organized the exhibition of Yale's Cushing Tumor Registry for the 1996 AANS Annual Meeting. This remarkable collection was recently restored to exhibit quality by Yale Medical Student Christopher J. Wahl, under the direction of the Cushing Tumor Registry Restoration Committee. Mr. Wahl was instrumental in bringing the exhibit to the neurosurgical community at the meeting in Minneapolis, spent time in the exhibit as host, and wrote the exhibit's brochure.

A description of the Registry is best taken from Mr. Wahl's introduction in the exhibit brochure. (See article below "An Introduction to the Tumor Registry")

Production of the historical exhibits at the AANS Annual Meetings would not be possible if it were not for the educational grants provided by the commercial exhibitors. The Committee is indebted to Aesculap's Geri Shaffer, Baxter/V Mueller's

Kathy Battistella, and Codman/Johnson & Johnson Professional, Inc.'s Roy Black for



Photographs from Cushing's Brain Tumor Registry, nearly a century old, provided exhibit visitors with a unique glimpse into the world of Dr. Cushing's patients.

their continued interest and support. Not only do they provide the necessary financial support needed to execute the Exhibit, they provide us an opportunity to identify their roles within our theme. These displays in the

Archives Booth documented each company's interest in transsphenoidal surgeries both with instruments and a collection of old instrumentation catalogs.

Robert Wilkins, MD, was this year's guest author for a book signing of *Neurosurgical Classics* on Monday of the meeting. Due to the popularity of this book, a second signing was required on Tuesday after AANS Staff had additional books sent to the meeting from the Headquarters in Park Ridge, Illinois. The Committee appreciates Dr. Wilkins' grace in agreeing to the second signing.

The Archives Committee has chosen the theme for the next historical exhibit, "Treatment of Movement Disorders and Pain." This exhibit is planned for presentation at the AANS Annual Meeting in Denver in April 1997. If you have any items you would like to exhibit, or would like to assist in the development of the exhibit, please contact Chris Ann Philips, Archives Coordinator, at (847) 692-9500.

An Introduction to the Cushing Tumor Registry

The Cushing Brain Tumor Registry, in the simplest of terms, is a diary. It is an immense document comprised of over 2,000 case studies: human whole-brain specimens, microscopic slides, about 50,000 pages of hospital records, notes, journal excerpts, and over 15,000 compelling photographic negatives — materials dating from the late 1800s to 1936. It is at once a scientific epic which chronicles the emergence of neurological surgery as a modern medical specialty, an icon for the relentless scientific pursuit of clinical knowledge, and quite literally, a portrait of human misery, bravery, suffering, and triumph.

The Registry actually began as Dr. Harvey Cushing's personal collection, which he aspired to become a database of clinical information in the founding stages of modern surgery on the brain and central nervous system. Its formal organization did not occur until after 1932, when Dr. Cushing retired from his position as Moseley Professor of Surgery at Boston's Peter Bent Brigham Hospital. At this time, he hoped his archive would become a formal repository for brain tumor specimens of all sorts—a dream which would never be realized.

When Dr. Cushing accepted a position at the Yale Medical School as Sterling Professor of Neurology, he arranged to have the entire Registry brought with him, complete with microfilmed copies of patient records. This astounding collection has been the property of Yale School of Medicine ever since. The

“...Life is short,
the Art is long...”
Hippocrates

knowledge gleaned from this little-known legacy revolutionized the practice of neurosurgery (and indeed, all of medicine); many of these materials were previously published in scientific journals, monographs, and abstracts. The painstaking *methods* which created this Registry exemplify an ideal construct for clinical research—a subtle, but equally important contribution to science.

In the past year, however, a review of these original materials revealed another

rather surprising aspect of Cushing's Brain Tumor Registry. The photographic portion of the archive, aside from its obvious scientific merit, gives the observer a unique glimpse into the world of Dr. Cushing's *patients*. While nearly a century old, the photographs and records afford one the opportunity to witness a timeless emotional undercurrent, to briefly grasp a sense of what it *means* to be a person with a serious neurological affliction. The experience becomes more sublime when one stops to consider that the photos were all taken in an era when "brain surgery" was the novel work of only a handful of pioneers.

This exhibit, then, offers for you excerpts and vignettes from the "complete works" collected by one of modern medicine's most prolific innovators, Dr. Harvey Williams Cushing. The Brain Tumor Registry is not merely an account of his unyielding passion for the acquisition and synthesis of knowledge, but a valuable historical, social, and scientific legacy which documents and vividly portrays the state of American medicine, specifically neurological surgery, in the early twentieth century.

Neurosurgical Focus™ Readies First Issue

The first issue of *Neurosurgical Focus*™, a new monthly electronic journal is now available on the neurosurgical web site on the Internet (<http://www.neurosurgery.org>). The publication is designed to provide for rapid electronic publication of original research in both real time and quick-time movie formats.

Each monthly issue of *Neurosurgical Focus*™ will be devoted to the exploration of a topic of interest to neurosurgeons. The first edition, which went on line July 15, was edited by Edward R. Laws, Jr., MD, and features articles related to the topic "Pituitary Disease and Endocrine Problems."

The electronic journal is being published under the auspices of the *Journal of Neurosurgery* and indexed in Index Medicus. It will be available to all *Journal of Neurosurgery* subscribers.

John A. Jane, MD, Editor of *Neurosurgical Focus*™, is soliciting original contributions for future issues. Each entry will be peer reviewed for both the electronic and print journals by members of the editorial board of the *Journal of Neurosurgery*, who also will serve as

topic editors for *Neurosurgical Focus*™. A variety of material will be considered for publication, including brief basic science reports, clinical studies, case reports with specific lessons to be learned, methodology and technical reports, protocols for management and assessment of outcome, and clinical "pearls." Future issues, topics and deadlines for article submission include:

August 1996 Issue:

Cranial Nerve Surgery
Topic Editor: Robert H. Wilkins, MD
Deadline: Issue closed

September 1996 Issue:

Functional Imaging
Topic Editor: Charles J. Hodge, Jr., MD
Deadline: Issue closed

October 1996 Issue:

Intracerebral Hemorrhage: Treatment Options and Outcome
Topic Editor: Julian T. Hoff, MD
Deadline: August 15, 1996

November 1996 Issue:

Epilepsy
Topic Editor: Howard M. Eisenberg, MD
Deadline: September 15, 1996

December 1996 Issue:

Cervical Spondylotic Myelopathy
Topic Editor: Edward C. Benzel, MD
Deadline: October 15, 1996

January 1997 Issue:

Advances in Neurosurgical Treatment of Intractable Pain
Topic Editor: Robert M. Levy, MD, PhD
Deadline: November 15, 1996

February 1997 Issue:

Management of Plagiocephaly
Topic Editor: Harold L. Rekate, MD
Deadline: December 15, 1996

March 1997 Issue:

Controversies in Movement Disorder Surgery
Topic Editor: L. Dade Lunsford, MD
Deadline: January 15, 1997

Manuscripts should be prepared using the guidelines established by *The Journal of Neurosurgery* and be submitted to John Jane, MD, at the *Journal of Neurosurgery/Neurosurgical Focus*™, 1224 West Main Street, Suite 450B, Charlottesville, Virginia 22903. Telephone and facsimile inquiries may be made to (804)924-8727 and (804)982-1396, respectively. E-mail: jneuro@virginia.edu.



Howard L. Weiner, MD, Chosen 1996 Van Wagenen Fellow

The 1996 William P. Van Wagenen Fellowship has been awarded to Howard L. Weiner, MD, who was a Senior Resident at New York University at the time of his application. At NYU, Dr. Weiner's research interests have revolved around the role of growth factor-mediated signaling pathways in brain tumor oncogenesis.

The clinical investigator use the Van Wagenen Fellowship to study in the laboratory of Professor Nicole Le Douarin, Director of the Institut d'Embryologie Moleculaire et Cellulaire des CNRS et du College de France, investigating the molecular biology of normal brain development. The goal of this research is to understand how the loss of regulation of these molecular events contributes to oncogenesis.

Dr. Weiner and his wife, Barbara, are expecting twins in July. They will leave for Dr. Weiner's fellowship year in Paris in early Fall.



THINK FIRST Foundation Names New Chief Executive Officer

The THINK FIRST Foundation has chosen Frederick H. Grubbe to serve as the Foundation's first Chief Executive Officer. In making the announcement, board chair Thomas G. Saul, MD, said, "I believe the fact that we have named our first CEO speaks to where the Foundation is in its evolution. We have reached a point where we need strong central leadership in our National Office to oversee the day-to-day business that is necessary to complement the work of our many volunteers. This is an important step toward the future."

Of his appointment, Mr. Grubbe said, "I believe the Foundation's mission is noble and important. I could not be more thrilled with the opportunity before me to further that mission." Mr. Grubbe brings solid administrative and management skills to the post as well as a strong personal affinity for issues of safety and prevention. He recalls his first exposure to the aftermath of debilitating injury when, in high school, a family friend was injured playing hockey and remains paralyzed today. His professional experience further sensitized him to the tragedy of brain and spinal cord injury.

Early in his career, Mr. Grubbe served as assistant director of public services for the College of American Pathologists. In 1986, he organized a tour of the Rehabilitation Institute of Chicago for then-Vice President



Frederick H. Grubbe, THINK FIRST CEO

and Mrs. George Bush. Later, in 1988, he served as deputy regional political director for the Bush/Quayle campaign. In 1991, as deputy administrator of the National Highway Traffic Safety Administration, he supervised an award-winning national public service program to encourage use of seat belts. In 1992, President Bush appointed Mr. Grubbe to serve as deputy director of the United States Office of Consumer Affairs.

Speaking on behalf of the five-member selection committee, Dr. Saul

said, "Mr. Grubbe demonstrates a very good understanding and emotional feel for our mission and brings with him an excellent background in safety through his work with the United States Department of Transportation. It is also important to have someone in this position who feels strongly about the program and has the ability to lead others in a way that makes them believers in what we are doing. Mr. Grubbe was chosen by unanimous vote of the selection committee from among more than 200 high caliber applicants. I think we made an excellent choice."

Serving with Dr. Saul on the selection committee were Foundation board members Michael J. Caron, MD, Charles N. Dunn, Jr., Fran Inman, and Jeffrey M. Lobosky, MD. A national executive search was conducted by Smith Beers Yunker and Company, an international consultancy with offices in Cincinnati, Ohio, and Merseyside, England.

Prior to accepting the position with THINK FIRST, Mr. Grubbe was Director of Special Projects for the Million Dollar Round Table in Park Ridge, Illinois. He assumed his duties at the Foundation on June 3rd. Mr. Grubbe and his wife, Mary Duke, live in Arlington Heights, Illinois. Their son, Will, is almost two years old, and a second child is expected in July.

THINK FIRST Participates in National Conferences

During the past year the THINK FIRST Foundation has participated in various national organizational conferences across the country and abroad. Local THINK FIRST program coordinators and national staff have been busy helping draw attention to the valuable injury prevention message portrayed in both the Foundation's high school and elementary school programs.

THINK FIRST representatives participated in such conferences as the National Highway Traffic Safety Administration's Lifesavers Symposium and Moving Kids Safely Conference, the National Parent Teacher Associations' Conference, the Injury Prevention and Control Third International Conference held in Melbourne, Australia, and the National Association for Elementary School Principal Conference.

Abstracts and presentations were delivered and exhibits displayed by those coordinators and staff attending to help strengthen efforts and help identify the THINK FIRST Foundation as a key player in the arena of injury prevention.



With Summer Months Upon Us, So Comes Water Fun AND Safety!

The summer months are upon us and with them comes the opportunity to enjoy relaxing activities such as swimming in the neighborhood pool, area lake, or the ocean. With the summer also comes the possibility of injury. THINK FIRST urges neurosurgeons to help spread the water safety message to both young and old in their communities. Following are some important facts and tips to help in that effort.

Summer is the best time to show some of your best dives in those lakes and pools, but remember to keep one simple thing in mind —SAFETY! Half of all serious recreational diving injuries happen when the diver has been drinking. The probability of an injury increases with each and every ounce of alcohol consumed.

Studies indicate that 1,000 recreational swimmers suffer serious injuries each year from diving incidents. According to the National Spinal Cord Injury Research Data Center, diving incidents account for one of every ten serious spinal cord injuries in the United States each year. More than 90% of all serious recreational diving incidents result in quadriplegia. Most of these incidents occur in less than five feet of water, in swimming pools, lakes, ponds, or streams.

Diving requires clear thinking before and during the dive. Alcohol affects the part

of the brain which exercises control and restraint, posing a potential hazard to a swimmer or diver. Drinking may instill a sense of bravado in some people, leading them to do things they normally would not do, such as holding a diving competition or horsing around in the water.



A dive requires coordinating body movements, judging distance and depth, scanning for obstacles, monitoring speed and direction, and making mental or physical adjustments accordingly. Sharp skills and a keen awareness are necessary when diving, and even small amounts of alcohol impair those skills.

Remember to...

- ◆ Check the water depth to make sure it is sufficient for your dive.
- ◆ Plan your dive path. Make sure there's at least 25 feet of clear water ahead. And keep your dive simple.
- ◆ Be sure there are no submerged or floating obstacles.
- ◆ Steer up. Keep your head up and your arms extended over your head. Steer up with your hands once you enter the water.
- ◆ Take diving lessons from a qualified instructor.
- ◆ Avoid diving into shallow water. Remember that 95% of all diving incidents in pools occur in five feet of water or less.
- ◆ Avoid diving into an above-ground pool.
- ◆ Avoid drinking and diving.
- ◆ Avoid diving through an inner tube or other pool toy.

For more information on water safety and brain and spinal cord injury prevention, contact the THINK FIRST Foundation at (847) 692-2740. Or write THINK FIRST Foundation, 22 South Washington Street, Park Ridge, Illinois 60068.

Black and Eyster Named Chairmen Emeritus

During The American Association of Neurological Surgeons Annual Meeting in Minneapolis, Minnesota, Roy W. Black and E. Fletcher Eyster, MD, were named Chairmen Emeritus of the THINK FIRST Foundation.

Mr. Black and Dr. Eyster earned this title for their tireless efforts and leadership contributions to the Foundation. Both are

original board members and have contributed not only their professional guidance but have spent endless personal hours supporting and nurturing the Foundation's efforts. Mr. Black was honored at the Foundation's Donor Reception, held at the Minneapolis Hilton & Towers Hotel on April 29, 1996. Dr. Eyster was unable to attend the reception and will receive his certificate at a future date.

In concurrence with the THINK FIRST Foundation's Board of Directors' decision, announced during their meeting held April 29, 1996, Mr. Black and Dr. Eyster retired from the board as Co-chairmen. At the same meeting, the leadership position of Chairperson was passed on to Thomas G. Saul, MD. Dr. Saul will hold this office for two years.

POSITIONS

Although the AANS believes the classified advertisements to be from reputable sources, the Association does not investigate the offers made and assumes no liability concerning them.

DYNAMIC NEUROSURGICAL PRACTICE OPPORTUNITY

Northwest locale offers opportunity for a dynamic neurosurgical practice. A four-person group looking for a fifth neurosurgeon to join them. The group is one of the oldest established neurosurgical groups in Eastern Washington. It actively covers one 600+ bed hospital and another 150+ hospital in downtown Spokane. The hospitals offer state-of-the-art equipment in neurosurgery with specialized neurosurgical units. The Spokane area has an immediate population of approximately 450,000+ with a drawing area of 1 million. Symphony, theatre, and a variety of outdoor activities are readily available within minutes for summer and winter. The group practices in all areas of pediatric and adult neurosurgery.

For more information, contact:
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 Sacred Heart Doctors Building
 West 105 Eighth Avenue, Suite 124
 Spokane, Washington 99204
 Phone: (509) 624-9112; Fax: (509) 624-1087

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 or fax credentials to (618) 549-1996

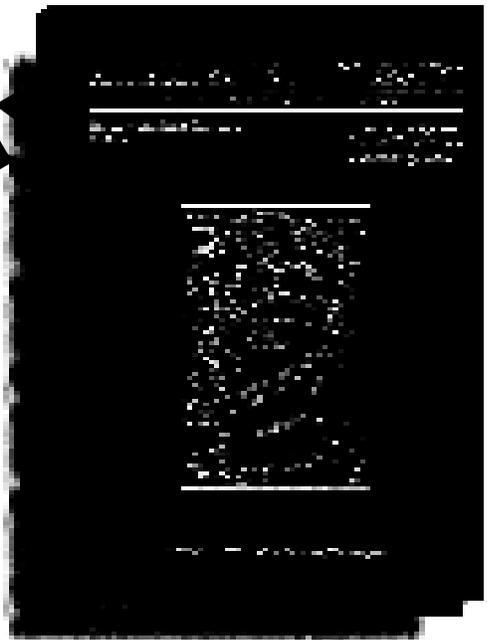
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Available Fall 1996

*A History of Neurosurgery
 in its Scientific and Professional Contexts*

Edited by *Thomas M. Oldfield, MD, FRCGS, FRCR, FRCS, FRCS(Ed), FRCS(NZ), FRCS(S), FRCS(Sr)*
 The history of neurosurgery is a rich and varied one, encompassing the evolution of the specialty from its early beginnings to the present day. This book provides a comprehensive overview of the field, covering the scientific and professional contexts of neurosurgery. It is an essential read for all neurosurgeons and those interested in the history of the specialty.



Call 708-692-9500 to place your order!
 THE AMERICAN ASSOCIATION OF NEUROLOGICAL SURGEONS

TECHNOLOGICAL ADVANCES

The following product descriptions, submitted by medical suppliers, are published to highlight recent technological advances in the neurosurgical field. Publication of these brief summaries should not be construed as indicating endorsement by the AANS.

New Ventricular and Peritoneal Catheters Introduced

Medtronic PS Medical has introduced new ventricular and peritoneal catheters with BioGlide, used in the treatment of hydrocephalus. This is the first marketed application of a surface modification that produces hydrophilic properties on hydrocephalus shunt components. BioGlide is a proprietary process featuring covalent bonding to the silicone elastomer substrate.

The catheters are hydrated prior to use and are packaged in a tray with a built-in well for the hydrating solution. During hydration, a portion of the hydrating solution is absorbed, giving hydrophilic qualities to the surface. These hydrophilic qualities—lubricity and smoothness—allow for easier insertion of the product. For more information about these products contact Marketing Communications at (800) 826-5603.

Coated Blade Saves Clean Up Time in Operating Room

Valleylab, Inc., has introduced The EDGE™ coated electro-surgical blade. The new product offers greater convenience and time savings over conventional stainless steel blades because it can be wiped clean on a sponge or 4 x 4 gauze and doesn't require scraping to remove eschar buildup during surgical procedures.

The EDGE blade features a proprietary coating material designed to retain its "non-stick," easy-to-clean properties longer. An additional advantage The EDGE blade offers is that it can be bent up to 90 degrees to facilitate access to the surgical site, without compromising the integrity of the coating.

For more information about this product, contact Karen Muhler at (303) 530-6222.

Digital Holography System Provides New Imaging Technology for Neurosurgeons

The Voxel™ Digital Holography System, sold under the name Voxgram, was recently awarded FDA clearance for marketing. The system includes a machine that makes holograms of already high-tech images such as computerized tomography (CT) scans, X-ray scans, and magnetic resonance images. A light box displays the hologram as a three-dimensional image floating in space, unlike the flat CT or MRI picture. The life-size, transparent holograms literally extend out in space. Surgeons can interact with the holograms as if they were interacting with the patient.

Clinical studies with the Voxgram used holograms to guide stereotactic procedures including needle biopsies, to investigate causes of abnormalities and to merge neurovascular data sets.

For more information about this product, contact Raymond Schulz by phone at (714) 348-3202, by E-mail at rschulz@voxel.com or visit Voxel's Internet web site at <http://www.voxel.com>

Computer-Assisted Surgery System Receives FDA Clearance

Picker International has received clearance from the U.S. Food and Drug Administration to market the ViewPoint computer-assisted surgery workstation for intracranial surgical applications. Developed jointly by the Cleveland Clinic Foundation and Picker International, ViewPoint uses a freehand 3D localizer and computer technology to correlate magnetic resonance (MR) or computer tomography (CT) images of the skull and brain.

In the operating suite, surgeons touch the probe to the patient and immediately view 2D and 3D images of the internal anatomy on the computer screen, enabling intraoperative guidance and precise targeting of the areas of interest. By improving the quality of information provided during surgery, it is believed that ViewPoint will help reduce morbidity, healing time, hospital stays, and the associated costs.

For more information about the ViewPoint system, contact Mike Peterson at Picker International (216) 473-3539.

Moving?

Don't forget to send your change of address to:

AANS Member Services
22 South Washington Street
Park Ridge, Illinois 60068-4287

You can reach the AANS online at
info@aans.org

You may access
NEUROSURGERY : // ON-CALL™
at
<http://www.neurosurgery.org>

IN MEMORIAM

Active

George R. Prioleau Jr., MD
April 23, 1996

Lifetime (Inactive)

John Martin, MD
Date Unknown

International Associate

Antonio V. Marques, MD
January 5, 1996

Names in the News

R. Loughlin Macdonald and Peter D. Le Roux

R. Loughlin Macdonald, MD, and Peter D. Le Roux, MD, were among only seven recipients of the 1996 Faculty Research Fellowships presented by the Board of Regents of the American College of Surgeons. Dr. Macdonald is an assistant professor of surgery/neurosurgery at the University of Chicago. His research project focuses on the role of heme oxygenase-1 in vasospasm. Dr. Le Roux is an assistant professor of neurosurgery at New York University. His research examines neuronal interactions in process outgrowth and regeneration in the CNS.

Educational Opportunities

CNS Offers Mock Oral Board Exam

The Certification Committee of the Congress of Neurological Surgeons (CNS) will sponsor a mock oral board exam at the Annual Meeting of the CNS in the fall of 1996. The exam is directed toward helping physicians who have previously failed the oral board exam.

For further information you may contact Howard Kaufman, MD, Chairman, Department of Neurosurgery, West Virginia University School of Medicine, Morgantown, West Virginia, 26506. Please call (304) 293-5041 and ask for Joyce or Robin.

Yale University Offers Course on Neurosurgical Clinical Trials

The Yale University School of Medicine will sponsor "Modern Neurosurgical Clinical Trials," a workshop on the design,

conduct, and analysis of neurosurgical clinical trials, October 30–November 1, 1996, in New Haven, Connecticut. The registration fee is \$300 and includes opening reception, continental breakfasts, refreshment breaks, and dinner. For more information, contact:

Office of Postgraduate and Continuing Medical Education
Yale University School of Medicine
333 Cedar Street
P.O. Box 208052
New Haven, CT 06520-8052

Wayne State To Sponsor Symposium on Microsurgery vs. Radiosurgery

The Wayne State University Neurological Surgery Department will sponsor "The Third Detroit Neurosurgery Symposium: Microsurgery vs. Radiosurgery," November 15–17, 1996, at The Atheneum in Detroit, Michigan. The program will focus on treatment of neurosurgical problems with conventional microsurgery vs. radiosurgery techniques. For more information and registration materials, contact:

Fernando G. Diaz, MD, PhD
Professor and Chairman,
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Tel: (313) 993-8600
FAX: (313) 966-0368
<http://www.neurosurg.wayne.edu>
E-mail: swider@neurosurg.wayne.edu

Grant Opportunities

1997 Research Fellowship

The Research Fellowship, funded by the Research Foundation of The American Association of Neurological Surgeons, is designed to provide research training for

neurosurgeons who are preparing for academic careers as clinician investigators. Applicants must be MDs who have been accepted into, or who are in, an approved residency training program in neurological surgery in North America. The Fellowship is awarded for two years beginning July 1, 1997 at \$35,000 per year. Deadline for application submission is December 6, 1996.

Applications will be available through the Internet on NEUROSURGERY : // ON-CALL™ at <http://www.neurosurgery.org> beginning July 15, 1996. Applications will also be mailed to all Program Chairman in July 1996. If you would like additional information or would like an application mailed directly to you, please contact Chris Ann Philips, Grants Coordinator, at (847) 692-9500.

1997 Young Clinician Investigator Award

The Research Foundation of The American Association of Neurological surgeons is accepting applications to grant support for young faculty who are pursuing careers as clinician investigators. Applicants must be neurosurgeons who are full-time faculty in North American teaching institutions and in the early years of their careers. The purpose of the Award is to fund pilot studies that could provide preliminary data that may be used to strengthen applications for more permanent funding from other sources. The Award of \$40,000 will be provided for one year starting July 1, 1997. Deadline for application submission is December 6, 1996.

Applications will be available through the Internet on NEUROSURGERY : // ON-CALL™ beginning July 15, 1996. Applications will also be mailed to all Program Chairmen in July 1996. If you would like additional information or would like an application mailed directly to you, please contact Chris Ann Philips, Grants Coordinator, at (847) 692-9500.

(continued on next page)

ANNOUNCEMENTS

1997 Van Wagenen Fellowship Applications

The American Association of Neurological Surgeons has begun accepting applications for the 1997 Van Wagenen Fellowship. The Fellowship application is available to any neurosurgical resident in his/her last year of training who is a citizen of any North American country who intends to pursue a career in neurological surgery. The fellowship requires this continued training to take place outside of the North American continent for a period of not less than six months. Deadline for submission of applications is November 1, 1996.

Applications will be mailed to all neurosurgical residents whose residency training ends in 1997. For further information, please contact Chris Ann Philips, Grants Coordinator, at (847) 692-9500.

Clinical Trials

Patients Sought for Drug Trial

Guilford Pharmaceuticals, Inc., has received FDA clearance for a treatment protocol to proceed with a clinical trial with the investigational drug Gliadel wafer, a product for use in cases of recurrent malignant glioma. The company is alerting physicians that it is seeking patients for the trial. Patients enrolled into the treatment protocol must have a previous diagnosis of malignant glioma. In addition, this diagnosis must be confirmed at the time of Gliadel wafer implantation.

Gliadel is a biodegradable polymer which contains carmustine (BCNU). Up to eight wafers are implanted directly into the tumor resection cavity after the removal of

the malignant glioma. As the wafers slowly erode in the brain, they release high concentrations of the drug directly to the cancer site for an extended period of time.

Physicians interested in learning more about the treatment protocol may contact Lisa Butler at (800) 701-9035.

Kudos!

The AANS in-house print production team, led by Tony Loster, CGCM, Production Manager, recently won **first place** in the In-Print 96 competition sponsored by the International Publishing Management Association and IN-PLANT GRAPHICS Magazine. The piece that won first place honors was the Spine Section's 1996 Annual Meeting Exhibit Prospectus.

CALENDAR OF NEUROSURGICAL EVENTS

1996 Annual Meeting of the Congress of Neurological Surgeons

September 28–October 3
Montréal Convention Centre
Montréal, Quebec, Canada
Contact: CNS Annual Meeting Office
(847) 692-9500

1996 Annual Meeting of the AANS/CNS Joint Section on Pediatric Neurological Surgery

December 6–9
The Ritz-Carlton Hotel
Pasadena, California
Contact: AANS Meeting Services
(847) 692-9500

1996 Annual Meeting of the AANS/CNS Joint Section on Cerebrovascular Surgery

February 4–6, 1997
Disneyland Hotel
Anaheim, California
Contact: AANS Meeting Services
(847) 692-9500

2nd Pan Pacific Neurosurgery Congress on Craniovertebral Junction/Cervical Spine and C-P Angle Lesions

March 23–28, 1997
Honolulu and Maui, Hawaii
Contact: Continuing Medical Education Dept.
Allegheny General Hospital
320 East North Avenue
Pittsburgh, PA 15212-4772
Tel: (412) 359-4952
FAX: (412) 359-8218

8th Annual Meeting of the North American Skull Base Society

(combined with 2nd International Congress on the Cerebral Venous System and 2nd International Congress of Meningiomas)
March 22–26, 1997
Little Rock, Arkansas
Contact: Ossama Al-Mefty, MD
Dept. Of Neurosurgery
University of Arkansas for Medical Sciences
4301 W. Markham Street, Mail Slot 507
Little Rock, AR 72205-7199
(501) 686-8757

11th International Congress of Neurological Surgery

July 6–11, 1997
Amsterdam, The Netherlands
Contact: The Congress Secretariat
c/o Amsterdam RAI-OBA
P.O. Box 77777
1070 MS Amsterdam, The Netherlands
Tel: 31-20-5491212
FAX: 31-20-6464469

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