TABLE OF CONTENTS

SNACC NEWS

Message from the President ........................................... 2
Editor’s Corner .................................................................. 3
In Memoriam - Dale A. Pelligrino, PhD ........................... 3
44th Annual Meeting Reflection .................................... 4
Magnificent Mile Hosts Magnificent Meeting ............... 5
SNACC 44th Annual Meeting and the Cubs Win! .......... 6
SNACC 44th Annual Meeting Photos ............................. 7
ASA 2016 Brain Initiative ................................................ 8
University of Southern California’s Neuroanesthesiology Fellowship ........................................... 9
SNACC Education Committee Update ......................... 10
SNACC Newsletter Schedule ........................................ 11
Save the Date! 45th Annual Meeting in Boston ............ 11
Members in the News .................................................... 12
Welcome New Members ............................................... 13
Thank You to Our Sponsors and Exhibitors ............... 14

Connect with SNACC via Social Media!

[Social Media icons]
President’s Message

The Three Pillars of Neuroanesthesiology

George A. Mashour, MD, PhD
SNACC President

It is truly a privilege to serve as the President of the Society for Neuroscience in Anesthesiology and Critical Care (SNACC). In anticipation of this new role, I began exploring a vision for SNACC and, more fundamentally, neuroanesthesiology itself. To start a collective conversation, I would like to propose that there are three “pillars” to our subspecialty.

First Pillar: The care of neurosurgical and neurological patients. The clinical care of individuals with neurologic compromise is incredibly rewarding and represents a true opportunity to make a positive difference in the lives of others. Traditionally, the disciplines of neuroanesthesia, neurocritical care, and neuromonitoring have been the focus of SNACC, and with good reason. Indeed, the Journal of Neurosurgical Anesthesiology, our official journal, reflects in its title this first and foremost pillar of neuroanesthesiology.

Second Pillar: The foundational neuroscience of anesthesiology. Anesthesiology is, in my opinion, a form of clinical neuroscience. On a daily basis, even as anesthesiologists for non-neurosurgical cases, we modulate peripheral nerves, the spinal cord, subcortical arousal systems, thalamocortical and corticocortical networks supporting consciousness, pain networks, memory systems in the medial temporal lobe, the neuromuscular junction, and the autonomic nervous system. Is there any other specialty that can boast such a comprehensive modulation of the nervous system on an entirely routine basis? We need to think of “neuroanesthesiology” as a compression of “neuroscience in anesthesiology” instead of “neurosurgical anesthesiology,” and attract our scientific colleagues working in these fascinating areas who might not take care of neurosurgical patients in the operating room or intensive care unit. The mechanistic study of our therapeutic interventions is exciting neuroscience in its own right, with profound implications for nervous system function.

Third Pillar: Neurologic outcomes of non-neurosurgical procedures. How the perioperative period might negatively impact the brain is the new frontier of outcomes studies and has been a major priority for the field of anesthesiology in the past years. Questions related to anesthetic neurotoxicity, delirium, cognitive dysfunction, and stroke should, in my opinion, fall within the purview of neuroanesthesiology, but they have not. SNACC should attract clinicians and scientists interested in these questions and neuroanesthesiologists should serve as consultants to other perioperative physicians regarding these complications.

The efforts of SNACC have traditionally focused on the first pillar of neuroanesthesiology, which should remain an important goal. However, the past decade has seen tremendous activity related to the second and third pillars, but SNACC has not always been at the forefront. It should be and could be. We changed the name of SNACC some years back to include “neuroscience” instead of “neurosurgical.” We must now critically re-examine our roles as neuroanesthesiologists to ensure that we are fully equipped—and that we are fully equipping the next generation—to be outstanding clinicians for our neurosurgical and neurocritical care patients, but also to understand and advance the foundational neuroscience of anesthesiology as well as serve as consultants regarding neurologic outcomes of surgery. I personally regard this expanding focus as critical to a vital subspecialty in the years to come.

This is the start of a conversation that should prompt reflection of SNACC’s vision and mission. I look forward to engaging with you in the next year to reconsidering neuroanesthesiology and the activities of SNACC in terms of these three pillars.

Attention Members!

Would you like to promote the SNACC Annual Meeting at your next speaking engagement? If so, SNACC has a PowerPoint slide that you can use. Please contact Sandra Peterson at sandra@societyhq.com for more information on how to obtain the SNACC Annual Meeting slide.
Editor’s Corner

Reza Gorji, MD
SNACC Newsletter Editor

Fenghua Li, MD
Associate Editor

What a great meeting! The SNACC Annual Meeting took place at the Intercontinental Hotel in Chicago. It had more attendance than any other SNACC meeting in history. Attendees participated in multiple workshops and venues. It almost seems like the SNACC meeting should be starting a day earlier as the number of workshops and sessions are numerous. I also noticed something a bit different this year: the enthusiasm among the attendees was high! People were excited about the meeting and its educational values. Some of the meeting photos are in this issue of the newsletter. Other ones can be seen HERE.

Your newsletter will be starting a new column with this issue called Member’s Corner. SNACC wishes to highlight our members’ accomplishments. I am happy to start off this section in this issue. We have some extremely talented individuals among us – many members as pioneers and foundation makers in the field of neuroscience and critical care. But also members who take care of patients in such a way only a neuroscientist can approach; meticulous, compassionate and with a high degree of care. Make sure you view the section in the Member’s Corner on Dr. T odd receiving the 2016 Research Award and to all the other members doing such remarkable work. Let me or SNACC know of any accomplishments you see worthy of mention. If you have a newsworthy event please send it to me at reza@gorji.com.

The SNACC website continues to evolve. One can spend hours viewing the website and not see it all. It is clearly very functional and kudos to Ruggles Service Corporation, the website and society’s management company.

At the SNACC meeting, I am usually congratulated and thanked for my work on the newsletter. I’ll take some of the kind words and distribute the rest to the many folks including our Spanish translator Karina M. Woodling, MD and Sandra Peterson for doing behind the scenes work, as well as, to all of you who contribute.

Thank you for being a SNACC member and a newsletter reader.

In Memoriam

Dale A. Pelligrino, PhD

October 26, 1948 - August 15, 2016

By Ronald Albrecht, MD

Dale A. Pelligrino, PhD, age 67, a 22-year resident of Naperville, Illinois, passed away August 15, 2016 at his home, surrounded by the love of his family. He was born on October 26, 1948 in Milwaukee, Wisconsin.

Dale is survived by his loving wife of 35 years, Yiftu; his children, Nicole, Julie and Erik Pelligrino; his siblings, John (Marlene) Pelligrino, Diane (Von Berrier) Pelligrino and Robert (Sheryl) Pelligrino; and his sister-in-law, Barbro (Andrew) Webber. He was preceded in death by his parents, John and Alice Pelligrino.

Dale graduated in the class of 1966 from Nathan Hale High School, West Allis, Wisconsin; received a BS in Zoology from Carroll College, Waukesha, Wisconsin in 1970; and a PhD in Physiology from University of Wisconsin-Madison in 1978. He completed his post-doctoral training at Lund University, Sweden where he married his wife. In 1981, they moved to Chicago where he became a Research Scientist in the Department of Anesthesiology at Michael Reese Hospital. In 1994, he became a Research Professor at the University of Illinois-Chicago, Department of Anesthesiology Research. He went on to direct his own lab, and retired in 2016. He loved his work.

Dale traveled the world for decades, both for work and pleasure. He often took his wife and three children along. He was an avid runner and skier who loved the outdoors. He will be remembered as fun-loving and laid-back; as well as a devoted husband, father and friend. He was taken too soon, and will be missed dearly.

Donation Information

For those who would like to leave a lasting tribute to Dale’s life, memorials to the Lewy Body Dementia Association (LBDA) at 912 Killian Hill Road, SW Lilburn, GA 30047 can be made or login to LBDA.org.
SNACC 44th Annual Meeting Reflection

By Rafi Avitsian, MD and Fenghua Li, MD

The 2016 SNACC Annual Meeting, held on October 20-21 in beautiful Chicago, was a huge success. In my view, it was one of the best SNACC meetings that I have attended in the past years. The meeting was full of new knowledge in neuroanesthesia, friendship, pride and optimism.

Beside ENLS, one of the novel Thursday afternoon scientific sessions was the Airway Workshop organized by Drs. Lauren Berkow and Rafi Avitsian. A unique characteristic of this workshop was the emphasis on injured cervical spine and the role of new airway management devices when facing patients who have unstable cervical spines. The well received workshop was offered in two sessions. After a short presentation by the organizers, the participants rotated through five stations for hands-on practice on a variety of airway management devices, including fiberoptic bronchoscopy, supraglottic airways, videolaryngoscopy, airway topicalization and cricothyrotomy on pig tracheas. This session was approved to fulfill the Patient Safety requirement for Part II of the ABA’s Maintenance of Certification in Anesthesiology Program (MOCA) 2.0™ credits.

The scientific symposium on Thursday afternoon focused on the traumatic brain injury (TBI). The basic research session moderated by Dr. Engelhard discussed the neuroinflammation following TBI. Dr. Pasternak presided over a clinical scientific session where updates on TBI were presented by the panel. The session consisted of three topics including sports-related TBI, intraop strategies that can improve outcome, and the role of multimodal monitoring in TBI. This symposium program is always popular and all tickets for the lectures were sold out.

The dinner symposium was one of the highlights of the Thursday program. The presentation ballroom was in a hall with dark wood walls and stained glass which added warmth to the gathering participants who met and socialized with old and new friends. The talks were very enjoyable and began with Dr. Detlev Boison’s eye opening talk about the basic science of epilepsy, explaining his current research on ways to prevent development of seizures in a cellular level. Dr. Jorge Gonzalez, a neurosurgeon from Cleveland Clinic, followed with an interesting talk about current modalities used for surgical treatment of epilepsy, highlighting the point that we still have a long way to go to reach our goal in effectively treating these patients. He also mentioned development of new stereotactic electroencephalographic techniques to diagnose seizure foci. Dr. Karen Domino had an informative talk about what anesthesiologists should do with patients with seizure undergoing surgery. As always, Dr. Domino’s lecture was very well received by the audience.

Following committee meetings and SNACC President Dr. Andrew Kofke’s opening ceremony statements, the Maurice Albin Keynote Lecture opened the Friday scientific meeting. Dr. Clare Elwell, a renowned researcher in optical physics and imaging from University College of London, presented the topic “Novel Applications for Optical-based Brain Monitoring Technologies.” Near infrared spectroscopy (NIRS) was an excellent example in clinical use of monitoring injured brain. The talk was a real eye opener and gave the hope of non-invasive monitoring breakthroughs in the near future.

Two mini symposiums were well organized this year. The first topic was “Anesthetic Neurotoxicity in Kids,” moderated by Dr. Sulphicio G. Soriano. Dr. Brambrink reviewed the preclinical data in anesthetic neurotoxicity, followed by clinical trial study presentation, including both PAND and GAS trials that did not show evidence of neurotoxicity in kids. However, those new studies did not eliminate the concern of neurotoxicity. Dr. David O. Warner outlined his view in future data and research direction in neurotoxicity research. The second topic, “Novel Developments of Neuropharmacology,” was moderated by Dr. Dhanesh K. Gupta. The panel of three experts, composed of Drs. Arvid Palanisamy, James W. Sleigh and Ken Solt, discussed magnesium for perinatal protection, neuroprotection by ketamine esters and general anesthesia reversal with methylphenidate. The research by Dr. Solt in general anesthesia reversal by methylphenidate was fascinating and may fundamentally change our future clinical practice.

Poster sessions on Friday are always attractive because of its dynamic and interactive nature. This year’s poster sessions were particular worthy due to the very large attendance. There were a total of 120 highly selected posters that covered frontier research in all aspects of neuroanesthesia and neurocritical care. The discussions were lively and stimulating. Also new this year were the medically challenging cases that were concentrated into two presentation stations. The separation of the scientific abstracts from clinically challenging cases is a change that may inspire more residents to attend Annual Meeting’s in the future.

The plenary session, “Clinical Curveballs in Neuroanesthesia,” moderated by Dr. Steven Robicscek was innovative. Dr. Ines Koener presented SAH and vasospasm, while Dr. Robert Gould talked about major spine surgery. Both speakers used an interactive live polling of answers to questions during presentation.

The business lunch session was very enjoyable and celebratory. The most important moment was when Dr. Kofke handed...
SNACC 44TH ANNUAL MEETING

his gavel to Dr. George A. Mashour. Dr. Mashour became the new SNACC President and will lead our society to new heights. Along with the Travel and the New Investigator John D. Michenfelder awards, a new award was introduced to celebrate the accomplishments of William L. Young, MD, who passed away a few years ago. Dr. Miles Berger from Duke University became the first recipient of the Young Award in Neuroscience. Another highlight was when Dr. Arthur Lam from University of Washington received the Distinguished Service Award. The Lifetime Education Award was awarded to Dr. Pirjo H. Manninen.

The meeting concluded with a wine and cheese reception during exhibits, followed by the special interest group (SIG) meetings. Thanks to all supporting partners who made the meeting possible. I was in the Spine SIG and we had very constructive discussion on blood transfusion in major spine surgery with Dr. Gupta leading. The atmosphere was cordial and friendly.

As I said last year, it is both the dedication to my beloved subspecialty of neuroanesthesia and my passion for the society that makes me attend SNACC’s Annual Meeting every year. I am looking forward to seeing you all at the 2017 Annual Meeting in Boston.

Magnificent Mile Hosts “Magnificent” Meeting

By Jeffrey Pasternak, MD

I always look forward to SNACC’s Annual Meeting. It’s a great time to catch up with friends while learning about some truly amazing contributions and innovations in perioperative neuroscience. The 44th Annual Meeting was no exception. It was held at the Intercontinental Hotel right in the heart of the Magnificent Mile in downtown Chicago on October 20-21, 2016.

The meeting kicked off on Thursday afternoon with various sessions. These included airway workshops that were specific to issues encountered in neurosurgical patients, an Emergency Neurologic Life Support (ENLS) workshop that included ENLS certification, and both basic and clinical science symposia focused on traumatic brain injury. In the latter session, we were honored to have Dr. Julian Bailes speak about sport-related concussion. Dr. Bailes was instrumental in characterizing the manifestations of chronic traumatic encephalopathy as recounted in the movie Concussion, where Dr. Bailes’ character was played by Alec Baldwin. The Thursday afternoon session also included a career development workshop on grant proposal writing that featured the opportunity for young researchers to have their specific aims critiqued by a panel of experts. The day concluded with a dinner symposium on seizures and seizure surgery.

Friday started off with the keynote lecture, named in the honor of the late Dr. Maurice Albin and delivered by Clare Elwell from University College London. Professor Elwell discussed novel applications of near-infrared spectroscopy to monitor the brain including preliminary findings sponsored by a multi-million dollar grant from the Melinda and Bill Gates Foundation. One of Professor Elwell’s goals is to use this technology to learn how nutrition impacts brain development in remote regions of Africa. The first mini-symposium focused on pediatric neurotoxicity, providing a summary of basic science findings, recent data derived from two clinical trials and a speculation on future directions for research.

Two poster sessions were held on Friday, one prior to lunch and the other following lunch collectively including 120 posters from researchers all over the world. These sessions utilized the electronic format whereby anyone registered for the meeting has access via the SNACC mobile meeting guide (accessed via the SNACC app and at snaccmmg.societyhq.com) to not only abstracts but also to full posters before, during, and following the meeting. These informative posters are still available to view to those who registered for the SNACC Annual Meeting.

The lunch break consisted of two simultaneous sessions — a special educational session for trainees and the formal business lunch. The business lunch involved updates from SNACC leadership including an address by President Kofke, and transfer of the gavel to the new President, Dr. Mashour. Multiple awards were announced during the luncheon. These included the New Investigator John D. Michenfelder Award to Dr. Markus Luedi from Switzerland, the Teacher of the Year Award to Dr. Pirjo Manninen from Canada, and the Best of Neuroscience Award (a SNACC-sponsored award at the IARS Meeting) to Dr. Ken Solt from the United States. Finally, the first William Young Neuroscience Research Award of $5,000 was given to Miles Berger from Duke University. The William Young Neuroscience Research Award was the result of donations from generous SNACC members, all members of the SNACC Executive Committee and Board of Directors, as well as from funds from SNACC. The late Dr. William Young’s wife, Chantal Philipona, was able to attend the award ceremony and assist with presenting the award.

Following the afternoon poster session, the mini-symposium focused on novel developments in neuropharmacology that included the use of magnesium as a prenatal neuroprotectant, ketamine esters, and the effect of methylphenidate on emergence from general anesthesia. This session was followed by a plenary

Continued on page 6
session involving electronic audience participation during a discussion of a complicated aneurysmal subarachnoid hemorrhage and complex spine procedure.

The day concluded with a wine and cheese reception, meet-ings of the SNACC special interest groups, and a special fund raising dinner at a local Chicago restaurant with proceeds going to the William Young Neuroscience Research Award.

The meeting went off without a hitch thanks to the tireless work of so many dedicated people that it would be impossible to name them all. Please know that you have made a lasting contribution to neuroanesthesia education. I want to thank all of the speakers, poster presenters and moderators, the members of the SNACC board of directors for their help organizing the meeting, along with Sandra Peterson, Teri Allanson, Dana Gibson, Stewart Hinckley and the staff at SNACC’s management company, Ruggles Service Corporation, for all of their hard work. I also want to thank the industry exhibitors for their financial support and to everyone who attended and took part in this event. You can take pride in knowing that you were one of the 343 delegates who made up the largest number of attendees at an Annual Meeting in SNACC’s 44 year history. I look forward to seeing everyone again next October in Boston, Massachusetts for the 2017 Annual Meeting. Have a great year!

SNACC 44th Annual Meeting and the Cubs Win!

By Chanannait Paisansathan, MD
Chair Scientific Affairs Committee

It was an exciting time to be in Chicago during the baseball playoff game, especially for Cubs fans. The city exploded with excitement. Finally, the long wait was over. After 108 years, the Cubs win!

I am certain that SNACC members who attended the Annual Meeting could feel the energy of the city. The meeting ended with great success and record attendance. SNACC welcomed many members, both nationally and internationally. This year, we congratulated the recipient of the 2016 New Investigator – John D. Michenfelder Award, Dr. Markus Luedi from Switzerland for his work entitled “A Dexamethasone-regulated Gene Signature is Prognostic for Poor Survival in Glioblastoma Patients.”

At the meeting, I was impressed with Dr. Luedi’s presentation. Later, I had an opportunity to discuss with him his future plans. Dr. Luedi has already received grant funding from many different agencies and foundations. He aspires to continue his research in perioperative medicine, particularly in the field of neuroscience. He thinks it is very important for anesthesiologists to embrace all aspects of perioperative medicine. Such opportunities include research in molecular biology, management questions, clinical studies and pursuing any question that is at the intersection with our neurosurgical partners. He enjoyed his post-doctoral research fellow experience in 2014 at the University of Texas MD Anderson Cancer in Houston. He said the competition in and among American laboratories stimulated him to achieve a higher performance and he would like to advance his collaboration with the US counterpart.

Dr. Luedi will continue his clinician scientist career at Bern University Inselspital in Switzerland. As a first-time attendee of the SNACC Annual Meeting, he was impressed with the depth of science and material presented. He enjoys his affiliation with SNACC and looks forward to attending more SNACC meetings in the future.
SNACC 44TH ANNUAL MEETING

(left to right) Distinguished Service Award winner, Dr. Arthur Lam and his wife Annie Lam

(left to right) Dr. George Mashour presenting the president’s plaque to Dr. W. Andrew Kofke

(left to right) Drs. W. Andrew Kofke, Pirjo Manninen (winner of the Teacher of the Year award) and Adrian Gelb

Clinical Science Symposium with speaker Dr. Julian Bailes

(left to right) Dr. Martin Smith with Keynote speaker, Dr. Claire Elwell

(left to right) Drs. W. Andrew Kofke, Arthur Lam and Deepak Sharma

Program Chair Dr. Jeffrey Pasternak enjoying a moment of unrelated official business!
Delirium and changes in cognition occur frequently after major surgery and anesthesia, which have resulted in significant morbidity, increased costs, and patient distress. In September, the American Society of Anesthesiologists (ASA) convened a multi-stakeholder summit including multiple specialty societies who care for elderly patients undergoing surgery, including but not limited to, the American College of Surgeons, the American Association of Orthopedic Surgeons, the American Geriatric Society, payers such as Center for Medicare and Medicaid Services, the Veterans Administration, public advocacy groups including the American Association of Retired Persons, the Institute for Healthcare Improvement, and federal funders such as the National Institute of Aging and the Patient Centered Outcomes Research group. The summit addressed three key questions: 1) should the public be informed about the risks of surgery and anesthesia on postoperative cognition in the vulnerable brain and be informed of strategies to reduce that risk; 2) how can providers be informed of and galvanize to implement strategies to reduce postoperative delirium and cognitive dysfunction and; 3) can funders be educated about the gaps in knowledge regarding these conditions. A series of workgroups have been identified and strategies to address each of these questions are currently underway.

The group consensus was that the public should be made aware of the current state of the evidence and that their engagement will result in improved outcomes. It is clear that the risk of postoperative delirium in an elderly surgical patient far exceeds many other complications which are routinely discussed (heart attack, stroke, death). The group believes that the public needs to be informed regarding delirium for the purpose of education, reassurance and risk reduction when possible. There was general consensus that a campaign should focus on raising patient awareness regarding the signs of delirium, identification by patients and/or their families, education regarding the benefits of “prehabilitation” such as exercise and nutrition, and preparing caregivers for the potential for longer term postoperative cognitive changes. The public awareness campaign will also include information for caregivers about how best to help the elderly return to the baseline brain health such as familiar objects and pictures to assist with reorientation and a commitment to assist with early mobilization.

A similar campaign focusing on provider education across disciplines was discussed which will highlight recommendations from the American Geriatric Society Guidelines and the Coalition for Quality in Geriatric Surgery recommendations. The mission of this campaign will be to disseminate existing best practice to providers to reduce the risk of postoperative delirium and delayed cognitive recovery. Key provider stakeholders for this educational initiative include nurses, pharmacists, anesthesiologists, surgeons, internists, and providers in training (residents and fellows). The initiative will work with groups that promote geriatric specialty training such as the Geriatrics for Subspecialists Initiative sponsored by the AGS and the ongoing Maintenance of Certification Program (MOCA) sponsored by the American Board of Anesthesiology.

The provider initiative will create a toolkit for medical professionals which will contain suggestions about how to engage patients and families to discuss delirium. The provider kit will also contain information regarding delirium. Information would include pre, intra and postoperative strategies to prevent delirium with emphasis on:

• Preoperative identification of high risk patients (how to take a cognitive vital sign)
• Screening for polypharmacy
• Awareness of Beers criteria meds
• Monitoring the brain during anesthesia
• Avoidance of antipsychotics
• Importance of nonpharmacologic sleep regimens
• Early mobilization
• ERAS measures to promote recovery

The kit will include a pathway or bundled care for patients identified preoperatively as high risk for delirium. The provider tool kit will also contain an algorithm for dealing with an agitated delirious patient and utilize materials such as short videos, printable pamphlets, review articles or guidelines, and proposed order sets.

Developing research priorities will require that investigators already engaged in this area, whether laboratory or clinical, meet, discuss and reach consensus. This consensus is then presented to funding agencies to consider targeted calls for proposals. Currently, the working group led by Dr. Roderick Eckenhoff will pursue NIH supported conference funding, in the next six to nine
months. If approved for funding, this meeting will occur in the Fall of 2017 and involve 50 to 75 invited investigators working in the area for two days of talks and breakout sessions. The goal of the meeting will be to identify critical gaps in knowledge and a deliverable of a research agenda that will be submitted to NIA, NINDS, NIMH and NIGMS for consideration of Program Announcements (PA) and Request-for-Applications (RFA). The meeting will be international in scope and the budget will include travel funds for junior investigators.

In summary, the Brain Health Initiative is a multistakeholder effort convened by the American Society of Anesthesiology. The initiative will focus on delirium education for patients and providers. The group will work to advance scientific knowledge in this area to provide foundational knowledge for identification and treatment of delirium and ongoing evidence for best practice. The current timeline calls for provider materials to be available over the next six months. The initiative will need champions at academic and community centers to roll out the best practices initiative. Providers, groups, and institutions who are interested in becoming involved should contact stacie.deiner@mssm.edu. Progress from this year’s initiative will be reported at next year’s ASA meeting in Boston.

**University of Southern California’s Neuroanesthesiology Fellowship**

**By Eugenia Ayrian, MD**

Neuroanesthesiology Fellowship Director

The Neuroanesthesiology Fellowship at the University of Southern California is a one-year program. The goal is to provide advanced clinical training in neuroanesthesiology, clinical research, and education in order to prepare the fellow for an exciting career as an attending neuroanesthesiologist in either clinical or academic practice. The fellow will be participating in both the training and evaluation of performance as described by the ACGME for the core residency program.

Knowledge of preoperative evaluation and intraoperative management of neurosurgical patients, neurophysiologic monitoring, postoperative ICU management, and interventional neuroradiological treatment are just a few areas that will be focused on during this fellowship. The case range is extensive and includes management of patients requiring craniotomies for clipping of intracranial aneurysms, tumors, seizure disorders, awake craniotomies for tumor excision and DBS placement.

The introduction of a vigorous Spine Center at USC has made it possible for our hospital to become a leader in complicated spine surgery. The fellow will manage patients with congenital spine deformities, scoliosis, spinal cord injuries, fractures, and spine tumors. In addition, the fellow will get extensive experience in Interventional radiology and will take care of patients coming for the intravascular treatment of aneurysms, AVMs, and strokes.

Our fellows will work in a team environment, communicate and cooperate with surgeons, neurophysiologists, interventional neuroradiologists, pharmacist, and all members of the perioperative team. A specific didactic program will be provided for the fellow in the form of lectures, seminars and journal clubs. In addition, fellows will attend conferences in neurosurgery and neurology. There are numerous opportunities to teach residents as well as medical students. In addition, the fellow will enhance their own supervisory skills working with anesthesiology residents in the operating room. The neuroanesthesiology fellows will obtain necessary research skills to be able to construct and handle clinical research in methodical manner and to write a manuscript suitable for publication in a scientific journal.

**ACCREDITATION:** The neuroanesthesiology fellowship is currently a non-ACGME accredited fellowship. The fellowship is open to physicians who have successfully completed an accredited residency training program in anesthesiology.

**CURRICULUM:** The fellowship is based on the guidelines for a clinical neuroanesthesiology fellowship training program proposed by the Society for Neuroscience in Anesthesiology and Critical Care (SNACC).

**ROTATION SCHEDULE:**

- Clinical Neuroanesthesiology: six months
- Clinical Neuroscience scholarship: one month
- Neurocritical care: two months
- Neurmonitoring: one month
- Interventional radiology: one month
- Electives: one month

**FACULTY:** Division of Neuroanesthesiology includes seven faculty members. Their diverse interests and extended experience in clinical practice will contribute to the broad exposure of the fellow to a variety of aspects of the neuroanesthesiology and provide flexibility in adjusting their experience to their needs and interests.

For more information about our program, please contact:

**Eugenia Ayrian, MD**

Neuroanesthesiology Fellowship Director

Email: gayrian@med.usc.edu

**Nancy Curtis**

Residency Program Coordinator

Phone: (323) 409-7748 Email: Nancy.Curtiss@med.usc.edu
Update from the SNACC Education Committee

By John F. Bebawy, MD

I hope you enjoyed the SNACC Annual Meeting as much as I did this year in Chicago! It was another productive quarter for the SNACC Education Committee and thanks are due to Deepak Sharma and the other energetic and passionate members of the committee. Truly, Dr. Sharma has been an inspiring leader during his tenure as Committee Chair. He has left his mark indelibly on what this committee is capable of doing. In my new role as Education Committee Chair, I truly have giant shoes to fill, but take this role passionately, with all humility, and awe for the truly remarkable job that has been done thus far under Dr. Sharma’s leadership.

We had a wonderful Friday morning pre-program committee meeting. I updated the members on our website hits for all of the educational content (www.snacc.org), which was truly astounding. We continue to deliver high-quality peer-reviewed educational content, with a few minor changes to hopefully promote the visibility of these undertakings and to direct the offerings towards those clinicians and scientists to whom they are targeted. The committee is structured in such a way that individual segments (all freely available on the website) are led by a team leader and are produced with regularity. Of notable mention, the Article of the Month is led by Oana Maties, the Neuroanesthesia Quiz is led by Shobana Rajan, the Interactive Case Discussion is led by Arne Budde, the Experts’ Audio Corner is led by Amie Hoefnagel, the Fellows’ and Residents’ Audio Corner is led by Shobana Rajan, the PBLD is led by Shaun Gruenbaum, and the SNACC Bibliography is led by Rachel Kutteruf. This is not to mention all of the wonderful contributors to these segments, to whom we all are extremely grateful and proud.

Our primary challenge now, as we see it, is to promote the overall utilization of these resources, which will hopefully improve both the quality and breadth of SNACC membership. We need your help. Please visit the website, make use of these free resources with your colleagues and trainees regularly, and of course, let us know what we can do better. Despite the great success of the educational content so far, and the great feedback we have received, there is always room for improvement. Our goal is to deliver content that is useful for both didactic and clinical teaching, to increase the reach of SNACC and to share our passion for the neurosciences in anesthesia and critical care with others both in and out of the organization.

One pursuit that was new this year was our involvement in SNACC’s Special Interest Groups (SIGs) meetings after the general program on Friday (during the wine-and-cheese reception). Our SIG was the “Neuroanesthesia Education SIG”, which had a remarkable showing of members who are eager to promote the neurosciences in anesthesia, especially to trainees. Under the direction of Shobana Rajan and Angele Theard, this SIG has laid out a vision statement and agenda for what it hopes to accomplish. The Neuroanesthesia Education SIG is working hard to promote awareness and interest in perioperative neurosciences with particular focus on trainees who are the future of neuroanesthesia. The motto is, opening minds and eyes to neuroanesthesiology, and its vision is, to advance education in neuroanesthesia with focus on trainees to stimulate more interest in neuroanesthesiology and increase their engagement in SNACC. The SIG will work under the auspices of the education committee’s mission of advancing education in the perioperative neurosciences.

The Goals and Objectives of This Initiative Are To:

• Investigate opportunities to enhance resident interest in neuroanesthesiology.
• To facilitate opportunities for engagement between trainees and members of SNACC.
• To increase resident membership in SNACC.
• Help create an interactive neuroanesthesiology curriculum for trainees.
• To increase the number of trainees opting to do a neuroanesthesia fellowship.
• Help with data collection for accreditation of the neuroanesthesia fellowship.

Strategies For This Year Include:

• Sending out a survey to evaluate residents’ thoughts about a neuroanesthesia fellowship.
• Sending out a survey to current neuroanesthesia fellows about their thoughts on their fellowship.
• Trying to get a journal club working through a Twitter group.
• Helping with advertising of the material put out by the education committee of SNACC so that many programs can benefit.
• Setting up a link on the education and fellowship pages of the SNACC website to connect residents to SNACC mentors who could talk to a resident interested in considering a neuroanesthesia fellowship.

SIG Current Members:

A few members of the Neuroanesthesia Education Committee (left to right) Drs. Suneeta Gollapudy, Laurel Moore, Jeffrey Pasternak and Hemanshu Prabhakar

Thank you for taking the time to read this article and familiarize yourself with our ongoing work, which is so dear to us (and hopefully to you). I look forward to keeping you updated on the goings on of the SNACC education committee in future newsletters, and hope you will let us know your thoughts about how we might overcome barriers to becoming your go-to source for online neuroscience in anesthesia and critical care education in your practice.

SNACC Newsletter Schedule

PUBLICATION AND SUBMISSION DATES

Spring Issue
March 15, 2017 - Copy Deadline
Published April 15, 2017

Summer Issue
May 15, 2017 - Copy Deadline
Published June 15, 2017

Fall and Pre-Meeting Issue
August 15, 2017 - Copy Deadline
Published September 15, 2017

Winter Issue
November 15, 2017 - Copy Deadline
Published December 15, 2017
SNACC NEWS

Members in the News

By Reza Gorji, MD

Sadly, I heard of the passing of Dale A. Pelligrino, MD on August 15, 2016. See page 3 in this issue about the life of this great person in this newsletter.

Ansgar Brambrink, MD was recently named Chair of the Department Of Anesthesiology at Columbia University Medical Center. Dr. Brambrink is, of course, no stranger to SNACC, serving as Past President and a distinguished member, participating in multiple activities of the society.

James E. Cottrell, MD, also a former SNACC President and distinguished member, received the Leadership Award from the Arthur Ashe Institute for Urban Health. James E. Cottrell, MD, is Distinguished Service Professor and Chair of Anesthesiology and Garry S. and Sarah Sklar Professor in Anesthesiology at SUNY Downstate Medical Center. The award is given to people who make significant contributions to urban communities in areas of education, health and medical research as well as community service and philanthropy.

SNACC member Max Kelz, MD, PhD, became the first recipient of Longnecker Endowed Chair at University of Pennsylvania. Max Kelz MD, PhD, is a neuroanesthesiologist and neuroscientist renowned for his work on sleep and anesthetic mechanisms. Contributed by Andrew Kofke, MD, MBA, FCCM and George Mashour, MD, PhD.

Mazen Maktabi, MBBCh was appointed the Chair of Anesthesiology and Health Care Service Chief of Anesthesiology at the University of Vermont College of Medicine, effective August, 1 2016. A long-time member of SNACC, Dr. Maktabi most recently served as the chief of division of general surgery anesthesia at Massachusetts General Hospital. Contributed by Laurel Moore, MD.

Eugenia Ayrian, MD was recently named the Program Chair for the California Society of Anesthesiologists at the 2017 Annual Meeting and Workshops in San Francisco, California to be held April 27-30, 2017. The program promises to provide the tools needed to deliver high-quality patient care, but also how to shape the future of anesthesiology.

Miles Berger, MD, an Assistant Professor in the Anesthesiology Department of Duke University, was the inaugural 2016 winner of the William Young Neuroscience Award. His application dealt with the role of inflammatory mediators within the CNS in human postoperative cognitive dysfunction (POCD), delirium and brain network activity changes. POCD and delirium are distinct disorders that are associated with decreased quality of life and increased mortality, which can occur in a significant number of patients who undergo anesthesia and surgery. Currently, there is no effective drug to prevent POCD and/or delirium despite a number of NIH-funded trials that have considered a number of different therapeutic approaches. Interestingly, several pre-clinical animal studies have focused on mechanism for POCD and have suggested that anesthesia and surgery cause postoperative memory deficits by inducing neuroinflammation. Dr. Berger and colleagues at Duke had recently examined the neuroanatomy of POCD using functional magnetic resonance imaging. In these studies, they demonstrated that patients with POCD have significant changes in brain network connectivity and that the magnitude of these brain network changes correlate with postoperative changes in cognition. In the application submitted for the William Young Award, Dr. Berger presented preliminary data obtained from patients that demonstrate that there are significant increases in pro-inflammatory cytokines and activated monocytes within human CSF after anesthesia and surgery. These exciting data are proposed to be followed up by studies which will determine whether postoperative increases in such mediators play a mechanistic role in human POCD and/or delirium and the brain network connectivity changes that had been prior observed in patients with POCD. This work, therefore, has the potential to improve postoperative cognitive outcomes for the more than 16 million Americans over the age of 60 who undergo anesthesia and surgery each year. Contributed by William Armstead, PhD.

SNACC member Dan Cole, MD completes his year as President of ASA. Congratulations on a great year.

The American Society of Anesthesiologist recognizes Michael M. Todd, MD, with its Excellence in Research Award. Dr. Todd is currently Vice-Chair in the Department of Anesthesiology at the University of Minnesota. Click Here to read the article regarding Dr. Todd.
Welcome New SNACC Members

ACTIVE
Hamdy Awad, MD .......................... Upper Arlington, OH
Thomas F. Floyd, MD .............................. Media, PA
Semhar Ghebremichael, MD .......................... Houston, TX
Shawn Hicks, MD, MSc .......................... Ottawa, ON, Canada
Olusweun Johnson-Akeju, MD .......................... Lexington, MA
David Kopman, MD .......................... New York, NY
Charu Mahajan, MBBS, MD, DM .......................... New Delhi, Delhi, India
Kabel Morgan, MD .......................... Knoxville, TN
Alexander Papangelou, MD .......................... Decatur, GA
Saraswarthy Shekar, MD .......................... Shrewsbury, MA
Ljuba Stojiljkovic, MD .......................... Chicago, IL
Daniel A. Lopez, MD .......................... Hopkinsville, KY
Amy K. Mehta, MD .......................... Philadelphia, PA
Krassimir Denchev, MD .......................... Northville, MI

FELLOW
Ibukun Adedugbe, MBBS, BSC, FRCA .......................... Toronto, ON, Canada
Sanchit Ahuja .......................... Cleveland, OH
Arun S. George, MD .......................... Chicago, IL
Bradley Howell, MD .......................... Southfield, MI
Eric Hsu, MD .......................... Ann Arbor, MI
Xu Jin, MD .......................... Beijing, China
Jacqueline M. Morano, MD .......................... Chicago, IL
Ferenc Rabai .......................... Gainesville, FL
Wael Saasouh, MD .......................... Cleveland, OH
Iman Suleiman, MD .......................... Chicago, IL
Yunzhen Wang, MD .......................... Beijing, China
Diana Ayubcha, MS, DO .......................... Philadelphia, PA
Valerie Howell, DO .......................... Southfield, MI
Margaret M. Collins, MD .......................... Ann Arbor, MI

RESIDENT
Hassan Aijazi, MD .......................... Houston, TX
Kacie Bhushan, DO .......................... Houston, TX
Amanda Faulkner, MD .......................... Lexington, KY
Sean Harrison, MD .......................... Kansas City, MO
Nicole Jackman, MD, PhD .......................... San Francisco, CA
Simon Meyer Mommenheim .......................... Rheinland-Pfalz, Germany
Rajeeb Kumar Mishra, MD .......................... New Delhi, Delhi, India
Jordan Starr, MD .......................... Seattle, WA
Gaurav Tomar, DA, DNB, DM .......................... Beijing, China
Ryan Truant, MD .......................... Vancouver, BC, Canada
Kyle J. Rogan, MD .......................... Calgary, Alberta, Canada

STUDENT
Ayda Askari .......................... Thornhill, ON, Canada
Katherine Ni .......................... New York, NY
Yi Ren .......................... Beijing, China
Christopher Sinon .......................... Atlanta, GA
Shanshan Wang, PhD .......................... San Diego, CA
Min Zeng .......................... Beijing, China

Save Money for Your Practice with Group Membership Billing
Each member of your group will get 10% off of the membership dues and the practice will get one comprehensive bill. Contact Greg Leasure to sign up!

Do you have membership questions?

Contact Greg Leasure, greg@societyhq.com
THANK YOU AGAIN TO OUR SPONSORS AND EXHIBITORS FOR THE 44th Annual Meeting

GOLD LEVEL
Masimo Corporation

EXHIBITORS
Chiesi USA, Inc.
Decisio
KARL STORZ
Endoscopy-America Inc.
Merck
Moeller Medical GmbH
Neurocritical Care Society
Ornim Medical
SmartTots
Teleflex
UCB, Inc.
Wolters Kluwer Health

RESIDENT NEUROANESTHESIA REVIEW SESSION SPONSOR
Center for Consciousness Science – University of Michigan Medical School

2016-2017
Society for Neuroscience in Anesthesiology and Critical Care

Board of Directors
President
George Mashour, MD, PhD
President-Elect
Jeffrey J. Pasternak, MD
Vice President for Education and Scientific Affairs
Rafi Avitsian, MD
Secretary-Treasurer
Deepak Sharma, MBBS, MD, DM
Immediate Past President
W. Andrew Kolke, MD, MBA, FCCM

Directors at Large
William M. Armstead, PhD
Dhanesh K. Gupta, MD
Michael L. “Luke” James, MD, FAHA
Chanannait Paisansathan, MD
Lauren C. Berlow, MD
Laurel E. Moore, MD
Linda S. Aglio MD, MS
John F. Bebawy, MD

Society Management
Executive Director
Stewart A. Hinckley
Association Manager
Sandra Peterson

Newsletter Staff
Newsletter Editor
Reza Gorji, MD
Newsletter Assistant Editor
Fenghua Li, MD
Graphic Design / Publications
Beverly V. Bernard

This newsletter is published four times a year in conjunction with the Society for Neuroscience in Anesthesiology and Critical Care (SNACC), 2209 Dickens Road, Richmond, VA 23230-2005; (804) 565-6360 or fax (804) 282-0090.

No part of this publication may be reproduced without the express written consent of SNACC. All rights reserved.

SNACC is not responsible for statements made by any contributor. Statements or opinions expressed in this newsletter reflect the views of the author(s) and not necessarily the official policy of the SNACC.