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President’s Message

Kristin R. Engelhard, MD, PhD
SNACC President

Nearly half of my presidency has now passed and SNACC members have been very active in the last six months. Therefore, I would like to share with you the most important developments.

The relationship between SNACC and the International Anesthesia Research Society (IARS) has been growing over the years. This year, we can proudly announce that at the IARS meeting in May, 2014, Dr. Deepak Sharma has organized a SNACC panel on “Controversies in Neuroscience in Anesthesiology & Critical Care” and Dr. Rafi Avitsian will discuss an interesting case with the audience during his PBLD. Additionally, for the second year in a row, SNACC will donate an award for the best abstract of neuroscience in anesthesiology and perioperative medicine.

Another meeting which is endorsed by SNACC, is the EuroNeuro 2014 which will take place in April in Istanbul, Turkey. This meeting will be the 8th Interdisciplinary Update in Neuro Anesthesiology and Intensive Care and it will provide the most recent treatment strategies of neurologically impaired patients.

For the first time in the history of SNACC, it will now be possible to elect the new members for the SNACC Board of Directors electronically. The ballot will open on June 23 and close on July 20. The advantage of the electronic voting is that each member has the opportunity to vote independent of participation at the Annual Meeting. Furthermore, the newly elected BOD members can attend the BOD meeting in October, 2014, which will facilitate the transition between the past and the incoming directors. The exact timetable for the electronic voting has been sent out to all members by Dr. Martin Smith, who is organizing the elections this year.

The SNACC consensus guidelines on “Perioperative Care of Patients at High Risk for Stroke after Non-Cardiac, Non-Neurologic Surgery” has been posted at the SNACC webpage for comments by the SNACC members. Dr. George Mashour has now implemented the comments of the SNACC members and finalized the guidelines. I am really grateful to Dr. Mashour and his co-authors for their hard work.

Finally, I want to remind you that the 42nd Annual Meeting of SNACC will be held in New Orleans, October 9-10, 2014 at the Sheraton New Orleans. Dr. Kofke has organized an outstanding program with a perfect balance between clinical neuroanesthesia and critical care and the most recent aspects of neuroscience. This year, it was possible to extend the Thursday afternoon sessions. SNACC members will have the choice between the Basic Science Symposium with the topic “Neuroscience Issues in Emergence from Anesthesia,” the Emergency Neurologic Life Support Workshop, which is a joint meeting with the Neurocritical Care Society, the Mentoring Session on “Making My Clinical Research Project a Success”, and the Neuromonitoring Workshop. During the Thursday Dinner Symposium, the advantages of EEG monitoring during anesthesia will be discussed and a fascinating glance on the way about how anesthetics might induce anesthesia will be given.

SNACC is very proud to present the First Annual Maurice Albin Keynote Lecture on Friday morning in order to honor the second SNACC President and important founding member. The keynote lecture will be given by Dr. Deitrich Dalton on “Spinal Cord Injury: Hypothermia, Stem Cells and Other Advances.” This highlight will be followed by our clinical scientific mini-symposium on “Personalized Medicine.” The second mini-symposium is again a joint session with the Neurocritical Care Society and focuses on the management of intraoperative catastrophes during neurosurgery. The last session will look from two perspectives on “Anesthesia in the Neurointerventional Suite: Two Perspectives.” This discussion will be moderated by Dr. Pekka Talke, who is the author of the SNACC Consensus Guideline on the “Anesthetic Management of Endovascular Treatment of Acute Ischemic Stroke,” which is now published in the latest issue of the Journal of Neurosurgical Anesthesiology. As always, there will also be two poster sessions where clinical and experimental neuroscientists will have the chance to present their most recent data and discuss them with the experts. I sincerely thank all those members who contributed in creating such an outstanding program and I hope that the program inspires all of you to attend our Annual Meeting in New Orleans and to learn more about the art and science of the care of neurologically impaired patients.

Kristin R. Engelhard, MD, PhD
SNACC President
42nd Annual Meeting
October 9-10, 2014 • Sheraton New Orleans • New Orleans, LA

Jointly sponsored by the American Society of Anesthesiologists and the Society for Neuroscience in Anesthesiology and Critical Care

Thursday, October 9
• Basic Neuroscience Symposium. Find out how patients wake up from anesthesia and what’s going on when emergence is slower than expected.
• ENLS Workshop. A first of its kind opportunity to become certified in Emergency Neurologic Life Support. A workshop run by leading SNACC neurointensivists.
• Neuromonitoring Workshop. Overview and practice intraoperative neuromonitoring techniques, including Transcranial Doppler.
• Mentoring Session on developing your idea and making it a success.
• Annual Thursday evening Dinner Symposium. Network with colleagues and learn about the meaning of anesthetic effects on EEG. Also learn more about the newly hot area of connections in the brain and how they are important in anesthesia.

Friday, October 10
• Keynote Lecture on Spinal Cord Injury. What’s going on with hypothermia, stem cells, neuroprotection, perfusion pressure and other issues relevant to neuroanesthesia care.
• Personalized medicine: Learn about what’s new in the interface between the electronic health record and genomics. The ultimate in personalized medicine and it will make it to your OR!
• Two scientific poster sessions. All digital with many stations. Read the abstracts and their posters before, during, and after the presentations. Offer questions to the authors digitally.
• Intraoperative catastrophes: Hear opinions of leading clinicians of what to do when all heck breaks out in your OR. Venous air embolism, massive bleeding, epidural hematoma.
• Neurointerventional suite. Dealing with various issues. GA or MAC?
Editor’s Corner

Reza Gorji, MD
Editor

I am very happy to bring you this edition of the newsletter. I think you will find it both educational and informative. Please make sure you view new offerings from the Educational Committee in Dr. Sharma’s article.

I have received a fair amount of positive feedback after the last newsletter was published. The education corner received nice comments from many of the readers. A reader even asked permission to use it for their anesthesia residency program. There is an expanded version in this edition. I find our practices are heavily influenced by changes in neuromonitoring techniques in a very positive fashion.

As always, I invite you to get involved with SNACC and feel free to contribute to the newsletter. Thank you for being a SNACC member and a reader of this newsletter.

SNACC Nomination and Elections

Martin Smith, MBBS, FRCA, FFICM
Immediate Past President
Chair, 2014 Nominations Committee

Nominations for election to the SNACC Board of Directors opened on March 26 and will close at midnight (EST) on April 30, 2014. This year, there will be vacancies for Secretary/Treasurer and as many as four Directors-at-Large. The opening of nominations are announced on the SNACC website and via a broadcast email that was sent out on March 26.

Self-nominations in the form of a short biography (maximum 250 words), including previous contributions to SNACC, and a photograph, are encouraged. Please contact Sandra Peterson at sandra@societyhq.com or Martin Smith at martin.smith@uclh.nhs.uk, Chair of the 2014 Nominations Committee, for further information.

This year, for the first time, the elections will be held electronically. The ballot will open on June 23 and close on July 20 at midnight (EST). Further information will be available at a later date.

SNACC Clinical Presentation

Click here for the latest Clinical Case Presentation: “Anesthetic Management of Traumatic Brain Injury” and Click Here for Article of the Month (Members Only)

SNACC Bibliography

Updates to the 2014 SNACC Bibliography are in progress. If you are a contributor the deadline to submit updates is July 1, 2014. If you have suggestions for improvement or you wish to become involved please e-mail Laurel Moore at laurelmo@med.umich.edu. Thank you!

The SNACC bibliography is available free of charge to all SNACC members. For non-members, there is a free 90-day trial. Save yourself some time when looking up a topic and go straight to the bibliography. You will be amazed at the wealth of information presented.

The URL is http://www.snacc.org/biblio.iphtml.

CALL FOR ABSTRACTS

Abstracts will be accepted for the

SNACC 42nd Annual Meeting

Monday, April 7, 2014 through

Monday, May 19, 2014

Please plan to contribute your abstract at that time.
The 15th annual conference of the Indian Society of Neuroanaesthesiology and Critical Care (ISNACC) was held in the “Pink City” of India, Jaipur from January 31-February 2, 2014. The scientific program included symposia, lectures, panel discussions, workshops, problem based learning discussions (PBLDs) and poster presentations. The highlight of the conference was the “SNACC Panel” comprising lectures by three well-known SNACC members: Cor Kalkman, MD, PhD; Jeffrey Pasternak, MD and John Hartung, PhD. Dr. Kalkman lectured on “Patient Safety in Neuroanesthesia,” while Dr. Pasternak talked about “Ethical Challenges in Neuroanesthesia” and Dr. Hartung discussed “How and Why We Need to Fix the Medical Literature.” The lectures were followed by a very interesting discussion. The panel was very much appreciated by the attendees and the executive body of ISNACC has requested SNACC to recommend a panel for the next annual conference to be held in Lucknow, India in January, 2015.

ENLS for the Neuroanesthesiologist

Time is Brain. Every neuro-anesthesia healthcare provider has encountered a patient in the perioperative period that has suffered a neurological emergency. The appropriate best treatment for these patients, especially in the “golden first hour” after injury is not always clear. In order to address this therapeutic uncertainty, the Neurocritical Care Society devised the Emergency Neurological Life Support (ENLS), as ACLS for the brain, which provides recommendations to address these emergencies, based on current best evidence. ENLS offers providers the opportunity to learn to provide coherent and consistent medical care of high quality in times of neurological crisis. SNACC is excited to be able to offer an ENLS workshop for its members at the upcoming Annual Meeting in New Orleans. The workshop will cover all 13 different disease processes within the ENLS curriculum. Special emphasis will be put on the emergencies that are of highest relevance to SNACC members, including acute ischemic stroke, subarachnoid hemorrhage, traumatic brain and spinal cord injury, and acute intracranial hypertension. The five-hour workshop will take place on Thursday afternoon and be conducted by three practicing neuroanesthesiologist/neurointensivists.

At the end of this workshop, attendees will be able to take the ENLS Certification examination on site. Becoming ENLS certified will prepare participants to champion the cause of best practice-based responses to neurological emergencies at their home institution. ENLS materials, endorsed by the Neurocritical Care Society, will be provided to all registrants prior to the meeting.

Please use this opportunity to enhance your knowledge about the various neurological emergencies, discuss best practice approaches with your peers, and become ENLS certified. Welcome to the network of ENLS-certified providers.

ENLS Workshop Moderators:
Ines Koerner, MD, PhD (mkoerner@ohsu.edu)
Abhijit Lele, MD (alele@kumc.edu)
Michael “Luke” James, MD (michael.james@duke.edu)

Visit www.snacc.org
Kathryn Rosenblatt, MD
Upstate Medical University
Syracuse, New York

As members of the Society for Neuroscience in Anesthesiology and Critical Care, we know that anesthesiology is a neurological science. Balancing unconsciousness, analgesia, amnesia and immobility, general anesthesia is a neurophysiological state in which each component of the nervous system is altered in some manner. With the help of anesthesia, neural correlates of consciousness are currently being outlined.1,2 Renowned neuroscientists believe anesthesia is a better model than sleep to examine changes in consciousness, mostly because anesthesia is controllable.3 In fact, anesthesia has been safely used to control consciousness in the United States since 1846.4

While both neurology and anesthesiology can trace their intellectual histories back to antiquity,5 the discovery of anesthesia for painful procedures can be attributed to dentists, ophthalmologists and neurologists during the second half of the 19th century.4,6 In 1872, the New York Neurological Society became the first specialist organization devoted to the diagnosis and treatment of nervous conditions.7 The first organized group of American physicians dedicated to the practice of anesthesiology met in 1905 as the Long Island Society of Anesthetists.8 In 1908, the concept of a specialty board, for the purpose of establishing qualifications for specialists, was first proposed, and in 1928, the Council on Medical Education and Hospitals published the Essentials of Approved Residences and Fellowships for the specialties then existing.9 To this day, there remains little, if any, formal coupling of clinical training in neurology and anesthesiology despite the intertwining disciplines in their origin and current medical advances.

Professor Emeritus Dr. Charles Wilson, Chairman of Neurological Surgery at UCSF for 28 years and founding director of the Brain Tumor Research Center, noted that, “…among surgeons, no group has greater respect for, or greater dependence on, its counterparts in anesthesia than neurosurgeons.”10 Outside of our lectures and textbooks, how do anesthesiologists earn the respect of neurosurgeons to such a great degree? How do anesthesiologists come to understand the neural networks we control and keep safe? Are the 20 ACGME-required intra-cranial cases enough when the fundamental mechanism of general anesthesia is entirely neuroscientific?

As a neuroanesthesiology-focused CA-3 anesthesia resident, I certainly do not think that 20 cases are enough. Fortunately, the two ACGME-required neuroanesthesia months I experienced at SUNY Upstate overflowed with neurosurgical cases, but I still had many unanswered questions. Upon request, my residency program arranged for me to complete my final four of 16 ACGME-required critical care training weeks
in our hospital’s neuroscience complex. Ordinarily, anesthesia residents at SUNY Upstate Medical University complete all critical care training divided between our medical intensive care unit and surgical intensive care unit. By the end of my first day as a resident rotator with the neurocritical care team, I had no doubt that every one of my classmates could benefit from this experience.

SUNY Upstate University Hospital is a New York state-designated stroke center, Level I trauma center with a 13-bed Neuroscience Critical Care unit, a 13-bed Neuroscience Stroke/Step-down unit, and a five-bed EEG monitoring unit. Upstate has one of the first United Council of Neurological Subspecialties (UCNS)-certified Neurocritical Care Fellowship programs. The vast education I received took place during bedside rounds with attendings, while engaged in direct patient care, and via didactic conferences. My training involved the application of critical care principles to the management of patients with acute neurological conditions, and to trauma victims with complex multi-organ dysfunction. I performed full neurologic evaluations and acquired skills in emergency management, continuous critical care and intensive monitoring of patients with ischemic and hemorrhagic stroke, brain trauma, CNS malignancy and infection, status epilepticus and coma.

Core critical care principles such as advanced hemodynamic assessment and monitoring using invasive and non-invasive techniques and airway and ventilator management were thoroughly covered and reinforced. However, equal priority was given to discussions of multi-modality neuromonitoring including continuous EEG assessment and interpretation, intraparenchymal brain tissue oxygenation/ICP monitor insertion and management, external ventricular drain insertion and management and transcranial Doppler applications and interpretations. For me, several learning experiences stood out the most. One was the time spent interpreting neuroradiographic images to help direct daily patient care and guide treatment plans. Another was the family and patient discourses involving ethical principles of provision or withholding of care, as well as discussions concerning confidentiality, decisional capacity and informed consent. Additionally, I discovered parallels between the type of care provided for critically ill patients in the Neuroscience Critical Care unit (NeuroICU) and the care anesthesiologists provide for all patients in the operating room, which was different from the care provided in the medical and surgical intensive care units (ICUs). A few of the similarities between NeuroICU and OR management include aggressive blood pressure control, tight arterial blood gas targets, and strict temperature regulation. Unlike critically ill patients I cared for in the general ICU, patients with neurological insults would deteriorate less predictably and more quickly and therefore required a higher level of vigilance. Rapid medical and often neurosurgical intervention was necessary to prevent poor outcome.

Each week, I presented during rounds and was directly responsible for the care of at least four patients, among whom a broad spectrum of acute CNS dysfunction was visible. One of my first patients was an independent and active 80-year-old gentleman on Coumadin for a history of pulmonary embolism in the remote past, who presented with sudden right-sided weakness and aphasia and rapid deterioration requiring emergent intubation. CT angiography revealed high grade stenosis of the left internal carotid artery (ICA) and hypoperfusion of the left brain. Immediate angioplasty and stenting of the left ICA as well as left middle cerebral artery clot retrieval was performed. Although he succeeded in early extubation, significant hemiparesis and aphasia remained, followed by epistaxis and a large occult retroperitoneal hematoma. We evaluated brain MRI, head CT, and chest and abdomen imaging routinely. We monitored hemodynamics and cardiac output invasively and non-invasively and performed serial comprehensive neurologic exams. With this information, we were able to adjust blood pressure parameters, dictate anticoagulation therapy and guide physical therapy. I received a wink and a handshake from this patient the day he was safely discharged to a subacute rehabilitation facility close to his wife and daughter at home.

I also had the incredible experience of caring for a 19-year-old with worsening paresthesias, neuropathic pain and progressing flaccid paralysis who was given a diagnosis of Guillain-Barré syndrome. I performed or facilitated all aspects of the diagnostic workup and critical care interventions including emergent intubation, lumbar puncture with cell count and microbiology, and...
Neurocritical Care Training During Anesthesia Residency: A CA-3 Resident’s Experience

Continued from page 7

EMG and nerve conduction studies, and brain and spine MRI. After an unsuccessful course of IVIG, and positive cytomegalovirus results, Lyme-positive titers and multiple positive SLE markers, I coordinated plasmapheresis, antibiotic, antiviral and steroid therapies, a tracheostomy and gastrostomy feeding tube insertion alongside considerable rheumatology and infectious disease consultation input. The patient slowly regained strength and was discharged from the NeuroICU to the acute rehabilitation center in our hospital not long after I completed my rotation. She was subsequently discharged home after 11 days of acute rehab, with normal movement, speech and diet, and resolved paresthesias.

Data shows that high-quality neurocritical care with the delivery of early protocol-driven therapeutic interventions in a dedicated neurocritical care unit impacts both survival and quality of survival.12-15 Although neurosurgeon, Walter Dandy, is credited with creating the first neurosurgical intensive care unit at Johns Hopkins Hospital in 1923, the modern ICU started as respiratory care units to provide ventilatory support during large scale poliomyelitis epidemics around the world.16 Anesthesiologists at Massachusetts General Hospital, Anderson, Benidixen and Pontoppidan, started the first United States-based respiratory care unit in the 1950s.17 In the 1970s, these early ICUs were replaced by multidisciplinary ICUs, trauma units, transplant units, and postoperative care units under the supervision of predominantly anesthesiology-based intensivists, surgeons and specialty nurses.16 In the 1980s, neurologists joined the intensivists in the growing number of neuroscience intensive care units because a greater need emerged for bedside coverage when neurosurgeons were occupied in the operating room. While anesthesiology-based neurointensivists have been practicing since Dandy’s era, neurologists have rapidly expanded into the field of neurocritical care over the past decade.

Newly formed professional societies like the Neurocritical Care Society and accreditation organizations like the UCNS are collaborating with long-standing medical societies such as the American Association of Neurological Surgeons, SNACC and the American Academy of Neurology to make structured neurocritical care practice available to a wider patient population. While specialized training programs continue to develop, there is still a shortage of neurointensivists in the United States. According to a survey recently published by James et al. in the Journal of Neurosurgical Anesthesiology,18 as of 2012, 554 UCNS-certified neurointensivists exist but only 41 anesthesiology-based neurointensivists are practicing in 22 of the 104 United States institutions with specialized NeuroICUs. Data collected from these anesthesiologists suggests that although representing less than half of their time at work, the job satisfaction for providing NeuroICU care is high with little economic downside. In December 2013, the last UCNS Neurocritical Care certification exam was offered to both practice-track pathway and fellowship-trained neurointensivists. Now, only those who have successfully completed a UCNS-accredited Neurocritical Care fellowship will be able to apply to sit for the certification exam.

I believe it to be imperative that residency programs incorporate a month of clinical training in a NeuroICU to expose anesthesia residents to this growing and attractive career opportunity. In addition, I found that direct, consecutive patient care after neurosurgical procedures are performed is necessary to gain knowledge and skill about neuroanesthesia, similar to the way knowledge and skill is acquired while learning about regional anesthesia and pain medicine. But more importantly, I feel all anesthesia residents would greatly benefit from the tremendous education in neuroscience such an experience provides because it plays such a fundamental role in our daily practice. Like the marriage of anesthesia with current scientific investigations of consciousness, the field of anesthesiology has much to gain from resident training in the NeuroICU, and much to offer in return.

References:

INTERVIEW WITH DR. W. ANDREW KOFKE

In this issue of the newsletter, I have the privilege of interviewing Dr. W. Andrew Kofke from the University of Pennsylvania. Dr. Kofke is an inspiration to all neuroanesthesiologist and is one of the original members of SNACC. I hope you enjoy reading this dialogue between Dr. Kofke and myself.

Reza Gorji
SNACC Newsletter Editor

Reza Gorji: What is your current position at UPenn?
Andrew Kofke: I am currently a Professor of Anesthesiology and Neurosurgery. I am Director of the Neuroanesthesia Program and Co-Director of the Neurocritical Care Program at the University of Pennsylvania.

Reza Gorji: How many residents do you have a year?
Andrew Kofke: UPenn brings on about 15 residents a year. Plus I work with two or three new neuroICU Fellows annually.

Reza Gorji: Approximately how many residents have you trained in your career?
Andrew Kofke: This is difficult to answer, but if you assume about 10 per year since 1983, we come up with a number which is around 350 or so that I have “trained.” This is nonetheless perhaps a little far fetched as sometimes my interaction with these residents has been just a day or so, ranging up to weeks to months interacting with others. On top of that are numerous fellows with whom I have worked over the years in critical care and neurocritical care at the University of Pittsburgh, Penn State, and the University of Pennsylvania.

Reza Gorji: That is an amazing number and accomplishment.

Reza Gorji: We take care of patients every day as we did 20 years ago. Are there any differences today compared with then? Are we busier as neuroanesthesiologists today? Are our patients sicker today compared with the past?
Andrew Kofke:

a. The nature of neuroanesthesia has changed substantially. I would suggest that the medical illnesses in many ways are more complicated now, although the primary care now seems better such that chronic diseases are better managed than they were when I started my career in 1983.

b. The nature of neuroanesthesia thirty years ago was substantially different from now.

i. For example, aneurysms were always clipped under induced hypotension, using any of a variety of agents including deep halothane, trimethophan, nitroglycerin, and nitroprusside. For those cases where you placed your a-line transducer was crucial.

ii. Hypothermia was commonly employed, and there was the occasional deep hypothermic circulatory arrests case for some aneurysms.

iii. Aneurysms often came for clipping after they had undergone their period of vasospasm risk because surgeons thought it best to do the clipping more than ten days after the bleed, etc. This often entailed some ten days or more of epsilon amino caproic acid, with thrombotic or vasospastic strokes on arrival to OR.

c. I would suggest a standard of practice for the neurovascular problems has moved to a large extent to interventional radiology where the same sick patients are now being done in out-of-OR remote locations which presents its own challenges for both acute procedures, e.g. AVM bleed, aneurismal bleed, acute oropharyngeal bleeding, and also for thrombolysis for stroke. Moreover, there are other elective cases that we’re seeing more in IR including embolization of tumors and AVMs, elective coiling of aneurysms and a few other miscellaneous procedures. Thus neuroradiology has become a large part of our practice compared to 30 years ago, and this marks another area of new expertise which is now in the place of things which have gone past.

d. In addition, it seems like there are more awake craniotomies going on now than there were 30 years ago, thus constituting a primary area of unique skill amongst neuroanesthesiologists.

e. It’s hard for me to say whether or not we are busier as this seems to depend on the referral patterns of one’s neurosurgeons and the congealing of health centers into megaplex hospitals. It certainly seems like the medical environment has resulted in a conglomeration of large medical centers with patients less distributed and more centralized such that we seem to be busier in the large medical centers. Many of our patients are requiring
had to live in the hospital every other night for five years, although we took it every third to fourth night and then had to be available to give anesthesia the next day after call, assuming there was at least an hour or so of sleep. So the work hours rules have created a distinct change in the culture although it may actually go with the culture of the entire generation and not work rules which have been foisted on them and us by the powers that be. It appears that the anesthesia residencies are overall healthy with a lot of interest in the specialty, perhaps related to remuneration. I am not sure how much interest there is academically or not. It’s not zero but NIH award stats suggest that academic interest in neuroanesthesia is suboptimal. Certainly, the anesthesia residents at Penn greatly enjoy their neuroanesthesia rotation ranking it as one of the most highly satisfied rotations, although few of them actually go into neuroanesthesia fellowships. Perhaps this is related to the lack of accredited neuroanesthesia fellowships that are available compared to other anesthesia sub-specialties.

Reza Gorji: Not getting married while in residency will not work in today’s environment because of the culture of the current generation.

Reza Gorji: A neuroanesthesiology fellowship is different today compared to when I finished residency 20 years ago. How do you see our specialty with fellows today?

Andrew Kofke: The fellowships that we undertook were non-accredited sort of loosely organized fellowships which were typically funded by the department. Now the fellowships are not easily funded by the department and there is not funding available from the ACGME such that many places are developing neuroanesthesia instructorships, which is to say that someone signs on for at least a limited commitment to be on faculty as an instructor bringing in billing and then having a rest of the time to do academic activities and learning how to do neuroanesthesia under supervision. So this has been a marked difference, primarily driven by the source of funding. Personally, I expect to see this trend extend to ACGME fellowships.

I am working with the SNACC executive committee to develop a process for accreditation of neuroanesthesia fellowships through the United Council of Neurologic Sub-Specialties. We’re hoping that we can come up with a system whereby neuroanesthesia fellowships can have an identifiable accreditation process through the UCNS. If that works out well with a lot of interest then perhaps we can proceed to a certification process.

One advantage of such a process is that a resident can do a year of neuroanesthesia in an accredited fellowship and it is...
About Bill Young: A Personal Note

Maurice S. Albin MD, MSc
Professor of Anesthesiology
University of Alabama at Birmingham

The intellectual ferment that marked the emergence of Neurosurgical Anesthesia as a defined subspecialty of Anesthesiology in the late 1960’s and early 1970’s was indeed exhilarating. This enthusiasm became remarkably contagious as the organizational aspects of Neurosurgical Anesthesia progressed in the USA and Canada with the formation of the Society of Neurosurgical Anesthesia (SNA), the forerunner of the present day SNACC. Before too long, like the dragons teeth of ancient Green mythology, Neuroanesthesia Fellowship Programs sprung-up seemingly out of nowhere. Another factor enhancing this spiritual brew was the active participation of many young neurosurgeons, a number of whom became leaders in the SNA-SNACC as well as Neurosurgical Departmental Chairs in the future. Our open membership policy encouraged and also allowed for many of our female members to participate in all organizational areas. It was within this intellectual context that Bill Young carried out his Neuroanesthesia Fellowship.

I first met Bill when he was a Fellow in Neuroanesthesia at Columbia University and remember a rather shy respectful individual, easy to talk with, as we “schmoozed” during a break at a SNACC meeting. I was trying to find out his interests and to also keep the conversation going and mentioned some of the work I was doing and what I had carried out in the past. In passing, I brought up the scientific activity in the area of the isolation and subsequent transplantation of the mammalian brain and the near decade it took to accomplish the task with my neurosurgical colleague Robert J. White. Wow! It was like opening the steeply imbedded floodgates as Bill interjected one knowledgeable question after another, to the point where we continued our conversations intermittently during the next day. During our talks, Bill was not only interested in the physiological rationale and sequence of brain transplantation but he wanted to know about immunological problems and posed unanswerable questions about levels of consciousness, memory and basic philosophical teasers about the “soul”. As if this was not enough of a challenge, Bill Young was extraordinarily knowledgeable when I mentioned that some science-fiction writers had written stories about our brain transplantation work. In fact, Bill exploded with enthusiasm, having a very good knowledge of the history of science fiction. So in the wink of an eye, we were both discussing Mary Wollenscraft and the contribution of Galvani’s experiment stimulating the frog’s leg with an electric current to the development of the monster, Frankenstein, Edgar Allen Poe, H.G. Wells, Jules Verne, Ray Bradbury and legions of others. In fact in 1977, I remember alerting Bill to a story in Analog Science

Figure 1. The first page of the paper by Bill Young containing a dedication.
Fiction titled, Ender’s Game, by Orson Scott Card, which was just published in full text in 1991 and which I sent to Bill as a gift. To my mind, I have always believed that an active imagination acts as an incubator of ideas, which Bill never appeared to lack. Along with our discussions concerning medicine, theology, mathematics, philosophy and Sci-Fi, Bill was of course most appreciative of and knowledgeable about music, and as a lover of the classical composers and opera, I was overwhelmed with the ease that he was able to move from the classics to jazz. A bond that also connected us was the love we both had for languages, especially, some of the more modern writers in the German and Spanish idiom going back to Thomas Mann, Gunter Grass, Erich Remarque, Jorge Borges, Garcia Lorca and Pablo Neruda. I don’t want to neglect the area of science, but the moving tribute to the memory of Bill Young by David Warner and William Lanier that appeared in the January, 2014, issue of the JNA more than adequately covered this aspect of this extraordinary individual.

I will however, recommend that one should take a few moments to read the tongue-in-cheek sardonic, yet prophetic critique of our specialty written in a rhythm that Bill would probably call punk-rock with a tinge of Jonathan Swift Cacophany added, titled “Neuroanesthesia–A Look Into the Future,” that appeared in Anesthesiology Clinics of North America in September, 1992. This wonderful evaluation of our subspecialty as well as a peek into the future warrants an evaluation that suborns the purpose of this essay, but I must say that the ease in which Bill Young moves from the philosophy of science to considerations of anesthesia mortality and then leaping from hints of genomics to outcomes evaluation, buttressed by a protean selection of references from classical literature, philosophy and every including the film director, Woody Allen, all indicate the wonderful uniqueness of Bill Young. My how this Sci-Fi-Guy wunderkind will be missed!

References:

Welcome New Members

ACTIVE

Ahmed F. Attaallah, MD, PhD.............West Virginia University
Robert F. de Quevedo, MD.............St Luke's University Health Network
Romina G. Ilic, MA, MD......... Beth Israel Deaconess Hospital
Andrea Orfanakis, MD ....Oregon Health & Science University
Ekaterina Veksler, MD ................CAPITAL Health System
Matthew K. Whalin , MD, PhD .......Emory University School of Medicine
Seiji Takaoka, MD....................Yamagata University Faculty of Medicine, Japan
Catherine M. Christenson, MD .............Fletcher Allen Health Care-University of Vermont
Kathleen W. Nissman, MD ..................Raleigh, NC

SNACC FELLOW

Chris N. Hamilton, MBChB ..........North West Deanery, UK
Sherry Nashed, MD ................. Montefiore Medical Center
Sabine Kreilinger, MD, PhD ......University of Illinois, Chicago
David A. Wyler, MD ..............University of Pennsylvania Health Systems
Anita V. Cucchiaro, MD ............ George Washington University Hospital
Aaron M. Mittel, MD .... Beth Israel Deaconess Medical Center
Johnny Quick, MD ............... University of Central Florida College of Medicine
Caitlin J. McGinty-Froncek, MD ........ Beth Israel Deaconess Medical Center

Thank you

The SNACC Editorial Board would like to acknowledge the following and thank them for their contribution in translating the SNACC newsletter articles into Spanish: Sergio D. Bergese, MD; Karina Castellon Larios, MD; Juan Portill, MD and Alix Zuleta Alarcon, MD.
Title: Is it possible to have an EEG in burst suppression and have intraoperative seizures?

Presenters: Reza Gorji, MD; Geoff Allott, CINM

Presentation: A young male undergoing craniotomy for tumor resection is in burst suppression. Anesthesia consists of propofol and fentanyl infusions. No muscle relaxants are used. The patient suddenly moves. Is this inadequate anesthesia or something else?

![PT in Burst Suppression](Figure 1)

Display Gain is 30uV/Div. In Burst Suppression with cautery at end of window

![Cautery ending with sharp EEG](Figure 3)

Sharp EEG turning to Spike activity (beginning of seizure)

![Spike activity increasing](Figure 5)

Reversion back to spikes and after seizure discharges

![Beginning of High Frequency Seizure activity with the patient moving on the table](Figure 6)

End of seizure back to burst suppression

ANSWERS

1. In Figure 1, one sees the patient’s EEG, which is in or near burst suppression.

2. Figures 2 and 3 show diminution of seizure activity with reversion to spikes and sharp activity, which could be indicative of epileptiform activity or ongoing seizure. The higher frequency activity seen in Figure 6 is likely a result of enhanced electrocortical irritability. In the first figure, the cautery ends, and one sees increased slow activity, and in Figure 7, one sees diminution of seizure activity with reversion to spikes and lastly back to burst suppression.
I am very excited to share with you the new energy and enthusiasm in the Education Committee. As you may have noticed, the committee has now been re-organized. I now have a team of wonderful Neuroanesthesiology educators who are already working hard on delivering educational material that the SNACC members suggested in the survey completed at the Annual Meeting in San Francisco. The committee now has 11 members including one resident member and a Neuromonitoring Subcommittee.

I am sure you have viewed, on the SNACC website, the “Chat with the Author” in which Laurel Moore, MD interviewed George Mashour, MD, PhD about his study “Surge of Neurophysiological Coherence and Connectivity in the Dying Brain” (Proc Natl Acad Sci USA, 2013). You will be seeing such chats with authors of recent studies more regularly. Two new initiatives are currently published on the SNACC website. “Clinical Case Discussion” is now in a new and interactive format allowing you the opportunity to test your knowledge about anesthetic management of Traumatic Brain Injury as you go through the case discussion. Thanks to Arne Budde, MD for his efforts on this. Please let us know your thoughts about the clinical case discussion and also what other topics you would like included in the future. Click here for the link to the “Clinical Case Discussion.”

Another new feature is the “Article of the Month”, being led by John Bebawy, MD. Click here for the link to the “Article of the Month”. We will be using this segment to discuss recently published articles with some editorial and expert comments. We are hoping that further discussion on the article of the month will continue on the SNACC “LinkedIn” site which now has a good number of members regularly discussing Neuroanesthesiology related issues. Have you had a chance to participate in these discussions yet? Many have expressed their appreciation for the SNACC Bibliography and we remain committed to updating it every year. In fact, this process is already underway and will be live shortly before we meet for the annual conference in October. Our Neuromonitoring Subcommittee is working on creating a regular segment on “Neuromonitoring Cases”. Other members of the committee are enthusiastically working on multiple other initiatives including “Pro-con Debates” and “Neuroanesthesia Lectures”. In the coming months, these educational materials will be published on the SNACC website. As always, we would like to get your input and feedback.

One final note – while the Education Committee is working hard on creating educational content, we would benefit from the contributions from SNACC members who have the technical expertise with using software programs to make the web based content interactive. Are you an expert in creating interactive learning modules? Are you savvy in creating podcasts? Are you someone who has the technical knowledge to make web based education more effective? If yes, we need you!

As always, we want to hear from you. If you have any ideas, suggestions or feedback, please write to me at dsharma@uw.edu.
Dr. Kofke Interview

Continued from page 11

expected that this will then have the fellow eligible to take a second year fellowship in neurocritical care be able to sit for the UCNS neurocritical care exam. This would thus enable the graduate to say that he or she has undergone an accredited fellowship in neuroanesthesia and is certified in neurocritical care. We still do have issues with some research training and you know that’s why many believe it should be a minimum of 2 years and is a topic of discussion.

Reza Gorji: So how have you managed not to miss a single SNACC meeting?

Andrew Kofke: I have been to every SNACC meeting since 1983 when Wayne Marshall, a previous SNACC president, who was on faculty with me at Penn State encouraged me to join. I so enjoyed it that I have become a regular at every meeting. I found that one way to make sure that I was given the time to go is to present a paper. And I don’t know, it must have been for 25 years or so consecutively I think I had a poster at the SNACC meeting every year. It’s only recently that I’ve had to drop off a little bit on that, but I still try to continue presenting. So presenting your scientific work and participating in committees, at the SNACC meeting are an important way to get time out and to be able to go every year. The benefits are that you keep up with what’s new in a neuroanesthesia, Neuro Critical Care, Neuro monitoring, and new research; and not to be minimized, develop a network of colleagues and friends around the world.

Thanks for inviting me to provide this interview.

Reza Gorji: I appreciate the time and effort for this interview. I know all SNACC members will read this piece with great interest.

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[SNACC Newsletter Schedule]

SNACC’s newsletter is open to submission by members of SNACC. Please adhere to the following schedule. Submissions do not guarantee publication. We are interested in news and articles of interest from the membership at large. In addition, if you have a question to ask any of the officers of SNACC, you can submit them as well. Due to time and the volume of issues anticipated, not all questions can be answered.

Publication & Submission Deadlines

**Summer Issue**
- Published June 15, 2014
- May 15, 2014 - Copy Deadline

**Fall and Pre-Meeting Issue**
- Published September 15, 2014
- August 15, 2014 - Copy Deadline

**Winter Issue**
- Published December 15, 2014
- November 15, 2014 - Copy Deadline

**Spring Issue**
- Published April 15, 2015
- March 15, 2015 - Copy Deadline

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