

# SNACC News

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*“The mission statement of SNACC is to advance the art and science of the care of the neurologically impaired patient. Our members are the logi-*

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## President’s Address: Piyush M. Patel, MD

It is an honor to serve as the President of the Society of Neurosurgical Anesthesiology and Critical Care. What started out as a small group of dedicated individuals has blossomed into a robust subspecialty society whose mission now includes the improvement of the care of the neurosurgical and critical care patients through advancements in the art and science of clinical neuroanesthesia. The Society now boasts an international membership and has developed extensive collaborations with a number of international neuroanesthesia societies. Our Annual Meeting serves as an excellent forum for presentation and discussion of topics that range from new developments in basic neurosciences to those that are more germane to the daily practice of neuroanesthesia. By any measure, the Society has been an outstanding success. It is, however, inevitable that growth brings with it new challenges which the Society will have to address. During a time when membership in a number of anesthesia subspecialty societies is in decline, we have indeed been fortunate that SNACC membership has remained fairly constant. However, the foremost challenge that we face today is to attract the attention of young anesthesiologists and researchers and encourage them to join our Society. The interest among anesthesiology trainees in pursuing a career in neuroanesthesia, and related critical care, has been in a steady decline. Of the many neuroanesthesia fellowships that are available in excellent academic institutions, few are subscribed to. A number of reasons for this decline have been proposed. Chief among these is the growing perception that neuroanesthesia per se, although considered a subspecialty of anesthesiology in general, does not require specialized training beyond

what is mandated during a residency. Frankly, I am rather amused by this attitude. This perception does not necessarily imply a lack of interest in the specialty as much as the lack of an understanding of the skill set required of a neuroanesthesiologist. Nonetheless, the perception exists and the task at hand is to reverse this trend. The advances in the field of medicine, both in knowledge and methodology, have indeed been breathtaking. The rate of advance has been such that it is difficult for general practitioners to remain abreast of the latest knowledge and to provide the very best of care. This inevitably has led to subspecialization and the narrow focus upon particular parts of general medicine. Has the evolution of neuroanesthesia reached such a stage? Are neurosurgical and neurointerventional procedures complex enough to require specialist training? In many academic centers, anesthesia for these procedures is routinely provided by neuroanesthetists. In clinical practice outside of academia, anesthetic care for the vast majority of patients is provided by anesthesiologists who have not received specialist training in neuroanesthesia. There is no evidence that patient care has suffered as a result. The use of this argument to support the notion that neuroanesthesia fellowship training is unnecessary, however, is not sound. A fellowship affords a focused in-depth exposure to cerebral physiology and pathophysiology, neuropharmacology, neuropathology and to the interaction of anesthetic agents with the normal and diseased brain that is simply not possible in a conventional residency. A properly constructed fellowship will allow one to gain facility with established and emerging neuromonitoring modalities. In many (cont. page 4)

## 31st Annual Meeting Report

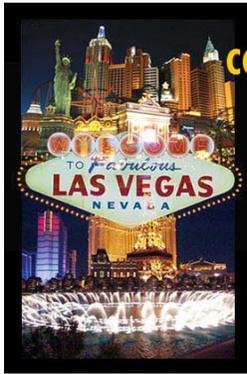
This year's program was organized by Karen Domino, MD, and hosted 179 members of SNACC at the Westin St. Francis Hotel in San Francisco, California. Keynote lectures by renowned authorities in basic and clinical neurosciences were combined with the presentation of 93 scientific abstracts by the SNACC membership.

**Basic Science Keynote Lecture.** Philip J. Horner, PhD (University of Washington) began the proceedings his lecture on stem cell entitled “Stem Cells and Regeneration of the Damaged Central Nervous System:

You Cannot Fool Mother Niche!”. By using data generated in his own and other laboratories, he demonstrated that the internal milieu has a significant effect on the maturation of stem cells. One example of this phenomenon is that adult spinal cord stem cells *in vitro* produce neurons, astrocytes, and *in vivo* produce only astrocytes and oligodendrocytes, which may be why spinal cord injury results in this scar formation instead of self-repair. Dr. Horner emphasized that modulation of the cellular “niche” of stem cells will play a dominant role in future

therapeutic applications.

**Clinical Keynote Lecture.** Claudia Robertson, MD, FCCM, (Baylor College of Medicine) spoke on “Management of Cerebral Perfusion Pressure after Traumatic Brain Injury”. She highlighted the role of post-traumatic hypotension in mediating cerebral ischemia within the first few hours and the development of intracranial hypertension thereafter. She reviewed the results of a randomized clinical trial by her group to prevent secondary ischemia by comparing CPP with ICP (cont. next page)



### 32nd Annual Meeting in Las Vegas: October 22, 2004:

Preliminary plans for the program include:

- brain-lung interactions
- stem cells
- IHASt review
- scientific abstracts
- problem-based learning discussions
- hands on workshops

Please make plans to join us in the fall. The formal program and application forms will be available this summer through the website [www.snacc.org](http://www.snacc.org) and the summer newsletter/annual meeting announcement. We encourage members of SNACC and all those who have an interest in neurosciences to attend what will undoubtedly be a very successful meeting.



**“isoflurane and caspase-8 inhibition provides prolonged neuroprotection”**

## 31st Annual Meeting Report (cont. from page 1)

targeted therapy. The former had shorter and fewer episodes of jugular venous desaturations, but no improvement in long-term neurological outcome. Furthermore, there was a five-fold increase in ARDS in the CPP-targeted group. She concluded that given the heterogeneity of TBI, individualized treatment of myriad clinical problems should dictate the course of therapy rather than a rigid targeted management protocol.

### Basic Science Symposium.

John W. Olney, MD, (Washington University) presented a lecture titled “Anesthetic Neurotoxicity in Young and Aged Animals.” Dr. Olney is an internationally recognized neuroscientist in neurotoxicity and was the first to coin the phrase “excitotoxicity.” Dr. Olney presented some of his more recent work in which he has demonstrated that exposure to commonly used anesthetic resulted in neurodegeneration in rats. He highlighted developmental differences in this phenomenon. NMDA antagonists cause neurotoxicity in adult rats, which is reversible with GABA agonists before or at time of exposure. However, most anesthetics, including GABA agonists (midazolam and isoflurane) are just as neurotoxic as NMDA antagonists in developing rat pups and result in widespread apoptotic neurodegeneration.

**Clinical Symposium: Update on Interventional Radiology-** Given the emergence of interventional neuroradiology, local faculty

from the University of California, San Francisco concluded the meeting with a review on this topic.

Dr. Randall T. Higashida, MD, Director of Neurointerventional Radiology and President of the Association of Interventional and Therapeutic Neuroradiology presented an update on the results of cerebral angioplasty and stenting, and discussed the potential advantages of carotid stenting as a viable treatment alternative for symptomatic hemodynamically significant lesions. However, controlled outcome trials of these novel therapies need to justify them as alternatives to carotid endarterectomy.

Wade S. Smith, MD, PhD, Director of the Neurovascular Science, discussed methods for detection of cerebral vasospasm, which include clinical exam, transcranial Doppler, CT angiogram, CT perfusion studies, and magnetic resonance angiography. He also discussed the various therapies for the management of vasospasm; including hypertension, hemodilution and hypervolemia, angioplasty, intra-arterial papaverine injection, and intrathecal nitroprusside.

S. Claiborne Johnston, MD, PhD, Director of Stroke Services “Recent Studies on Aneurysm Treatment: How Should Trial Results change Practice?”. No randomized trial of ruptured aneurysm treatment has been performed at the time of presentation, however there is one study comparing clipping versus coiling of ruptured aneurysm. Further randomized

studies and outcome studies are necessary to evaluate interventional radiology techniques versus surgical clipping. William L. Young, MD, Vice-Chair of Anesthesiology discussed the role of anesthesiologists in controlling systemic circulation during endovascular surgery and focused on manipulating systemic or regional blood pressures as dictated by the procedure.

**Scientific Abstracts.** An important function of the Annual Meeting is to provide a forum in which research performed by SNACC members can be presented and critically appraised. Ninety-three abstracts were presented during the meeting. The topics ranged from cerebral ischemia/molecular biology to clinical neuroscience/critical care. Discussion of the abstracts, presented in posters, was facilitated by recognized experts in various fields of neurosciences and neuroanesthesia. Abstracts of the scientific papers are published in the *Journal of Neurosurgical Anesthesiology* 2003; 15:350-87.

**Annual SNACC Dinner Symposium: “Anesthetic-Mediated Neuroprotection: Established Fact or Passing Fancy?”** This lively debate featured David S. Warner, M.D (Duke University) for the pro-side and Richard J. Traystman, Ph.D. (University of Oregon) for the con-side. Both prominent authorities in neurosciences provided opposing but equally compelling arguments for this vexing phenomenon.

## 2003 Young Investigator Awardee: Satoki Inoue, MD

Satoki Inoue, MD, a post doctoral fellow from the University of California, San Diego (UCSD) was the recipient of the SNACC Young Investigator Award for work entitled “Isoflurane and Caspase-8 Inhibition Reduced Cerebral Injury in Rats Subjected to Focal Cerebral Ischemia”. Under the direction of Dr. Piyush Patel, this work demonstrated that a combination of isoflurane and z-IETD-fmk produced neuroprotection in a rat model of focal ischemia. z-IETD-fmk is a specific caspase-8 inhibitor

with is one of the many mediators of neuronal apoptosis. In contrast to a previous report from the Patel laboratory which demonstrated that isoflurane alone delayed but did not prevent cerebral infarction, the combination of isoflurane and z-IETD-fmk had a measurable neuroprotective effect even after a 14 day recovery period. This combination also had greater efficacy than the administration of the caspase-8 inhibitor alone. This work underscores the importance of anti-apoptotic therapy in the

attenuation of secondary injury after transient cerebral ischemia. After completing his research fellowship at UCSD in 2003, Dr. Inoue returned as a research associate in his home institution in the Department of Anesthesiology, Nara Medical University, Nara, Japan. He currently is pursuing investigational work in the areas of cerebral ischemia and protection, hypothermia and cerebral metabolism. SNACC congratulates Dr. Satoki Inoue and his mentor Dr. Patel for their outstanding work.

## 2003 Distinguished Teacher Award: Adrian Gelb, MD

SNACC has had a tradition of recognizing the contributions that neuroanesthetists and neuroscientists have made to the specialty of neuroanesthesia and to the larger anesthesiology community as a whole. In that spirit, SNACC recognizes the important contributions made by Dr. Adrian Gelb, MB,ChB, FRCP (University of Western Ontario) in the area of education both in his own institution and internationally as a former president of SNACC and Chair of the Board of Trustees of the Inter-

national Anesthesia Research Society. He is currently Professor of Anesthesiology at the University of Western Ontario, London, Ontario Canada and was recently conferred the Dean's Award of Excellence in Research and Teaching. In addition to his impressive research accomplishments he is internationally known as a strong advocate of the field of neuroanesthesia and has received kudos from other neuroanesthetists around the world. His teaching dossier includes high marks from students, residents,

fellow faculty and deans alike. He has continuously demonstrated a strong commitment to collaborative research and served as a mentor in the areas of anesthesiology, physiology, pharmacology, neurosciences, imaging, intensive care, transplantation and psychology. Several of his fellows have achieved leadership positions in the field of neuroanesthesia. This more than any is a tribute to his influence as a teacher and role model.



*"..as a teacher I am a facilitator who strives to stimulate the desire to learn and actual learning."*

## Nominations for SNACC Officers

The Nominating Committee (Karen B. Domino, M.D., M.P.H, Satwant Samra, M.D., and Verna Baughman, M.D.) is pleased to nominate Sulpicio (Sol) Soriano, M.D. for Secretary/Treasurer and Basil Matta, M.D. for Vice President for Communications, for election at the October 2004 SNACC meeting. Dr. Soriano is Associate Professor of Anaesthesia, Harvard Medical School, and Senior Associate in Anesthesia, Children's Hospital, Boston. He is currently Vice President for Communications. Sol has done an outstanding job updating the website, coordinating educational activities for SNACC, including chairing a subcommittee on education and development of educational material on the website, helping with newsletter publi-

cations and co-editing of the bibliography update. Dr. Matta is Clinical Director of Perioperative Care, Associate Lecturer, University of Cambridge, Addenbrookes Hospital, Cambridge, U.K. He is currently a SNACC Board Member at Large, whose term expires at the annual meeting in 2004. Dr. Matta is a thoughtful and energetic member of the board. He organized SNACC's highly successful breakfast panel at the 2003 ASA in San Francisco. Basil chairs SNACC's subcommittee on international relationships and the Neuroscience Committee of the European Society of Anesthesiologists. Both Sol and Basil will do an outstanding job at the positions for which they are being nominated. Nominations for these positions are also welcome

from the membership. The bylaws reads "Additional nominations for officers may be made by the membership by petitions duly filed with the Secretary/Treasurer at least thirty (30) days prior to an election at the annual membership meeting. In order to qualify as nominating petitions, there shall be affixed thereto the signatures of twenty-five (25) members of the Society as a minimum." Individuals chosen for the Secretary/Treasurer position are those who have demonstrated a commitment to SNACC and have served the Society in a number of administrative positions. Their experience with these administrative responsibilities as well as their effectiveness in performing these tasks is crucial in their nomination.

**Karen B. Domino MD MPH**

## SNACC/ASA Breakfast Panel – Cerebral Ischemia

The Society hosted its annual Breakfast Panel at the ASA on Monday the 13<sup>th</sup> October. David Menon (University of Cambridge, UK) described the basic pathophysiological processes in action after traumatic brain injury, and demonstrated how brain imaging can detect changes in ischemic brain volume resulting from common interventions such as hyperventilation. The audience were treated to several scenarios where patients have undergone PET scanning a few hours after TBI in the state of the art Neurointensive Care in Cambridge. Michael Todd

(University of Iowa, USA) followed and highlighted important similarities with the cerebral insults observed after subarachnoid haemorrhagic bleeds. Emphasis was placed on the role of intra-operative hypothermia in the prevention of ischemic brain injury. The IHAST2 trial, the intraoperative hypothermia during aneurysm surgery trial, is the largest randomized prospective trial of its kind. Enrolment of patients was closed on September 2003 and the results will be presented in February 2004. Dr Hilary Grocott (Duke Univer-

sity, NC, USA) gave the audience a brief introduction to the experimental work his group has been conducting in relation to cardiopulmonary bypass and cerebral injury. Hilary then highlighted the importance of protecting the brain in these patients who not infrequently undergo successful cardiac surgery only to end up with neurologic deficit. The Panel was concluded having highlighted the importance of translating experimental and clinical research to improved outcome for neurosciences patients.

**Basil Matta MB FRCA**

**IARS 78th Clinical and Scientific Congress:**  
Tampa, FL  
March 27-31, 2004

**SNACC sponsored panel:**  
**Controversies in Neuroanesthesia:**  
3:00-4:30 Monday March 29

*Piyush M. Patel, MD*  
Moderator

*Tod B. Sloan, MD, PhD, MBA*  
Discussant

•Visual Loss and Nerve Injury:  
*Karen B. Domino, MD, MPH*

•General or Regional Anesthesia for Carotid Endarterectomy  
*Concezione Tommasino, MD*

•Appropriate Monitors for Pediatric Neurosurgery:  
*Sulpicio G. Soriano, MD*

### Note to members:

As of January 1, 2004 we have changed our management company to the ASA Management Services. Please note the new contact information on page 4.



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### 2003-2004 SNACC Officers

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#### Vice President for Communications SNACCNews Editor

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#### Immediate Past President

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#### Board at Large

Mary Anne Cheng, MD  
Rosemary Craen, MBBS  
Rona G. Giffard, PhD, MD  
Basil Matta, MB, FRCA  
Mark H. Zorrow, MD

#### ASA House of Delegates Representatives

Jeffrey R. Kirsh, MD  
W. Scott Jellish, MD (Alternate)

## SNACCNews

### Presidential Address (cont. from page 1)

centers, such facility is a prerequisite to the attempts to obtain financial remuneration for intraoperative neuromonitoring.

The Society has undertaken a number of steps to draw attention, not only to the specialty, but also to the opportunities for further training in neuroanesthesia. A directory of neuroanesthesia fellowships available has been compiled by Dr. Mary Ann Cheng (Washington University, St. Louis, MO) and will be posted on our web site. It is our intention to include specific details about each program such that potential candidates will be able to select programs based on what they wish to achieve. We have developed program guidelines for residency education in neurosurgical anesthesia and these guidelines will be extended to include fellowship programs. In parallel, SNACC interacts at the board level with the American College of Neurological Surgeons and the American Society of Interventional and Therapeutic Neuro-radiology. SNACC representatives attend the annual meeting of these societies and our objective is to raise the profile of neuroanesthesiologists amongst physicians who are most likely to benefit from close interaction with our members. On the basis of close interpersonal contacts, I can confidently state that the contribution that we make to patient care and research activities of these organizations is highly valued.

Membership in SNACC can also be increased by more aggressively recruiting residents. To facilitate this, we have waived membership dues for trainees enrolled in accredited residency programs. This special membership entitles trainees to a reduced meeting registration rate and free access to the SNACC website. To date, the material posted on our website has been of limited use for residents. To remedy this situation, we have embarked upon an ambitious program in which educational material of relevance to residents will be developed and posted on the web site. This program, the SNACC Task Force on Education, is under the direction of Dr. Sol Soriano. In the near future, a variety of educational materials will be posted. The content of the educational material will be developed by Sol. In this endeavor, we would very much welcome the input of our members. Interested members may directly contact Sol. It is our hope that the ready availability of educational material that is of immediate relevance to the trainee will elevate our profile amongst residents, and that this will eventually lead not only to an increased awareness of what SNACC can provide but also to membership in SNACC. Ultimately, though, the burden of recruiting residents to SNACC must fall upon those members who regularly make contact with residents. We request that our members make residents aware of benefits of SNACC membership.

To further elevate our profile, a proposal that we pursue subspecialty certification in neuroanesthesia has been advanced, among others by Dr. Maurice Albin, a recipient of the Distinguished Service Award of the Society. Just how feasible is this proposition and is it the best approach to the problem of diminishing interest in the specialty? A certification program undoubtedly would prompt academic departments to devote greater resources to neuroanesthesia and over time, the number of neuroanesthesiologists would

gradually expand. There is, however, little demand for certified neuroanesthesiologists among private practice groups, let alone academic centers. By contrast, there is a substantial demand for fellowship trained cardiac, pediatric and even obstetric anesthesiologists. Yet, these subspecialties do not yet have in place a certification program. A certification program also has significant ramifications for neuroanesthesia manpower, fellowship availability and ACGME approved positions for residents; we have not even begun to address these concerns. Based on these arguments, the preponderance of opinion is that certification is not feasible nor is it required. The SNACC leadership is nonetheless cognizant of the fact that the need for certification may well arise in the future. To ensure our preparedness for this possibility, we have convened a task force that will examine in detail all the issues relevant to certification. Dr. Arthur Lam (University of Washington, Seattle, WA) has graciously agreed to chair this task force. Comments and feedback should be sent to Dr. Lam (email [artlam@u.washington.edu](mailto:artlam@u.washington.edu)). Progress that the task force makes will be posted on our web site.

The issue of certification is more pressing for those of our members who participate in neurointensive care units. There is a move afoot to require trained intensivists to provide care in intensive care units. Unfortunately, the major medical specialties have made little effort to provide a means by which those physicians who are interested in providing primarily neurointensive care can pursue certification. The lack of this certification has the potential to limit the options available to neurointensivists. The United Council of Neurologic Specialties is an organization that has recently been formed to fill this void. The mission of this organization is to "provide for accreditation and certification for physicians in neurological subspecialties." The initial focus will be upon those subspecialties considered to be too small to meet the accreditation requirements of the ACGME. It is unfortunate that, at this moment, SNACC members will not be able to pursue this avenue for certification. We are, however, maintaining close communications with the leadership of UCNS and we are monitoring the progress that UCNS is making. It is our hope that the course that UCNS develops may be of substantial benefit to those members of SNACC who wish to acquire certification in neurointensive care.

Perhaps the best manner in which we can maintain an avid interest in neuroanesthesia is to pursue the mission of SNACC. The mission statement of SNACC is to advance the art and science of the care of the neurologically impaired patient. Our members are the logical candidates to lead this effort. The recently completed IHASt trial is an excellent example by which the efforts of our members will lead to a direct improvement in patient care. Such contributions will undoubtedly draw attention to the worldwide efforts of neuroanesthesiologists and to subspecialty organizations such as SNACC. Thank you for the opportunity to address our membership and I look forward to serving SNACC as its President this year. As always, I welcome your comments, questions and feedback.

With warmest regards,  
**Piyush M. Patel MD**