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How the AANS/CNS Section on Tumors was Formed

Message From the Chair

Joseph M. Piepmeier, MD



Joseph M.
Piepmeier, MD

Several things have happened since the last newsletter, and I want to take this opportunity to inform the membership on what the Executive Council has been doing for the past six months.

The AANS/CNS Section on Tumors has an exciting Scientific Session

planned for the AANS Annual Meeting, slated to take place April 8-13, 2000 in San Francisco. Linda M. Liau, MD, has prepared an outstanding program on brain tumor immunotherapy including presentations by Nicolas De Tribolet, MD; Walter A. Hall, MD; and Roberta P. Glick, MD. I am also happy to report that the Farber Award will be presented at the Tumor Section meeting and this year's recipient is Stewart Grossman, MD.

Tumor Satellite Symposium

Immediately following the AANS Annual Meeting, our Section will sponsor the Fourth Biennial Tumor Satellite Symposium. Ronald E. Warnick, MD, has organized a series of formal presentations and open papers that will make this symposium the best presentation of new findings in neuro-oncology ever. Innovations for the Satellite Symposium include awards for the Best Resident Paper and the Best Poster. Sponsors have

been solicited and their contributions are sure to improve the quality of the meeting.

Activities Abound

Since October of 1999, Herbert H. Engelhard III, MD, PhD, has served as our representative on the Education and Practice Management Committee for the AANS. Lawrence S. Chin, MD, was recently appointed as our representative to the AANS Physician Reimbursement Committee, in addition to his role as our liaison with the Washington Committee. Raymond Sawaya, MD, has taken over as Chair of the Awards Committee and re-established open communication with the American Brain Tumor Association, National Brain Tumor Foundation and Preuss Foundation.

Michael W. McDermott, MD, initiated a reception for potential new members at the CNS meeting in Boston. With the help of Frederick F. Lang, Jr., MD, this was a remarkable success. We want to continue with this type of outreach to inform neurosurgeons of the benefits of membership in the AANS/CNS Section on Tumors.

Finally, I have secured the commitment from the *Journal of Neuro-Oncology* to publish abstracts from the Annual Meetings of the AANS and CNS, as well as abstracts from the Tumor Satellite Symposium. This opportunity will further solidify our collaborative relationship and utilize the *Journal* as a voice for the AANS/CNS Section on Tumors.

The Executive Council welcomes your suggestions on how we can better serve the needs of the membership.

Minutes From the Executive Council Meeting

James T. Rutka, MD

AANS/CNS Section on Tumors
November 1, 1999
Boston, Massachusetts

In attendance were Joseph M. Piepmeier, MD (Chairman); James T. Rutka, MD (Secretary-Treasurer); Raymond Sawaya, MD; Mitchel S. Berger, MD; Harry R. Van Loveren, MD; Jack P. Rock, MD; William T. Couldwell, MD, PhD; Jun Yoshida, MD, PhD; Michael W. McDermott, MD; Anthony L. Asher, MD; Ronald E. Warnick, MD; Gene H. Barnett, MD; Ennio Chiocca, MD; and Linda M. Liau, MD. Dave Fellers, CAE, (AANS Executive Director) was present by invitation.

Committee Reports

Secretary/Treasurer

The minutes from the April 26, 1999 meeting of the Section, which took place in New Orleans, Louisiana, were reviewed. There was one change regarding the combined Neuro-Oncology Meeting as part of the World Federation of Neurosurgical Societies, which will take place in the year 2001, and not in 1999 as was printed. The minutes were then accepted by Dr. Piepmeier and seconded by Dr. Warnick.

Dr. Rutka reported on the financial statements of the AANS/CNS Section on Tumors. For the time period ending June 30, 1999, the AANS/CNS Section on Tumors had shown a \$20,000 gain in total assets when compared to the previous year. This was due, in part, to the timely collection of annual dues from Section members. Approximately \$3,000 was gained from the long-term investment pool. Contributions for the AACR Meeting in San Diego, jointly sponsored by the Section, have been accounted for. Dr. Rutka mentioned that the \$25,000 promised to the Washington Committee has not yet come out of the assets of the AANS/CNS Section on Tumors, but likely will over the next six months.

Awards

The award winners for the 1999 CNS meeting were:

Preuss Award	Terrence D. Julien, MD
Mahaley Clinical Research Award	Bruce E. Pollock, MD
Young Investigator Award	Quentin Malone, MD

The prize monies that accompanied each of these awards will be sent out shortly to the recipients by Dr. Rutka. There was some question as to the best mechanism for securing the Farber Award, which will be presented at the upcoming AANS Meeting in San Francisco. It was suggested that Dr. Berger contact Charles Wilson, MD, and Ms. Connie Farber concerning the naming and presentation of the Farber Award on an annual basis.

Bylaws and Guidelines

There was no new business with respect to the Bylaws. Dr. Rock reported that the "Guidelines for Single Brain Metastasis in the

Adult" were nearing completion. A draft of this proposal will soon be presented to the AANS/CNS Section on Tumors.

The issue of a project focused on "Guidelines for High-grade Gliomas" was brought forth. Dr. Rock suggested that this is an important area, and should be supported by a member of the AANS/CNS Section on Tumors. The names of Drs. Warnick, McDermott, Olson and Bruce were put forward for this project.

Membership

Twenty new resident applications were received in the past six months. The Web site was updated to have an application for members. A poster that details the advantages of membership in the AANS/CNS Section on Tumors was presented. There was initially some confusion regarding the best manner of tracking new members in the Section on Tumors, and this has since been resolved by Dr. McDermott.

Membership Services

Dr. Asher provided an update on his activities in the area of membership services. The members present congratulated him for his work on the Select Review in Neuro-Oncology. Initially, the task was arduous, as the database stability was in question and frequent computer software malfunctions were commonplace.

The effort has consumed a lot of time for Dr. Asher and his secretary. Accordingly, a motion was put forth that the Section provide financial support for secretarial services relating to the Select Review. Dr. Asher was then encouraged to submit a budget to the Section after the proposal was accepted and seconded.

A second proposal was made that the Society for Neuro-Oncology (SNO) be approached for intellectual and financial support of the Select Review project. The proposal was accepted, and discussion on the matter entailed. It was suggested by Dr. Berger that Dr. Asher go to the SNO Meeting in Scottsdale, Arizona, in November 1999 to present the subject to the Executive Committee of SNO. The SNO Board can then decide if they want to be associated with the Select Review project, in what capacity, and under what circumstances.

Newsletter

Dr. Warnick has put together an outstanding newsletter chronicling the progress made in the Section. He thanked Dr. Couldwell for his input regarding fellowship guidelines.

There was some discussion about the periodical known as *CNS Neurosurgery News*. It was suggested that the Section on Tumors' newsletter be published exclusively within this periodical. However, as it was felt that Dr. Warnick's newsletter was so strong, and as the Section on Tumors wanted to maintain its autonomy and stature distinct from the other Sections, this idea was not pursued.

The question came up as to whether the newsletter should contain advertising, and this idea was given strong support.

Education Committee

Dr. Couldwell reported that the "Neuro-Oncology Fellowship Guidelines" were published in the last newsletter. The "Guidelines for Skull Base Fellowships" are currently ongoing. Dr. Couldwell was congratulated for providing the Section on Tumors with a template for the education of residents regarding neuro-oncology matters. This detailed document was handed out at the last Section on Tumors meeting in New Orleans and is a valuable resource.

Program Committee

Dr. McDermott updated the Executive Council on the key lectures to be delivered during the 1999 CNS Annual Meeting Scientific Section on Tumors Sessions (Monday and Wednesday 2-5:30 PM).

Dr. Liau will organize the program for the 2000 AANS Annual Meeting in San Francisco. The preliminary program was reviewed and will highlight immunotherapy strategies for brain tumors. For the San Francisco meeting, it was suggested that the Program Chairperson and the Awards Chairperson communicate directly with the Chairman and the Secretary-Treasurer so that the Awards can be appropriately coordinated.

The 2000 Congress of Neurological Surgeons Meeting will be organized by Dr. Barnett. A session will be held on the Molecular Genetics of Gliomas and an update on advances in new imaging techniques will be considered.

For the 2001 AANS Annual Meeting in Toronto, Dr. Chiocca will be responsible for organizing the tumor sessions, and a program will be forthcoming.

Young Neurosurgeons Committee

Dr. Lang described ideas for educating residents, fellows and new staff with respect to opportunities in neuro-oncology. One idea was to help young neurosurgeons prepare for their Board examinations.

Dr. Lang organized a reception on Monday, November 1, 1999 from 6-7 PM. in the Boston Sheraton Hotel. At the reception, applications were available for the identification of new resident members.

Satellite Symposium

Dr. Warnick has secured the location, dates and program for the upcoming Tumor Satellite Symposium. Sponsorship letters have been sent out, and a target amount of \$15,000 is being pursued. The program generated a lot of interest, and Dr. Warnick was congratulated for all of his efforts.

American Board of Neurological Surgeons Subspecialization Questions

Dennis Spence, MD, approached Dr. Piepmeier concerning the need for questions from the Section on Tumors regarding neuro-oncology topics. Volunteers for this project included Drs. Warnick, Barnett, and Couldwell.

AANS/CNS Abstract Grading Issue

There was some difficulty with the grading of the CNS Annual Meeting abstracts immediately following the last AANS Meeting in New Orleans. As such, it was suggested that a letter be sent from either Dr. Piepmeier or Dr. Rutka to the CNS Executive Council to ensure that adequate time is allowed for the review of abstracts.

Political Action Committee

Troy M. Tippet, MD, attended the meeting and asked for a Tumor Section member to serve on the Political Action Committee (PAC) Board. This person would then represent the Tumor Section when it comes to PAC programs. This was construed as an important committee for the Section to be involved in. Dr. Piepmeier suggested the Section table this decision for another meeting, perhaps the AANS Executive Council meeting in San Francisco, California.

We Want to Hear From You

The Editor of *Tumor News* is interested in hearing your comments and queries on this issue of the newsletter, as well as your ideas for future issues. Please send your feedback to:

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In Brief...

Brain Tumor Awareness Week

Brain Tumor Awareness Week was created by the North American Brain Tumor Coalition (NABTC) two years ago to bring an awareness about brain tumors to the general public, to provide a forum for individuals and medical institutions across the country to hold community events, and to help educate legislators about issues affecting brain tumor patients.

There has been tremendous support for this activity by individuals touched by brain tumors and the neuroscience healthcare community. We continue to be encouraged by the significant interest we receive from bi-partisan members of Congress.

Currently, plans are underway for the 3rd Annual Brain Tumor Awareness Week scheduled for April 30 - May 6. In addition to community-based activities, the Coalition will host a series of events in Washington, D.C. on May 2-3. You and your colleagues are cordially invited to join us. Activities include:

Tuesday, May 2 - Legislative Luncheon

- Senators and Representatives voice their support for our cause.
- A keynote speaker will address the status of the brain tumor problem in the new millennium.
- A training session will be convened for those who want to advocate for our cause on Capitol Hill.
- A free luncheon will be held, but advance reservations are necessary. For reservations call (847) 827-9910.

Wednesday, May 3 - Visits to Capitol Hill

- Take part in role-playing sessions prior to Capitol Hill visits.
- Visit with Members of Congress or healthcare legislative staffers from your state to educate and advocate for three issues relevant to the brain tumor community.
- NABTC will adopt appropriate items depending upon the current political climate and/or pending legislation.
- During the 1st Brain Tumor Awareness Week we covered seven states, last year we visited 21 states. Our goal for 2000 is to have coalition representatives for all 50 states.
- Appointments will be made in advance, therefore reservations are necessary.

For more information, visit www.tbts.org/nabtcoal.htm.

National Brain Tumor Foundation

Plans are underway for the Power of Help, Hope and Healing: Brain Tumor Conference 2000

What: National Brain Tumor Conference for patients, caregivers and health professionals

When: Friday, March 31 - Sunday, April 2, 2000

Where: Los Angeles Airport (LAX) Hilton & Towers Hotel, in Los Angeles, California

Sponsor: National Brain Tumor Foundation

Conference Highlights:

- Three General Sessions
- Over 45 breakout sessions on treatment options, symptoms, medication management, caregiver issues, long-term survivors and coping
- Health professional track; CEU's offered
- Pediatric track for parents of pediatric brain tumor patients
- Networking opportunities with patients and caregivers from around the country
- Support group meetings
- Private consultations with health care professionals
- Roundtable luncheon discussions
- Resource and educational exhibits
- Patient/health professional presentations
- Opportunity to meet with health professionals from leading California medical centers

Special Features:

- Spanish language workshops
- Intensive pre-conference facilitator training for health care professionals
- Complementary and alternative therapy room
- Children's conference: KIDS 2000

Speakers:

- Inspiring keynote speakers: Ellen Stovall, founder of the National Coalition for Cancer Survivorship, and Jean Shinoda Bolen, MD, author of "Close to the Bone."
- Health professionals from leading California medical centers, including University of California (U.C.) at Los Angeles; U.C. San Francisco; U.C. Davis; Cedars Sinai Neuroscience Institute; Memorial Sloan-Kettering Cancer Center; University of Southern California; Hoag Cancer Center; Children's Hospital L.A.; Scripps Hospital; San Diego Gamma Knife Center; Good Samaritan Hospital; the Cancer Foundation of Santa Barbara; and Long Beach Memorial Center.

For more information and a registration form, please contact the National Brain Tumor Foundation at (800) 934-CURE (2873) or e-mail NBTF at nbtf@braintumor.org.

Pediatric Brain Tumor Foundation of the United States

The Pediatric Brain Tumor Foundation of the U.S. has announced its year 2000 call for proposals in the area of basic, clinical and translational pediatric brain tumor research.

Since its inception, the Pediatric Brain Tumor Foundation of the U.S. has supported the search for the cause and cure of pediatric brain tumors by funding basic research. Basic research was the initial focus of the Foundation's work and continues to be an integral part of the Foundation's research program.

In 1999, the Foundation announced the expansion of its research program to include available funding for clinical research projects, clinical fellowships, and translational research projects.

This announcement serves as a call for applications of available funding in basic, clinical, and translational research. The following is the deadline schedule and levels of funding for the Foundation's research program for 2000:

1. **Basic Pediatric Brain Tumor Research Project(s)**
Deadline: May 15, 2000
Level of Funding: \$35,000 a year for two years, not to exceed \$70,000
2. **Clinical Pediatric Brain Tumor Research Project(s)**
Deadline: August 1, 2000
Level of Funding: \$50,000 a year for two years, not to exceed \$100,000
3. **Clinical Fellowship(s) in Pediatric Brain Tumor Research**
Deadline: August 1, 2000
Level of Funding: \$50,000 a year for two years, not to exceed \$100,000
4. **Translational Pediatric Brain Tumor Research Project(s)**
Deadline: October 1, 2000
Level of Funding: Total funding available is \$1 million.
Project(s) to be supported for 3-5 years, with a maximum annual level of support of \$200,000

Grant applications and guidelines are available by contacting Dianne Traynor, Chief Financial Officer, at the Pediatric Brain Tumor Foundation of the U.S. at (800) 253-6530, or by visiting their Web site at <http://www.pbtfus.org>. Please carefully read the application guidelines to determine your eligibility prior to submitting a grant application.

Society for Neuro-Oncology

The Society for Neuro-Oncology (SNO) will soon issue a call for abstracts for its Fifth Annual Meeting, which will take place in Chicago on November 9-12, 2000. The deadline for abstract submissions is May 15, 2000. The society offers awards for scientific excellence in epidemiology, basic science and clinical research, a semiannual newsletter, and a comprehensive Web site (<http://www.soc-neuro-onc.org>). The Web site includes discussion forums, an online version of their newsletter, employment and educational listings, and more. A subscription to *Neuro-Oncology* is included as part of the dues to the Society. On November 17-21, 2001, the Society will host the first meeting of the World Federation of Neuro-Oncology Societies, to be held in Washington D.C. For more information, contact Jan Esenwein by e-mail at jesenwei@mdanderson.org or by phone at (713) 745-2264.

Brain Tumor Society's 2000 Research Grant Applications are Available

The Brain Tumor Society funds basic scientific research projects for up to a two-year period, at a maximum of \$50,000 per year. All projects with the potential to advance basic scientific research in brain tumors will be considered for funding. Grants may be used for start-up projects or supplementary funding. Funds cannot be used for indirect costs.

Grants are limited to research being conducted in the following states: Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and Washington D.C. The deadline for submission is April 17, 2000.

For information and application forms, contact: The Brain Tumor Society, c/o Carrie Treadwell, Research Manager, 124 Watertown Street, Suite 3H, Watertown, Massachusetts 02472-2500. Or, visit the Society's Web site at www.tbts.org.

Brain Tumor Society Announces 1999 Grant Recipients

The Brain Tumor Society recently presented grants totaling more than \$434,000 to 10 researchers. The recipients are Allen Bale, MD; Shi-Yuan Cheng, PhD; David Christiani, MD, MPH; Henry M. Furneaux, PhD; James M. Gallo, PhD; Lynn R. Hlatky, PhD; Donald O'Rourke, MD; Evan Snyder, MD, PhD; Eckard Wimmer, PhD; and Ming-Jian You, MD, PhD. Since 1992, The Brain Tumor Society has allocated over \$2.5 million in research grant awards for basic science research in the area brain tumors. The Society presented its 1999 awards on November 13, in conjunction with its Annual Meeting.

Headquartered in Watertown, Massachusetts, The Brain Tumor Society exists to find a cure for brain tumors and strives to improve the quality of life for brain tumor patients and their families through research, education and support.

Mark Your Calendars

The AANS/CNS Section on Functional and Stereotactic Neurosurgery is presenting a session on "The Role of Stereotactic Techniques in Brain Tumor Management." This session will be held on Tuesday, April 11, 2000, in conjunction with the AANS Annual Meeting, and should be of interest to the members of the AANS/CNS Section on Tumors. The program includes:

"The Role of Cytoreduction"

Patrick J. Kelly, MD

"Stereotactic Guidance to Optimize Resection"

David W. Roberts, MD

"Stereotactic Radiosurgery in Brain Tumor Management"

William A. Friedman, MD

Tumor Sessions Planned for 2000 CNS Meeting

Session I (Monday September 25, 2000):

Molecular Genetics of Gliomas for Diagnosis and Investigation
Moderators: Joseph M. Piepmeier, MD, and Gene H. Barnett, MD

Topic	Speaker
Genetic Prediction of Chemotherapy Responsiveness	David Louis, MD
The Molecular and Cellular Origins of Primary Brain Tumors	Eric C. Holland, MD
Molecular Genetics and the Management of Gliomas	J. Gregory Cairncross, MD

Oral Posters

Moderators: Ennio Chiocca, MD, and Ronald E. Warnick, MD

Break

Open Papers

Moderators: James T. Rutka, MD, and Michael W. McDermott, MD

Preuss Resident Award

Young Investigator Award

Session II (Tuesday September 26, 2000):

Advances in Neuroimaging for the Management of Brain Tumors
Moderators: Mitchel S. Berger, MD, and Mark Bernstein, MD

Topic	Speaker
Magnetic Resonance Spectroscopy	Michael W. McDermott, MD
Functional MRI	Joseph M. Piepmeier, MD
MEG/MSI	Ali Rezai, MD
Multimodality Integration for Surgical Navigation	Gene H. Barnett, MD

Oral Posters

Moderators: Gene H. Barnett, MD, and Anthony L. Asher, MD

Break

Open Papers

Moderators: James T. Rutka, MD, and Ronald E. Warnick, MD

Mahaley Clinical Research Award

Committee Reports

Awards Committee

Raymond Sawaya, MD

The AANS/CNS Section on Tumors' Awards Committee is pleased to announce the following awards for presentation at the AANS Annual Meeting in San Francisco, California, which will take place April 8-13, 2000. The Farber Award for this year will be presented to Stuart Grossman, MD, of Johns Hopkins School of Medicine. The Preuss Award will be presented to Amy B. Heimberger, MD, of Duke University Medical Center for her paper titled, "Pre-clinical Evaluation of Dendritic Cells as Immunotherapy for Intracranial Glioma." The Mahaley Award will be presented to Robert J. Weil, MD, of Vanderbilt University Medical Center for his submission titled, "Surgical Management of Pediatric Cushing's Disease." The Section on Tumors Young Investigator Award, which is sponsored by the American Brain Tumor Association, will be presented to Karen Aboody, MD, of Harvard Medical Center/Children's Hospital, for her paper, "A Novel Strategy for Gene Therapy Delivery to Brain Tumors: Foreign Gene Expressing Neural Stem

Cells (NCSs) Display Tropism for Intracranial Gliomas." It is indeed an honor to review the numerous abstracts that were submitted for these awards, and to be able to reward the excellence that each of the above investigators represent.

Task Force Committee

Jack P. Rock, MD

The "Guidelines for the Management of an Adult with a Single Brain Metastasis" are in near-final form. By April, the final version ought to be complete and copies can be handed out at the Executive Council meeting. Most likely, the Guidelines will be published in *Neurosurgical Focus*TM, the online counterpart to the AANS *Journal of Neurosurgery*. The Guidelines team for the "Management of a Patient With a Malignant Glioma," at least to my knowledge, has not been organized, but should be on the next meeting agenda.

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Tumor Section Highlights at the 2000 AANS Annual Meeting

Saturday, April 8, 2000

Practical Clinics

8 AM–5 PM

005 Microsurgical Anatomy of the Ventricles, Deep Cisterns and Cranial Nerves

Director: *Albert L. Rhoton, Jr.*
Faculty: *Toshio Matsushima, Evandro de Oliveira, Hung T. Wen, Helder Tedeschi, Antonio Mussi, QingLiang Liu, Ryuchi Tanaka, Takuya Inoue, Ronald Smith*

1–5 PM

014 Practical and Technical Aspects of Transsphenoidal Surgery

Director: *William F. Chandler*
Faculty: *Hae-Dong Jho*

Sunday, April 9, 2000

Practical Clinics

8 AM–12 PM

021 Lateral Approaches to Tumors and Aneurysms: Application of the Transcondylar, Far Lateral and Extreme Lateral Approaches

Directors: *Jeffrey T. Keller, Harry R. Van Loveren*
Faculty: *Khaled Abdel, Sebastian Froelich, R. Michael Chicione, Sami Rosenblatt, Myles Pensak, Murali Guthikonda, J. Michael Link, George K. Bovis, Abhay Sanan*

8 AM–5 PM

031 Temporal Bone Anatomy

Directors: *Steven L. Giannotta, John Diaz Day*
Faculty: *Takanori Fukushima, Carl B. Heilman, Anil Nanda, Richard Friedman*

033 Update on Tumors for the General Neurosurgeon

Director: *Jeffrey N. Bruce*
Faculty: *Ossama Al-Mefty, Eben Alexander III, Mitchel S. Berger, Thomas C. Origitano, Joseph M. Piepmeier, Corey Raffel, James T. Rutka, Raymond Sawaya, Jack P. Rock, Susan Chang, Michael Prados*

1–5 PM

037 Anterior and Anterolateral Approaches to Tumors and Aneurysms

Director: *Laligam N. Sekhar*
Faculty: *Chandranath Sen, K. Chandrasekhar, Amitabha Chanda, Christopher Bogaev, Robert C. Rostomily, Peter Hecht, Amal Nadel*

038 Intracranial Endoscopic Techniques

Director: *Charles Teo*
Faculty: *Marion L. Walker, Gail L. Rosseau, Ronald Young, Jr., Nikolai Hopf, David F. Jimenez*

Monday, April 10, 2000

Breakfast Seminars

7:30–9:30 AM

109 Novel Treatments for Malignant Brain Tumors

Moderator: *Robert L. Martuza*
Panelists: *Henry Brem, James T. Rutka, Corey Raffel, Roberta P. Glick, John M. Buatti*

110 Low-Grade Gliomas: Current Treatment and Controversies

Moderator: *Joseph M. Piepmeier*
Panelists: *Nicholas De Tribolet, Edward R. Laws, Jr., Mark Bernstein, Mitchel S. Berger*

112 Third Ventricle Tumors

Moderator: *Joao Lobo Antunes*
Panelists: *Michael R. Gaab, Kim H. Manwaring, M. Gazi Yasargil, Maurice Choux*

113 Surgical Approaches to the Lateral Skull Base

Moderator: *Ossama Al-Mefty*
Panelists: *Laligam N. Sekhar, Steven L. Giannotta, Chandranath Sen*

114 Acoustic Tumor: Current Management

Moderator: *Michael B. Sisti*
Panelists: *Madjid Samii, William Hitselberger, Douglas S. Kondziolka*

124 Advanced Techniques in the Treatment of Pituitary Tumors

Moderator: *William F. Chandler*
Panelists: *Ivan Ciric, Warren R. Selman, Hae-Dong Jho, Michael Buchfelder*

Plenary Session I

9:45–11:36 AM

707 Identification and Characterization of a Novel Gene, GAX, Overexpressed in Human Glioblastomas

Linda M. Liau, Trung Q. Vu, Sylvia Odesa, Jeff M. Bronstein, Donald P. Becker
Discussant: *Corey Raffel*

Scientific Session I

2:45–5:15 PM

Moderator: *Stewart B. Dunsker*
Co-Moderator: *William A. Friedman*

709 Endonasal Transsphenoidal Surgery

Albert L. Rhoton, Jr.
Discussant: *Nelson M. Oyesiku*

710 ACTH-secreting Pituitary Adenomas: Predictive Value of Post-Operative Cortisol Levels

Joseph C. T. Chen, SooHo Choi, Arun P. Amar, Shlomo Melmed, Peter Singer, William T. Couldwell, Martin H. Weiss
Discussant: *William F. Chandler*

711 The Diagnosis and Management of Rathke's Cysts in 106 Patients

G. Edward Vates, Scott P. Wachhorst, Andrew L. Bollen, Charles B. Wilson
Discussant: *Rudolph Fahlbusch*

712 Radiosurgery for Cushing's Disease After Failed Transsphenoidal Surgery

Jonas M. Sheehan, Mary Lee Vance, Dheerendra Prasad, Edward R. Laws, Jr., Ladislau Steiner
Discussant: *D. Kalmon Post*

Special Pull-out: Tear out this guide to the tumor sessions and bring it with you to the AANS Annual Meeting.

- 713 Potentiation of Chemotherapy Against U87 Glioblastoma by Gene Therapy Targeting Nuclear Factor Kappa B**
Kyle D. Weaver, Susan Yeyeodu, James C. Cusack, Jr., Matthew G. Ewend
 Discussant: *Mark L. Rosenblum*
- 714 Skull Base Chordomas and Chondrosarcomas: A 12 Year Prospective Review**
H. Alan Crockard, Timothy R. Steel, Anthony D. Cheesman, Nicholas Plowman
 Discussant: *Laligan N. Sekhar*
- 715 Is There a Benefit in the Preoperative Embolization of Meningiomas?**
Jaideep G. Rao, Martin Bendzus, Carlo Schaller, Ralf Burger, Kathrin Scheinemann, Johannes Schramm, Klaus Roosen, Laszlo Solymosi
 Discussant: *Robert N. Rosenwasser*
- 716 A Novel Strategy for Gene Therapy Delivery to Brain Tumors: Foreign Gene Expressing Neural Stem Cells (NSCs) Display Tropism for Intracranial Gliomas**
Karen S. Aboody, Kate A. Bower, Sarah Shivji, Conor B. McDonough, Alice Brown, Nikolai G. Rainov, Peter McL. Black, Xandra O. Breakefield, Evan Y. Snyder
 Discussant: *Roberta P. Glick*
- 717 Laser Ablation of Deep Seated Tumors in the Intraoperative MRI**
Claudia H. Martin, Ferenc A. Jolesz, Peter McL. Black
 Discussant: *Patrick J. Kelly*

Scientific Session II 2:45–5:15 PM

Moderator: *A. John Popp*
 Co-Moderator: *Ralph G. Dacey, Jr.*

- 719 Outcomes of Surgical Decompression and/or Ganglionectomy of Second Cervical Root for Cervicogenic Headaches**
Vasan S. Purighalla, Khang V. Nguyen, Joseph M. Phillips
 Discussant: *Richard B. North*

Tuesday, April 11, 2000

Breakfast Seminars 7:30–9:30 AM

- 208 Evaluation and Management of Primary and Metastatic Vertebral Column Neoplasms**
 Moderator: *Paul R. Cooper*
 Panelists: *Mark H. Bilsky, Ziya Gokasian, Narayan Sundaresan, Andrea L. Halliday*
- 210 Neurosurgical Management of Neurocutaneous Syndromes**
 Moderator: *Robert L. Martuza*
 Panelists: *Madjid Samii, Bruce E. Pollock, Ian E. McCutcheon*
- 211 Surgical Approaches to the Anterior Skull Base and Perinasal Sinus**
 Moderator: *Axel Perneczky*
 Panelists: *Keith L. Black, Anil Nanda, Donald C. Wright, Gail L. Rosseau*
- 218 Advances in the Management of Pediatric Brain Tumors**
 Moderator: *Robin P. Humphreys*
 Panelists: *Jeffrey H. Wisoff, Frederick J. Epstein, Maurice Choux, Liliana C. Goumnerova*
- 225 Current Management of Glioblastoma**
 Moderator: *Mark L. Rosenblum*
 Panelists: *Eben Alexander III, Philip H. Gutin, Jack P. Rock, Peter McL. Black*

Plenary Session II 9:45–11:20 AM

Moderator: *Martin H. Weiss*
 Co-Moderator: *Paul C. McCormick*

- 748 Phase II Trial of Convection-enhanced Distribution of Recombinant Immunotoxin in Patients With Recurrent Malignant Gliomas**
Edward H. Oldfield, William C. Broaddus, Jeffrey N. Bruce, Todd W. Trask, Douglas W. Laske, Jeffrey D. McDonald, Sunil J. Patel, Jon D. Weingart, Robert E. Wharen, Jr., Richard Youle
 Discussant: *Henry Brem*
- 749 Correlation of Neurosurgical Subspecialization With Outcomes of Children With Malignant Brain Tumors**
A. Leland Albright, R. Sposto, Edgar M. Holmes, P. M. Zeltzer, Jonathan L. Finlay, Jeffrey H. Wisoff, Mitchel S. Berger, R. J. Packer, Ian F. Pollack
 Discussant: *Stephen J. Haines*

Wednesday, April 12, 2000

Breakfast Seminars 7:30–9:30 AM

- 301 The Cerebral Venous System: Surgical Considerations**
 Moderator: *Albert L. Rhoton, Jr.*
 Panelists: *Grant B. Hieshima, André Olivier, Michael S. Edwards, Harry R. Van Loveren*
- 313 Recurrent Pituitary Tumors**
 Moderator: *William T. Couldwell*
 Panelists: *Edward R. Laws, Jr., Shlomo Melmed, Alex M. Landolt, Kalmon D. Post*
- 315 Management of the Difficult Meningioma**
 Moderator: *Ossama Al-Mefty*
 Panelists: *Robert J. Coffey, Marc P. Sindou, Jacques Brotchi*
- 316 Tumors of the Clivus and Foramen Magnum**
 Moderator: *Jon H. Robertson*
 Panelists: *Michael R. Chicone, Thomas C. Origitano, Jeffrey H. Bruce, Bernard George*

Scientific Session V 9:45–11:15 AM

Moderator: *Robert A. Ratcheson*
 Co-Moderator: *Jon H. Robertson*

- 754 A Novel Real-time Intraoperative MRI Guided System: A Wide-open, Compact and Displaceable IMRI System for Conventional Neurosurgical Operating Rooms**
Moshe A. Hadani, Ehud Katznelson, Yuval Zuk, Reuven Sinai
 Discussant: *Peter McL. Black*
- 755 Iodo-a-Methyltyrosine-SPECT as Metabolic Monitor for Human Gliomas, Results From 108 Patients**
Anja Hertel, Karl Langen, Juergen W. Kiwit, Friedrich Weber
 Discussant: *Joseph M. Piepmeier*
- 756 The Utility of MR Spectroscopy to Differentiate Radiation Necrosis From Recurrent Tumor**
Darren S. Lovick, Alastair Martin, Haiying Liu, Charles Truit, Walter A. Hall
 Discussant: *John M. Buatti*
- 757 Tumor-selective Blood-Brain Barrier Disruption With a Nitric Oxide Donor Increases Efficacy of Intravenous Carboplatin Chemotherapy in Rats With Intracerebral C6 Gliomas**
Astrid Weyerbrock, Stuart Walbridge, Larry Keefer, Edward H. Oldfield
 Discussant: *Keith L. Black*

continued on page 11

Application for Membership

AANS/CNS Section on Tumors



Eligibility: Members of the AANS and/or CNS who have demonstrated a special interest in tumors of the nervous system.

Note: *Adjunct Membership is available to non-neurosurgeons. Please contact the AANS office at 847-692-9500 for an Adjunct Membership application.*

I. Biographical

(A) Name: _____

(B) Home Address: _____

(C) Office Address: _____

Phone: _____ Fax: _____

(D) E-Mail: _____

II. Category of Membership Requested

Active

International

Resident*

III. Membership, Certification and Practice

(A) Are you certified by the American Board of Neurological Surgery? Yes No

(B) For Resident Applicants—Expected Residency Completion Date (month/year) _____

(C) Are you a member of

1. The American Association of Neurological Surgeons? Yes No

2. The Congress of Neurological Surgeons? Yes No

(D) Are you currently involved in brain tumor research?

Clinical — Yes No Basic — Yes No

Suggestions on Section activities that would benefit you:

Signature of Applicant

Date

*Membership dues are waived for applicants currently enrolled in a neurosurgical residency program.

Please return completed application and curriculum vitae to:

Michael W. McDermott, MD, Membership Chairperson

University of California, San Francisco

505 Parnassus Avenue, M-774

San Francisco, CA 94143-0112

Phone: (415) 476-1087 • Fax: (415) 753-1772 • E-mail: mcdermottm@neuro.ucsf.edu

Tumor Section Announces Online Genetic Vector Registry

Timothy Ryken, MD

With the rapidly expanding use of molecular biological techniques in neuro-oncology research, genetic vector construction and utilization has become an increasingly powerful method of studying the effects of gene manipulation in neurosurgical research efforts. Many laboratories have constructed genetic vectors for a variety of gene constructs and are willing to collaborate and share these vectors with other researchers. In order to facilitate this communication, a mechanism of listing vectors that are available in neurosurgical and related research efforts is being sponsored online by the AANS/CNS Section on Tumors.

This Web site (<http://205.184.247.34/vector/default.html>) is now available through **NEUROSURGERY://ON-CALL**® under the Tumor Section Web page. Researchers are encouraged to participate by listing vectors and constructs that are available in their laboratories. Participation does not imply that these vectors are automatically available, and there is no obligation to provide them. It is simply a statement that the vectors have been made and lists contact information to facilitate collaboration between laboratories and researchers with similar interests. The information is password protected and can be altered or removed at any time.

The success of this effort is entirely related to researcher participation. Please consider participating by registering vectors that have been constructed and are available in your laboratories. If you are interested in assisting with the further development of this project or have any questions related to participation, please contact: Timothy Ryken, MD, Division of Neurosurgery, University of Iowa Hospitals and Clinics, at (319) 356-3853 or via e-mail at timothy-ryken@uiowa.edu.

AANS/CNS Section on Tumors Announces its Genetic Vector Registry

Visit the Tumor Section Web Page
(<http://205.184.247.34/vector/default.html>)

Exchange
information with
your colleagues

Find researchers
with similar
interests

Find genetic
material and
vectors of mutual
interest

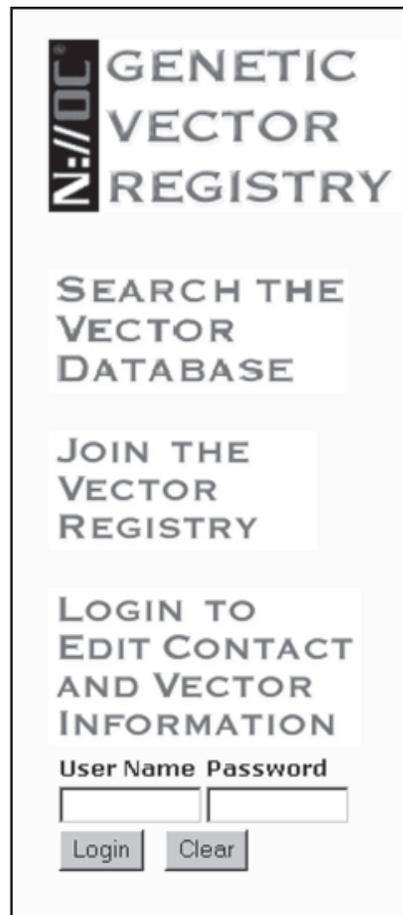
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contact:

Timothy Ryken, MD

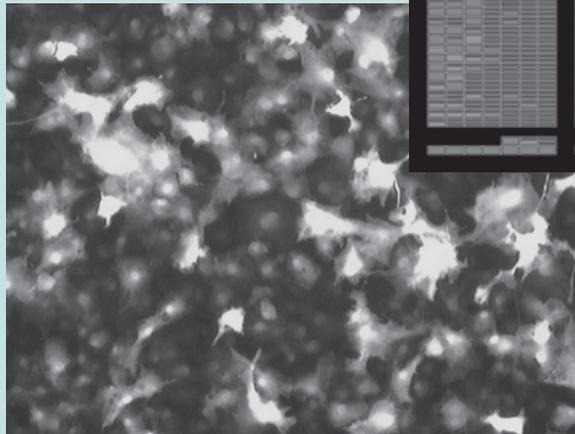
**Division of Neurosurgery
University of Iowa Hospitals and
Clinics**

e-mail:

timothy-ryken@uiowa.edu



The screenshot shows the top of the Genetic Vector Registry website. At the top left is the logo "N://ON-CALL" with "GENETIC VECTOR REGISTRY" to its right. Below the logo are three main sections: "SEARCH THE VECTOR DATABASE", "JOIN THE VECTOR REGISTRY", and "LOGIN TO EDIT CONTACT AND VECTOR INFORMATION". Under the login section, there are two input fields labeled "User Name" and "Password", and two buttons labeled "Login" and "Clear".



758 Heparin Co-infusion During Convection-Enhanced Delivery (CED) Dramatically Increases the Distribution of Glial Derived Neurotrophic Factor (GDNF) and Homologous Growth Factors in Rat Striatum

John F. Hamilton, Paul F. Morrison, Michael Y. Chen, Rosario S. Pernaute, Edward H. Oldfield, Kryst Bankiewicz

Discussant: *Edward A. Neuwelt*

759 The Role of Stereotactic Radiosurgery for Patients With Hemangioblastomas

Ajay Jawahar, Douglas S. Kondziolka, John C. Flickinger, L. Dade Lunsford

Discussant: *William A. Friedman*

Scientific Session VIII 9:45–11:15 AM

Moderator: *William E. Mayber, III*

Co-Moderator: *Gary D. Vander Ark*

772 Surgical Treatment of Intramedullary Spinal Cord Tumors: A Review of 300 Consecutive Cases

Albino P. Bricolo, Franco Faccioli

Discussant: *Paul C. McCormick*

773 Immuno-Gene Therapy: Prolongation of Survival and Induction of Long Term Immunity Against Intracerebral Breast Cancer

Praveen Deshmukh, Risha Moser, Roberta P. Glick, Terence R. Lichter, Edward P. Cohen

Discussant: *Robert L. Martuza*

774 Efficacy of HSV-tk Gene Therapy in Gliomas Largely Depends on Brain Tumor Physiology

Peter C. Warnke, Thomas Prokop, Bruni Baumer, Klaus Kopitzki, Christoph B. Ostertag

Discussant: *Zvi Ram*

775 Suppression of Angiogenesis and Malignant Glioma Growth by Recombinant Angiostatin

YongKil Hong, KwanSung Lee, Byung Chul Son, ChunKun Park, Moon Chan Kim, JoonKi Kang, Dong Sup Chung, YoungA Joe

Discussant: *Keith L. Black*

776 Prospective Randomized Comparison of Stainless Steel Wire Versus Titanium Miniplate Cranial Fixation

William C. Broaddus, Kathryn L. Holloway, Charles J. Winters

Discussant: *William T. Couldwell*

777 Self-Assessed Quality of Life in Patients Undergoing Major Cranial Surgery

Beth S. Rapaport, Edward Ledgard, Wei Zhang, Laurence F. Levy, William T. Couldwell

Discussant: *Beverly C. Walters*

Section Session 2:45–5:30 PM

Symposium – Brain Tumor Immunotherapy

Moderator: *Michael W. McDermott*

Speakers: *Nicholas de Tribolet, Walter A. Hall, Roberta P. Glick, Linda M. Liau*

Preuss Award

Pre-clinical Evaluation of Dendritic Cells as Immunotherapy for Intracranial Glioma

Amy B. Heimberger, presented by *Joseph M. Piepmeier*

Mahaley Award

Surgical Management of Pediatric Cushing's Disease

Robert J. Weil, presented by *James T. Rutka*

Young Investigator Award

A Novel Strategy for Gene Therapy Delivery to Brain Tumors: Foreign Gene Expressing Neural Stem Cells (NSCs) Display Tropism for Intracranial Gliomas

Karen Aboody, presented by *Ronald E. Warnick*

National Brain Tumor Foundation Award

presented by *Mark Bernstein*

Scientific Session

Moderators: *Linda M. Liau, Raymond Sawaya*

832 Pre-clinical Evaluation of Dendritic Cells as an Immunotherapy for Intracranial Glioma

Amy B. Heimberger, Laura E. Crotty, Gary E. Archer, Roger E. McLendon, Allan H. Friedman, Glenn Dranoff, Darell D. Bigner, John H. Sampson

833 Gamma Knife Radiosurgery for Pituitary Adenomas

Laurence S. Chin, Mark Hornyak, Massimo S. Fiandaca, Pradip Amin

834 Assessment of Size, Distribution and Infiltrative Spread in Gliomas by 3D-H-Proton MR-Spectroscopy Compared to Conventional MRI

Frank W. Floeth, Renate Rassek, J. Engelbrecht, Friedrich Weber

835 Directly and Indirectly Anti-angiogenic Gene Therapy of Malignant Brain Tumor with Endostatin and VEGF-R2 (flk-1)

Jianhong Zhu, Calvin Kuo, Li Zhang, Bob S. Carter, Judah Folkman, Richard Mulligan, Peter McL. Black

836 Initial Experience With Compact Intraoperative MRI

Gene H. Barnett

837 Mutant Peptide-Pulsed Dendritic Cell Vaccine in an Intracranial Protection Model

Timothy F. Witham, Gregorz Dworacki, Hideho Okada, Wendy Fellows, Melanie Erff, William H. Chambers, Ian F. Pollack, Albert DeLeo

Thursday, April 13, 2000

Breakfast Seminars 7:30–9:30 AM

411 Management of Brain Stem Tumors

Moderator: *James T. Rutka*

Panelists: *Mario Brock, Robert F. Spetzler, Frederick J. Epstein, Albino P. Bricolo*

412 Surgical Adjuncts for Neuro-oncology

Moderator: *Jeffrey N. Bruce*

Panelists: *Michael M. Haglund, Peter McL. Black, David W. Roberts, Axel Perneczky*

413 Contemporary Management of Craniopharyngiomas

Moderator: *Kalmon D. Post*

Panelists: *Rudolph Fahlbusch, John R. Adler, Nelson M. Oyesiku*

414 Cavernous Sinus Surgery

Moderator: *John Diaz Day*

Panelists: *Laligam N. Sekhar, Harry R. Van Loveren, L. Dade Lunsford*



Photo courtesy of the SFCVB.

AANS/CNS Section on Tumors Fourth Biennial Satellite Symposium

San Francisco Hilton and Towers April 13-14, 2000

Thursday, April 13, 2000

- 1-1:05 PM** **Welcome**
Joseph M. Piepmeier
- 1:05-1:15 PM** **Meeting Overview**
Ronald E. Warnick
- 1:15-2:30 PM** **Novel Delivery Strategies – From Molecules to Neurosurgical Patients**
- Implantable Biodegradable Polymers
Henry Brem
 - Osmotic Blood-Brain Barrier Disruption
Edward A. Neuwelt
 - Convection-Enhanced Delivery
Edward H. Oldfield
- Moderators: *William T. Couldwell* and *Jack P. Rock*
- 2:30-4 PM** **Skull Base Meningiomas**
- Cavernous Sinus Meningiomas
Harry R. Van Loveren
 - Clinoidal Meningiomas
Joung H. Lee
 - Petroclival Meningiomas
Ossama Al-Mefty
 - Status Report on Radiosurgery and Radiotherapy
Bruce Pollack
- Moderators: *William T. Couldwell* and *Jack P. Rock*
- 4-4:30 PM** **Coffee Break and Poster Viewing**

- 4:30-6 PM** **Free Papers**
Moderators: *Roberta P. Glick* and *Ennio A. Chiocca*
- 6-8:30 PM** **Dinner and Poster Viewing**

Friday, April 14, 2000

- 7-8 AM** **Continental Breakfast**
- 8-9 AM** **Craniopharyngioma – Point/Counterpoint**
- The Case for Radical Resection
James T. Rutka
 - The Case for Subtotal Resection and Radiotherapy
L. Dade Lunsford
- Moderators: *Raymond Sawaya* and *Linda M. Liao*
- 9-10 AM** **Free Papers**
Moderators: *Raymond Sawaya* and *Linda M. Liao*
- 10-10:30 AM** **Coffee Break and Poster Viewing**
- 10:30-11:30 AM** **Free Papers**
Moderators: *Raymond Sawaya* and *Linda M. Liao*
- 11:30-12:15 PM** **Special Lecture – Targeted Therapy for Gliomas Based on Their Genetic Pathogenesis**
Darell Bigner, introduced by *Joseph M. Piepmeier*
- 12:15-1:15 PM** **Luncheon Seminar – How to Build a Brain Tumor Center**
Moderators: *Joseph M. Piepmeier*
Faculty: *Peter McL. Black*, *Mitchel S. Berger*, *James T. Rutka*
- 1:15-2:15 PM** **Pediatric Brain Tumors – New Transnational Strategies**
- Developmental Pathways in Medulloblastoma
Corey Raffel
 - Growth Factor Mediated Signaling Pathways in Gliomas
Howard L. Weiner
 - Apoptosis in the Response of Medulloblastoma and Glioma to Radiation
Mark Israel
- Moderators: *Gene H. Barnett* and *Frederick F. Lang, Jr.*
- 2:15-4 PM** **Free Papers**
Moderators: *Gene H. Barnett* and *Frederick F. Lang, Jr.*

Salute to Our Sponsors: AANS/CNS Section on Tumors Fourth Biennial Brain Tumor Satellite Symposium

April 13-14, 2000

Program Sponsor \$10,000
Aventis Pharmaceuticals
Radionics

Partner \$ 5,000
Brain Tumor Society
Pediatric Brain Tumor Foundation

Sponsor \$ 2,500
American Brain Tumor Association
Carl Zeiss
Hitachi
Ohio Medical Instruments
Schering Oncology

Researchers Recognized

At the AANS Annual Meeting in San Francisco, the following researchers will be recognized:

Preuss Award

Pre-clinical Evaluation of Dendritic Cells as an Immunotherapy for Intracranial Glioma. *Amy B. Heimberger, Laura E. Crotty, Gary E. Archer, Roger E. McLendon, Allan Friedman, Glenn Dranoff, Darell D. Bigner, and John H. Sampson.*

Since glioma patients are profoundly immunosuppressed, the question arises as to whether dendritic cells (DCs) are capable of inducing an efficacious response in an immunosuppressed host against an “immunologically privileged” intracranial glioma.

Methods: We initially evaluated DC immunotherapy in an inbred VM/Dk mouse model in which the transplantable cell line was derived from a spontaneously arising astrocytoma that mirrors human gliomas phenotypically, morphologically and secretes an immunosuppressive cytokine similar to human gliomas.

Results: Systemic vaccination of mice with DCs pulsed with tumor homogenate followed by intracranial tumor challenge resulted in 50 percent of mice surviving long-term and produced a greater than 160 percent increase in median survival ($p=0.016$) compared with mice vaccinated with PBS or unpulsed DCs ($p=0.083$). Both cell-mediated and humoral immunity was induced and immunologic memory was demonstrated by survival of mice re-challenged with tumor. Furthermore, histologic examination showed no evidence of autoimmune encephalomyelitis. Since DC immunotherapy resulted in significant efficacy in animals and appeared safe, we next evaluated the DC phenotype in malignant glioma patients and found that the DCs were positive for class I and II molecules, the costimulatory molecules CD80 and CD86 and the DC marker CD11c; similar to DCs obtained from normal controls. Functionally, the DCs obtained from malignant glioma patients were found to be potent stimulators of allogeneic mixed lymphocyte reactions against multiple targets.

Conclusion: Based on this data, we are currently designing a Phase I clinical trial utilizing DC as an immunotherapy for patients with malignant glioma.

Young Investigator Award

A Novel Strategy for Gene Therapy Delivery to Brain Tumors: Foreign Gene Expressing Neural Stem Cells (NSCs) Display Tropism for Intracranial Gliomas. *Karen S. Aboody, Kate A. Bower, Sarah Shivji, Conor B. McDonough, Alice Brown, Nikolai G. Rainov, Peter McL Black, Xandra O. Breakefield, and Evan Y. Snyder.*

Primary human brain tumors (e.g., gliomas) are largely refractory to currently available treatments due to the degree to which they expand, infiltrate surrounding tissue, and migrate widely in normal brain. We investigated the tumor targeting potential of NSCs and their potential use as a vehicle to deliver therapeutic gene products.

Methods: NSCs were implanted directly into or at distant sites from established experimental tumor (including adjacent normal tissue, contralateral hemisphere, or lateral ventricles).

Results: We demonstrate that inherently migratory NSCs, when

implanted into experimental intracranial gliomas, will distribute themselves rapidly and extensively throughout the tumor and migrate in juxtaposition to aggressively advancing tumor cells while continuing to express a foreign reporter gene. Furthermore, when implanted at even distant sites from the tumor bed, the donor NSCs migrate through normal tissue and specifically target the tumor. Preliminary data suggest that both murine and human NSCs retrovirally transduced to express the prodrug cytosine deaminase behave in a similar manner. Additionally, pilot cell culture studies suggest an oncolytic effect of these genetically modified NSCs on surrounding brain tumor cells when exposed to 5-fluorocytosine.

Conclusion: These results support the use of NSCs as an effective delivery vehicle for targeting therapeutic genes to invasive brain tumor cells. Potential approaches made feasible by NSC-mediated gene delivery may include not only the direct dissemination of cytotoxic gene products, but also the more efficacious delivery of viral vectors encoding therapeutic genes to be incorporated by tumor cells (e.g. suicide genes).

Mahaley Award

Surgical Management of Pediatric Cushing's Disease. *Robert J. Weil, J. Johnson, George Chrousos, J.L. Doppman, Hetty DeVroom, Lynette Nieman, and E.H. Oldfield.*

Methods: Cushing's disease (CD) is uncommon in children and adolescents. To evaluate the presentation, diagnosis, treatment, and surgical outcome of children and adolescents with CD, we examined the course of 92 patients who underwent pituitary microsurgery between 1982 and 1997.

Results: Of the 92 patients (50 females, 42 males), 72 had their initial surgery at the National Institutes of Health (NIH) and 20 had their second ($n=19$) or third surgery at the NIH. Fifty-three were pre-pubertal and 39 were pubertal. Mean at onset of symptoms was 10.6 ± 3.6 y (range, 4-18y) and the mean age at surgery was 14.5 ± 3.7 y (5-20 y). Fifty-five had negative sellar MR. Seventy-seven patients had selective adenomectomy and 15 had partial hypophysectomy. A total of 98 percent of the 92 patients had remission of CD immediately following surgery. There have been two recurrences and five patients have been treated with irradiation of the pituitary (two recurrences, three with residual tumor). At long-term follow-up of 75.7 ± 48.1 months (12-198), the disease-free rate is 100 percent. Post-operative complications were few and most were transient. Central hypothyroidism occurred in 13 (15 percent) and panhypopituitarism in six (6.5 percent); both were more common in patients undergoing repeat surgery and partial hypophysectomy. Recovery of the HPA axis occurred in 86 (93 percent) at a mean of 11.8 ± 8.4 months (range, 3-60). Height increase, decrease in weight, and changes in body-mass index were statistically significant in pre-pubertal and pubertal patients. Recovery of menstrual function occurred in 96 percent of patients with primary or secondary amenorrhea.

Conclusion: Since transsphenoidal microsurgery is definitive therapy for most children and adolescents with CD, it can be performed with a high likelihood of cure and minimal long-term surgical or endocrine sequelae.

The Select Review in Neuro-Oncology

Anthony L. Asher, MD

We live in a time of unprecedented access to information. Exponential advances in various technologies have created an explosion in the amount of information available. While the “information age” has created opportunities for individuals to gather and use data relevant to their lives, the management of the extraordinary amount of data now available has created unique challenges for busy professionals.

What is Select Review?

Perhaps nowhere are the challenges of information management more apparent than in medicine, where the demand and need for up-to-date, specific and highly technical information is great. Although physicians can access an almost unlimited amount of information on highly specific topics through the Internet, it is unusual to find such information “packaged” in a truly useful and relevant form. The Select Review in Neuro-Oncology, (<http://www.neurosurgery.org/tumor/selectreview/>), an online educational resource for individuals with an interest in brain tumors, was born out of the conviction that “content” alone without an appropriate organizing structure was unlikely to be of use to busy clinicians.

The developers of the Select Review began with the premise that Internet-based information on complex medical issues should ideally possess the following characteristics:

- 1) It should be accessible and easy to assimilate;
- 2) It should be highly relevant, i.e., it should have the potential to significantly impact one's practice;
- 3) It should be comprehensive, but not overwhelming;
- 4) It should be current;
- 5) It should incorporate input from all specialty groups relevant to the particular issue/topic being analyzed;
- 6) It should employ a user-friendly interface and allow the user to narrow or expand his or her information inquiry as needed;
- 7) All aspects of the project including submission, editing and review and reader feedback should be completely online.

Given the rapid development of new therapies and diagnostic techniques for patients with brain tumors, the need for a comprehensive yet manageable informational resource for clinicians and researchers with an interest in neuro-oncology is obvious. The Select Review is an attempt to address that need. The review is a periodic summary of pertinent information in the literature related to brain tumors. A distinct and important feature of this effort is its multidisciplinary focus. Individuals from 13 different disciplines, including the basic sciences, have pledged their support for this effort.

How Does it Work?

The Review is divided into four sections: journal article reviews, abstracts from various national meetings, invited comments from authors of selected articles and original contributions from experts who summarize current areas of interest in neuro-oncology.

Periodically (starting every six months then quarterly), specialists in multiple fields (adult and pediatric neurosurgery, medical and radiation oncology, pediatric oncology, neurology, radiology, ophthalmology, basic science, neuro-pathology, pain medicine, rehabilitation medicine and skull base surgery) are asked to examine their own literature and then prepare concise summaries of the “select” articles thought to be most relevant to brain tumor research and treatment. These summaries are submitted online and then edited before final release.

These same individuals are also asked to identify and submit abstracts of particular interest/importance from the various national meetings related to neuro-oncology. These are subsequently listed in a separate section. All journal article summaries and abstracts are grouped according to specialty. Readers have the option to view submissions from individual or multiple specialties. Moreover, a detailed search mechanism allows viewers to review specific submissions from previous issues.

One or two articles are generally identified for special review. The authors of these articles are asked to make comments on their work in a section called “Featured Articles.” Additionally, in each issue a national expert in neuro-oncology is asked to give his or her perspective on a topic of particular interest in neuro-oncology. Those comments are offered in a special section called “What's Hot in Neuro-Oncology.” Both the Featured Article and the What's Hot features can be read separately or with the other submissions.

The Select Review is sponsored by the AANS/CNS Section on Tumors, and the Society for Neuro-Oncology. The Review is posted on the **NEUROSURGERY://ON-CALL**® Web site. Considerable technical support for this project has been provided by the AANS National Office Staff, as well as members of the Society for Neuro-Oncology (SNO). Members from the AANS/CNS Section of Tumors and SNO sit on an Advisory Board that oversees the Select Review. The Advisory Board was created to ensure that the quality and usefulness of this product is maintained over time. A feedback mechanism exists on the site that allows readers to e-mail the editor-in-chief with comments or suggestions.

The first issue of the Select Review was released on October 27, 1999. Thus far, the response to the project has been overwhelmingly positive. A number of new features were incorporated in the February 2000 issue. First, a PDF (graphic) format was made available that enables users to print the entire Review in a journal-like format, complete with a cover page and index. Also, a list-serve was established through the site that allows users to “subscribe” to the journal by receiving e-mail updates when new issues are available. Finally, a more user-friendly interface has been developed with the help of programmers at **NEUROSURGERY://ON-CALL**®. Over the next several months, we will be adding new features including links to related Web sites and a bulletin board for discussion about the brain tumor literature.

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How the AANS/CNS Section on Tumors was Formed

Mark Rosenblum, MD

The driving force behind the creation of the AANS/CNS Section on Tumors was the realization that neuro-oncology was a recognized subspecialty that needed more focused attention at the educational, political, and leadership levels. Edward R. Laws, Jr., MD, the President-elect of the Congress of Neurological Surgeons at the time, came up to me at the CNS meeting in 1983 and asked if I would organize the Section.

Upon his request, I gathered a group of neurosurgeons who had a focused interest in the management of tumors, either in the clinic or in the laboratory, as the first Section Executive Council. Over the course of the next six months, we wrote our Bylaws patterned after the Section on Cerebrovascular Surgery, the only active Section at that time. We were first sanctioned as a Section of the CNS and we then petitioned the AANS to become a Joint Section, which was approved in 1984. We started our formal educational activities by running special symposia at the AANS and CNS Annual Meetings, focusing on a variety of clinically relevant problems. Topics of interest were solicited from the entire membership. We also queried the membership on what services they desired in a Section.

Member Recruitment

An aggressive new member recruitment program was started with the concurrent development of a number of membership benefits including: surveys of the available neuro-oncology fellowships, reviews of all active clinical protocols with the help of the PDQ database and inquiries to all neurosurgery departments, the distribu-

tion of Cancer Letters as a literature abstract service, a newsletter, and summaries of our Symposia, which were bound as a reference source. Finally, we initiated two awards, the first was the Preuss Resident Research Award through the generosity of the Preuss Foundation, and the second was the Mahaley Award, in memory of Steven Mahaley, MD, to be given to the best clinical paper presented at the meeting. The Section's membership grew rapidly into one of the largest Sections in the AANS and CNS. We believe this growth occurred because of the services we provided to our members, as well as the general acceptance of specialization in neurosurgery.

It is interesting to note that we started the Section by borrowing \$4,000 from each of the parent organizations. Through the years, the Section has grown into a financially sound organization, which now has the opportunity to fund a number of new ventures, including a Satellite Symposia every other year, and other items of interest and benefit to neurosurgeons in the area of tumors.

Salute to our Leaders

My memory of those earlier years is focused on the individuals who dedicated their time and effort in their roles on the Executive Council. Without those leaders and their energetic work to support this new venture, the Section would not have been nearly as successful as it has been. Personally, I must say that one of the greatest honors I have ever received was to be selected as the founding Chairman and to serve in that role for the first several years of its existence, working with so many wonderful people.

Select Review (continued from page 14)

In summary, The Select Review in Neuro-Oncology is an effort to make the vast literature related to brain tumors easier to access, easier to use and most important, pertinent to the practice of busy clinicians. Other groups are presently considering this unique multidisciplinary format as a model for future Internet-based educational resources. The Select Review remains a work in progress and we anticipate further refinements over time. If you or any of your colleagues would like to contribute to this effort, please contact me via e-mail at tonyasher@cnsa.com.

The AANS/CNS Tumor Section is continuing to explore mechanisms to make emerging information-based technologies relevant to the practice of neurosurgery. We welcome your thoughts and suggestions.

Information at the Click of a Mouse

Information abounds on the Tumor section of **NEUROSURGERY://ON-CALL®**, including the Select Review in Neuro-Oncology, the new Genetic Vector Registry, information on the Fourth Biennial Brain Tumor Satellite Symposium, and links to various research and funding opportunities.

To view this section of the site, visit www.neurosurgery.org/sections/tumor/summary.html.

Young Neurosurgeons Committee

Frederick F. Lang, Jr., MD

The Young Neurosurgeons Committee, in cooperation with the Membership Committee, hosted a reception for prospective members on November 1, 1999, during the Annual Meeting of the Congress of Neurological Surgeons. The event was well attended by many neurosurgeons interested in joining the Section, including several international neurosurgeons. A delicious hot buffet and open bar lent itself to a relaxed atmosphere that provided a unique opportunity for prospective members to ask questions and speak directly with many of the senior members of the Section. Frederick F. Lang, Jr., MD, Young Neurosurgeons Committee Chair, and Michael W. McDermott, MD, Membership Committee Chair, provided information on membership enrollment and benefits. Joseph M. Piepmeier, MD, Chairman of the Section, remarked on his enthusiasm for the Tumor Section and the high quality of individuals he has met and worked with in the Section. Thanks are given to Laura Toner, from the AANS National Office and Sandra Flores, Administrative Assistant in the Department of Neurosurgery at MD Anderson, for their help in planning the reception.

The Young Neurosurgeons Committee also has been actively planning ways to increase its impact on different constituents of the Section, including residents, fellows and newly practicing members. Plans are in progress for devoting the upcoming year to outlining and implementing educational tools for each of these groups. Young neurosurgeons who are interested in participating in this effort are encouraged to contact Dr. Lang at (713) 792-2400.

Research Committee Report

Roberta P. Glick, MD

As many of you are aware by now, a teenage patient with a genetic liver disease (OCD) recently died in a gene therapy trial using an adenoviral vector at the University of Pennsylvania. At first, it was represented as a fluke, an untoward, unexpected, and unusual event, and that everyone had followed proper procedures. However, this event spurred investigations into the safety of gene therapy leading to Congressional hearings, and the findings that researchers had been lax about disclosing adverse events, including side effects, toxicities, and complications of therapy, not just in Pennsylvania but across the nation.

According to the latest statistics, 396 gene therapy trials have been completed worldwide, involving 3,278 patients of which 310 trials are in the U.S., accounting for 2,383 patients. (Sources: *CNN*, *New York Times* and *Chicago Tribune*.) The regulatory agencies, NIH and FDA, were not sharing information with each other. Adverse event reports that had been going to the FDA were kept confidential, according to proprietary interests. After NIH requested them, it received 691 side effect reports, of which only 39 had been reported to the Institutes. Sen. Bill Frist (R-Tenn) said "We may have just touched the tip of the iceberg." In addition, doctors were portrayed as "rogues willing to cut corners and sacrifice trust of patients for fame, glory, and biomedical riches." Dr. Richard Mulligan, one of the leading gene therapy pioneers who has been against human use of gene therapy, stated "Gene therapy is in the midst of an identity crisis, it was overhyped, overpromised, and oversold, expected to provide instant miracle on demand.

As a result of this incident, the University of Pennsylvania had their gene therapy program shut down by the FDA. The University of Alabama also had their gene therapy program closed. Beth Israel in Boston announced that they would suspend their clinical gene therapy trial, pending the national discourse on the safety of gene therapy.

Wanted: Contributions to *Tumor News*

In the next issue of *Tumor News*, we will once again publish the columns, "You Make the Diagnosis" and "Ask the Experts." If you have an interesting clinical case, as well as pertinent imaging studies, that you would like to publish in the "You Make the Diagnosis" column, please let us know. Or, if you are involved in an interesting and ground-breaking clinical trial and would like to share the progress or results of

that trial with your fellow Section members in the "Ask the Experts" column, please contact:

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Photo: Pyramid Vertical. The tallest building in San Francisco. SFCVB. Photo by Phil Coblentz.