As the incoming Chairman of the AANS/CNS Section on Neurotrauma and Critical Care, I would like to thank our outgoing Chairman, Charles Tator, MD, PhD, for a stimulating and productive reign. Dr. Tator has been a delight to work with and is all that he was chalked to be—a brilliant surgeon, fine educator, insightful researcher and, above all, a genuinely nice person.

I am extremely excited about our hopes and expectations for the next two years. Moreover, I am elated at the opportunity to work with our newly-elected board (Ross Bullock, MD, PhD, Chairman-Elect; Michael Fehlings, MD, PhD, Secretary-Treasurer; and David Adelson, MD, and Nelson Oyesiku, MD, Members-at-Large). I have taken the step of asking a resident member of the Section, Geoffrey Manley, MD, to become a resident member of the Executive Committee and offer us his insight on our resident member's needs. As well, I have selected excellent neurosurgeons from around the country to become or remain Standing Committee Chairmen. They include: Alex Valadka, MD, Head Injury and Membership Committees; Lawrence Pitts, MD, American Brain Injury Consortium; Charles Tator, MD, PhD, Spinal Cord Injury Committee; David Adelson, MD, Pediatrics Committee; Michael Caron, MD, Prevention Committee; Donald Marion, MD, Critical Care Committee; Jack Wilberger, MD, Guidelines and Awards and Fellowships Committee; Julian Bailes, Jr., MD, Sports Medicine Committee; and John McVicker, MD, liaison to the Section of State Neurosurgical Societies.

Our Section remains strong with 933 active members and 138 new applicants. We are currently emphasizing resident membership at no cost to the residents, as well as international and associate memberships.

In addition, we are very interested in using NEUROSURGERY://ON-CALL® to promote the services and activities of our Section. We have placed a patient education brochure on head injury on NEUROSURGERY://ON-CALL® and are in the process of developing a neurotrauma job placement service, as well as a neurotrauma fellowship registry.

Committee Activities

Under the guidance of Alex Valadka, MD, and the Head Injury Committee, we are developing Management Pathways in Neurotrauma—a standardized protocol for head injury treatment. Jack Jallo, MD, and Raj Narayan, MD, also are developing a core curriculum on head injury. Additionally, members of the Section are participating in the task force on CPT coding, which was formed by the officers of the AANS and CNS, and aimed at improving the coding for trauma-related services within neurosurgery.

(continued on page 2)
Message for the Chairman (continued from page 1)

The Spinal Cord Injury Committee is working to develop Spinal Cord Injury Management Guidelines, modeled after the Severe Head Injury Management Guidelines. Dr. Tator also has formed the Spinal Cord Injury Consortium to coordinate the evaluation and study of drugs used for spinal cord injury.

The Pediatrics Committee, in conjunction with the AANS/CNS Section on Pediatric Neurological Surgery, is working to develop Pediatric Head Injury Management Guidelines. The Prevention Committee continues to support the THINK FIRST program both monetarily and in prevention-related activities. The Gun Safety Subcommittee recently read a resolution supporting childproof safety locks for the Joint Officers of the AANS and CNS.

The Critical Care Committee, under the guidance of Michael Rosner, MD, is developing a Core Curriculum in Critical Care. Members of this committee also are working with the task force on fellowships to design a critical care fellowship program. In addition, our Executive Committee recently drafted Fellowship Guidelines for the AANS/CNS Section on Neurotrauma and Critical Care.

Members of the Sports Medicine Committee are involved in the planning of the 1999 Orlando Symposium on Concussion. As well, the Section is proposing a book on Sports Neurotrauma to the AANS Publication Committee.

CNS Meeting Highlights

At this year’s CNS Annual Meeting in Seattle, Washington, October 3–8, we will present our Neurotrauma Resident Award to Thomas Lee, MD. The award is presented annually at the AANS and CNS meetings to promote the pursuit of excellence in neurological surgery to residents who are interested in clinical and basic research in neurotrauma and critical care. Moreover, the Section is funding our first Neurotrauma Young Investigator Fellowship and will present Gordon Chu, MD, with the award. For the time being, we plan on presenting an annual fellowship subsidy, but are looking at alternative sources of funding from outside institutions or companies.

Finally, we have an excellent program planned for the CNS Annual Meeting, including special lectures on the use of Amicar and acute subarachnoid hemorrhage, as well as shaken-baby syndrome. These lectures will be reviewed by Thomas Leipzig, MD, and David Adelson, MD, respectively. Additionally, a bevy of scientific abstracts also will be presented during the scientific sessions on Tuesday, October 7, and Wednesday, October 8.

I strongly urge you to attend the AANS/CNS Section on Neurotrauma and Critical Care's Scientific Program at the CNS Annual Meeting. I look forward to seeing you there!

Sincerely,

Brian T. Andrews, MD

NATA Helmet Removal Guidelines

In May 1998, the National Athletic Trainers’ Association (NATA) convened an inter-association task force to develop guidelines for the proper removal of helmets, shoulder pads and facemasks from football players with suspected cervical spine injuries.

According to the task force, removing helmets from athletes with potential cervical spine injuries may worsen existing injuries or cause new ones. Removal of athletic helmets should, therefore, be avoided unless individual circumstances dictate otherwise.

Before removing the helmet of an injured athlete, the following alternatives should be considered:

- Most injuries can be visualized with the helmet in place;
- Neurological tests can be performed with the helmet in place. For example, the eyes may be examined for reactivity, the nose and ears checked for fluid and the level of consciousness may be determined;
- The athlete can be immobilized on a spine board with the helmet in place;
- The helmet and shoulder pads elevate the supine athlete. Removal of the helmet and shoulder pads, if required, should be coordinated to avoid cervical hyperextension; and
- Removal of the facemask allows full airway access to be achieved. Plastic clips securing the facemask can be cut using special tools, permitting rapid removal.

For more information on these guidelines and more, visit the National Athletic Trainers’ Association’s Web site at: www.nata.org.
Farewell Message

By Charles H. Tator, MD, PhD

It has been a pleasure to serve as your Chair for the past two years. I received great encouragement and assistance from your former Chairs, Raj Narayan, MD, and Jack Wilberger, MD, and am grateful for the cooperation and support that I received from every Section member. Neurotrauma and critical care are extremely important aspects of the field of neurosurgery and, the activities and accomplishments we have had over the past two years are certainly noteworthy. The following is a recap of some of those accomplishments.

Re-establishment of the Resident/Fellow Award in Neurotrauma and Critical Care

The Section has taken a major step forward in re-establishing the research fellowship in neurotrauma and critical care (renamed the Young Investigators Award). There is a great need for academic productivity in this field, and this award will serve as a stimulus to young neurosurgeons in training who are interested in presenting their material at the AANS and CNS Annual Meetings. Many thanks to Jack E. Wilberger, MD, for his help in this endeavor.

Gun Safety

We have taken our first step forward in getting neurosurgeons involved in the promotion of gun safety. Howard H. Kaufman, MD, and his committee for child-proof handgun safety locks, has submitted a final proposal for gun safety to the Joint Officers of the AANS and CNS. It is important for neurosurgeons to step forward and make a statement on gun safety.

AANS and CNS Program Planning

The system we have created for Executive Council members to interact with the Scientific Program Committees for the AANS and CNS Annual Meetings has worked out well. Moreover, our two-year time frame has proven effective in allowing our Section representation in the Annual Meeting’s Scientific Program Committees. Early designation of our representatives to the Scientific Program Committees will ensure adequate Section representation. Many thanks to P. David Adelson, MD; Daniel F. Kelly, MD; Michael G. Fehlings, MD, PhD; Brian T. Andrews, MD; Michael J. Caron, MD; and Alex B. Valadka, MD, for their work in this regard.

Maintaining Neurosurgical Input Into the Management of Sports/Athletic Injuries

Julian E. Bailes, Jr., MD, has enhanced the neurosurgical presence in the management of athletic injuries through his development of the Orlando Sports Injury Conferences. Our Section has supported these annual conferences and has had some input into the practice parameters for the management of concussion.

Council of State Neurosurgical Societies

Thanks to John H. McVicker, MD, for being an excellent liaison to the Council of State Neurological Societies and for agreeing to become a member of the Section Executive Council. Under his guidance, we have successfully promoted the interests of neurosurgeons involved with neurotrauma and critical care. Now, we look forward to further developments in this area, in particular, projects aimed at improving our practices and remuneration.

Resident’s Intensive Care Core Curriculum

Michael J. Rosner’s Committee presented the first draft of the Intensive Care Core Curriculum to the resident training program directors at the 1998 Society of Neurological Surgeons meeting in St. Louis, Missouri. We have been encouraged to complete the curriculum for further review by the program directors. An approved curriculum is essential for maintaining an important neurosurgical presence in the management of critical care patients in neurosurgery, either in a neurosurgically-managed ICU or in a general ICU. Thank you, Michael, for bringing this project to fruition.

Enhancing Our Relationship With THINK FIRST

We have been able to financially support THINK FIRST for the past few years on the basis of a donation of $5 per Section member. Michael J. Caron, MD, has continued to impress upon us the importance of preventing head injury among America’s youth. It is hoped that every member of the Section will participate in the activities of THINK FIRST, either at the national level or at the individual chapter level.

Head Injury Committee

Congratulations to M. Ross Bullock, MD, PhD, former Chair of the Head Injury Committee, on being elected President-Elect of the Section. We look forward to all that he will bring to our Section, in particular his input on the Neurotrauma Satellite Symposium and the Head Injury Management teaching video.

American Spinal Cord Injury Consortium

Lawrence H. Pitts, MD, has continued to keep the Section well informed as to the clinical research activities of the American Brain Injury Consortium. To that end, the Section is pleased to support this relationship, aimed at keeping neurosurgeons at the forefront in developing protocols for head injury research.

Spinal Cord Injury Committee

Michael G. Fehlings, MD, PhD, has been very effective in his role as liaison to the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, and in initiating the Guidelines for the Management of Spinal Cord Injury.

STASCIS

The Surgical Trial of Acute Spinal Cord Injury Study group (STASCIS) has continued to perform pilot studies and to develop applications to NIH for funding of the project. Many thanks to the Section Executive Council for their continued support of these activities. The fact that the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves has become a partner in this project has been very gratifying. So far, NIH has declined to support this trial, either as a formal Phase 3 trial or as a pilot project. The STASCIS committee remains committed to the project, and

(continued on page 4)
other sources of funding are being sought. In addition, further revisions of the NIH application will be made. It is hoped that funding will ultimately come from NIH for this important endeavor.

**State and Provincial Neurotrauma Initiative Funds**

A task force to develop a neurotrauma funding initiative in each state and province for the support of neurotrauma research and prevention is under consideration by the Executive Council. The Section, in collaboration with the Council of State Neurosurgical Societies, is working to enhance the funds available for these endeavors in every state and province. So far, several states, such as Kentucky and Florida, and several provinces, including Ontario and British Columbia, have these funds available, often as a surcharge on traffic violations.

**Pediatric Neurotrauma**

P. David Adelson, MD, has developed several new initiatives and is providing effective leadership to this committee.

**Secretarial Work and Newsletters**

Donald W. Marion, MD, has been a wonderful Section secretary and editor of the newsletter. I am very grateful to Don, who has carried out his responsibilities with diligence and wisdom.

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**NEUROTRAUMA/Critical Care Young Investigator’s Award**

The Section on Neurotrauma and Critical Care awards an annual competitive fellowship stipend to a young investigator committed to the fields of neurotrauma and/or critical care. This award is available to senior or chief residents in a neurosurgical residency training program in North America or Board-eligible neurosurgeons within the first two years of completing their residency training.

The award provides support in the amount of $40,000 for a one-year fellowship research and/or training in neurotrauma and/or critical care. The fellowship must be undertaken at North American or European centers with an established reputation in either clinical or basic research issues pertinent to neurotrauma and/or critical care.

The results of the individual’s fellowship research must be presented as a lecture at the Section Meeting of the Congress of Neurological Surgeons or The American Association of Neurological Surgeons. It is also expected that research results would be submitted for publication in a national peer-reviewed journal.

Please forward the requested information to Jack E. Wilberger, MD, Allegheny General Hospital, East Wing Office Building, 420 East North Avenue, Suite 302, Pittsburgh, PA 15212-4746. The deadline for receipt of materials is December 1, 1998.

**INFORMATION TO BE SUPPLIED:**

1. A current Curriculum Vitae.
2. A letter from the applicant’s neurosurgery residency program director confirming the date of his or her successful completion of neurosurgical residency or indicating his or her current status in the training program.
3. A letter from a critical care or neurosurgical mentor who will be responsible for the applicant’s activities during the year of fellowship.
4. A detailed description of the applicant’s planned activities for the fellowship year. If the money is to be used for salary support, a detailed proposal with respect to the nature and type of research which will be undertaken is to be provided. If the money is to be used to support a research project, a detailed research proposal, along with a budget must be submitted. In addition, if the latter is to be accomplished, we will require a letter from the sponsoring institution that ensures that the applicant has adequate space and resources to bring such a project to fruition. This letter should most logically come from either the Dean of the School of Medicine or, depending on the hierarchy of the applicant’s institution, the Director of Neuroscience/Neurosurgical/Critical Care research.
### Saturday, October 3—Practical Courses

**8 AM–5 PM**

**005 Spinal Cord Injury Workshop**  
Course Director: Russell P. Nockels  
Faculty: Michael Beattie, Douglas Anderson, A. R. Blight, Jackie Bresnahan, Michael Fehlings

**8 AM–NOON**

**006 Critical Care—Neurotrauma**  
Course Directors: Brian T. Andrews, Alex Valadka  
Faculty: John L. D. Atkinson, M. Ross Bullock, Anthony Zikos

### Monday, October 5—Luncheon Seminars

**NOON–2 PM**

**105/106 Advances in the Management of Spinal Cord Injury**  
Moderator: J. Wilberger  
Faculty: B. Green, F. Geisler, M. Fehlings

**125/126 Closed Head Injuries and Neurosurgical Treatment**  
Moderator: P. Muizelaar  
Faculty: M. Rosner, S. Goodwin, G. Clifton

### Tuesday, October 6—General Scientific Session II

**Trauma: The Neurosurgeon’s Domain**  
Moderator: Beverley Walters  
Presiding Officer: William A. Friedman

**7:30-7:50 AM**  
Magnitude of the Problem: Epidemiology and Cost of Craniospinal Injury  
*Lawrence Marshall*

**7:50-8:10 AM**  
Pathophysiology of Neural Injury-Therapeutic Opportunities and Challenges  
*John Postlethwait*

**8:10-8:30 AM**  
The Neurosurgeon’s Role in Triage and Acute Management  
*Raj Narayan*

**8:30-8:50 AM**  
Contemporary Treatment Paradigms—Brain Injury  
*Jack Wilberger*

**8:50-9:10 AM**  
Contemporary Treatment Paradigms—Spinal Injury  
*Mark Hadley*

**9:10-9:30 AM**  
Pediatric Neurotrauma—A Contemporary Approach  
*Thomas Luerssen*

### General Scientific Session II, continued

**9:30-10:15 AM**  
Coffee Break

**10:15-10:20 AM**  
Distinguished Service Award Presentation

**10:20-10:40 AM**  
Evolving Models of Neurosurgical Critical Care  
*Randall Chesnut*

**10:40-11 AM**  
Core Curriculum for Neurosurgical Critical Care  
*Brian Andrews*

**11-11:20 AM**  
Outcomes Science and Neurotrauma—A National Database  
*Beverly Walters*

**11:20-11:45 AM**  
Neurosurgeons at the Forefront: Prevention, Treatment, Research and Legislation  
*Lawrence Pitts*

### Luncheon Seminars

**NOON–2 PM**

**225/226 Penetrating Head Injury: When to Operate**  
Moderator: M. Carey  
Faculty: E. George, J. Ecklund, M. Levy

### Scientific Program

#### Section on Neurotrauma and Critical Care I  
2–5:30 PM

**Moderator: Brian T. Andrews**

**2:25-2:50 PM**  
Shaken Baby Syndrome: A Review for the General Neurosurgeon  
*P. David Adelson*

**2:50-3:30 PM**  
Oral Posters

**3:30-4 PM**  
Coffee Break

**4-5:30 PM**  
Open Papers (782-791)

**782.**  
The Effects of Therapeutic Cooling on Brain Oxygenation and Metabolism in Neurosurgical Patients.  
*Alois Zauner, Jens Soukup, Egon Doppenberg, John Ward, Harold Young, Ross Bullock.*

**783.**  
Simultaneous Supra and Infratentorial ICP Monitoring in Neurosurgical Intensive Care.  
*Konstantin V. Slavin, Mukes Misra, Lorenzo Munoz-Ruis, Fady T. Charbel, Yoon S. Hahn, James I. Ausman.*

*(continued on page 8)*
The Effect of Spontaneous Changes in Brain Temperature on Outcome in Severely Head Injured Patients. Jens Soukup, Alois Zauner, Egon Doppenberg, Harold Young, Ross Bullock.


Safety of Ventriculostomy Placement in Patients Requiring Heparinization After GDC Treatment of Acute Aneurysmal SAH. Rocco A. Armonda, Ronald Benitez, George Shanno, James Harrop, Jeffrey E. Thomas, Patricia Gannon, Robert H. Rosenwaser.

Thromboembolic Complications of GDC Treatment of Intracranial Aneurysms. Rocco A. Armonda, Jeffrey E. Thomas, Patricia Gannon, Suzanne Morrison, Robert H. Rosenwaser.

The Value of Transcranial Doppler Ultrasonography in the Diagnosis and Management of Cerebral Vasospasm Following Aneurysmal Subarachnoid Hemorrhage. Yashali Y. Voni, J. Max Findlay, David E. Steinke, Maria Suarez-Almazon, Mike L. Martin.


Changes in the Concentrations of Endothelin and Nitric Oxide in the Plasma and Brain Regions in Rats Following Diffuse Brain Injury. Misra Mukesh, Sharma Avadesh, Prat Ricardo, Volodimir Markiv, Dujovny Manuel, James L. Ferguson, James I. Ausman.


Enjoy the majestic scenery of Mount Rainier or take a tour of Seattle’s famous Space Needle. Photos courtesy of the Seattle-King County Convention and Visitor’s Bureau.
Committee Reports

Head Injury Committee
By Alex B. Valadka, MD

The Head Injury Committee has successfully followed the progress of numerous clinical trials in the field of head injury. Unfortunately, publication and dissemination of the results of those trials have been a problem. One of the most common difficulties is refusal of the sponsoring companies to release the data and make it available for timely review by the neurosurgical community. Proper dissemination of such results can have a significant impact on the way future trials are designed, executed, and analyzed. At the last Executive Meeting of the AANS/CNS Section on Neurotrauma and Critical Care, Lawrence H. Pitts, MD, suggested that the Head Injury Committee develop a white paper calling for the release of all such data following the completion of any such trial. Dr. Pitts has already put some of these thoughts into writing. Anyone interested in participating in this project is encouraged to contact the Head Injury Committee.

Another project still in the preliminary phase is the Management Pathways for Severe Head Injury. Several members of the Head Injury Committee have already submitted their thoughts or tentative outlines for the guidelines. Soon, we will begin working on a preliminary draft; however, there is still time for interested parties to submit their suggestions.

Another area demanding our attention is the conflict between neurosurgeons, trauma surgeons, and intensive care specialists regarding treatment for head-injured patients. There is some concern that apathy or inactivity on the part of neurosurgeons may lead to further encroachment of other specialties into this part of the neurosurgical domain. However, there is a tremendous paucity of data about attitudes and practices in this area. Plans are under way to obtain more concrete information, which can then be used to help organize the efforts of the neurosurgical community.

Spinal Cord Injury
By Michael G. Fehlings, MD, PhD

The Spinal Cord Injury Committee, coupled with the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, continues to be active in the Surgical Trial of Acute Spinal Cord Injury Study (STASCIS), and the development of evidence-based guidelines for the management of acute spinal cord injury.

The STASCIS principal investigators include Charles H. Tator, MD, PhD (Principal Investigator), Michael G. Fehlings, MD, PhD (Co-PI for surgery), Wayne Taylor, MD (Co-PI for statistics), and Robert Quencer, MD (Co-PI for radiology). A grant for a prospective Phase 2 pilot study to examine the role and feasibility of ultra-early surgical decompression (within 8 hours of injury) has been submitted. A Phase 3 randomized controlled trial to examine the hypothesis that early decompression (<8 hours after injury) is superior to decompression after a period of medical stabilization (>24 hours after injury) is being designed for submission to the NIH. The STASCIS group has recently completed a multi-pronged retrospective study to develop and validate a quantitative, objective measurement for assessing spinal cord compromise on midsagittal T1 and T2 MRI scans. This study, which has been accepted for publication in *Spine*, will be published in early 1999.

Section members who are interested in participating in the spinal cord injury guidelines study group, or who wish to obtain more information regarding STASCIS should contact:

Michael G. Fehlings, MD, PhD
Toronto Western Hospital
Department of Neurosurgery
399 Bathurst Street, Suite 2-417
Toronto, Ontario M5T 2S8 Canada
Phone: 416-603-5627
Fax: 416-603-5298
E-mail: mfehlings@torhosp.toronto.on.ca

Membership Committee
By Alex B. Valadka, MD

The AANS/CNS Section on Neurotrauma and Critical Care is one of the largest Sections. This statistic reflects the fact that neurosurgeons utilize their considerable training and expertise to care for many critically ill patients on a daily basis. To help residents become aware of the importance of neurotrauma and critical care, the Section waives dues for anyone who is a resident member of the AANS and/or CNS.

To apply for AANS or CNS membership, or to submit recruitment and retention ideas, contact:

Chrystene Hanus
Member Services Manager
American Association of Neurological Surgeons
22 South Washington Street
Park Ridge, Illinois 60068-4287
Or, apply electronically via our Web site:
www.neurosurgery.org

Pediatric Committee
By P. David Adelson, MD

Since the 1998 AANS Annual Meeting in Philadelphia, Pennsylvania, the Pediatric Neurotrauma Subcommittee has remained active in multiple areas. Thomas Luerssen, MD, Secretary/Treasurer of the AANS/CNS Section on Pediatric Neurological Surgery continues to revise the Pediatric Head Injury Guidelines; however, a deadline for the final draft still needs to be determined. Following is a progress report of the Pediatric Committee’s activities.

Education
At present, we have organized the Pediatric Critical Care Practical Course for the 1998 CNS Annual Meeting in Seattle, Washington, October 3-8. Some members of the Pediatric Neurotrauma Subcommittee are faculty of this course, including Doctors Luerssen, Duhaime, Cherny, and Adelson. Patrick Kochanek, MD, Associate Professor of Anesthesia/Critical Care Medicine and Pediatrics at the University of Pittsburgh and the Children’s Hospital of Pittsburgh, will serve as a guest speaker. In addition, we continue to be actively involved in both the breakfast and luncheon seminars at the Annual Meetings. This year’s breakfast and lunch seminars will address different aspects of pediatric neurotrauma, including traumatic brain injury, spinal cord injuries, brachial plexus injuries, peripheral nerve injuries, child abuse identification, spine and spinal trauma, and more. At the Section’s Scientific Session, I will discuss child abuse and the identification of resultant injuries.

Prevention Issues
In an effort to be more involved in injury prevention via community

(continued on back page)
education, product endorsements, legislation endorsements, and more, our Subcommittee has agreed to work closely with the Injury Prevention and THINK FIRST Committees.

In addition, some members of the Pediatric Subcommittee have conducted a multi-institutional study on the use of moderate hypothermia, as well as evaluative and outcome measures, following pediatric head injury. This study has been submitted to the NIH for funding as an RO1 multi-center pilot grant.

**Child Abuse Guidelines for Medical/Legal Issues**

Proper treatment protocols for victims of child abuse are in great demand in today’s day and age. To that end, Michael Partington, MD, has agreed to organize a group of interested individuals to review the available literature, design an informational packet addressing the proper protocol for child abuse and shaken baby syndrome, and distribute the information to general neurosurgeons. We have identified interested individuals and will be proceeding in the next months to organize a meeting and divide up the work.

**Participation in Outcomes**

It has been suggested that the Subcommittee organize a consortium-type group for reporting on traumatic brain injury, as well as a pediatric traumatic coma data bank. However, the question of efficacy and funding still remain unclear. Collaboration with the Outcomes Committee for the development of a specific pediatric outcome instrument remains to be discussed and the specific issues to be clarified. We are looking for someone to spearhead this effort.