

Tennessee
Neurosurgical
Society
Annual Meeting

August 10-12, 2012
Sheraton Read Hotel
Chattanooga, TN



American
Association of
Neurological
Surgeons

Jointly Sponsored by AANS



The Tennessee Neurosurgical Society

Agenda

PROGRAM with LEARNING OBJECTIVES

The Tennessee Neurosurgical Society exists to represent the interests of all neurosurgeons in the state of Tennessee. Our goal is to provide for education and collegiality between members and to provide a cohesive voice representing the neurosurgical perspective in political and public forums for issues that affect our region.

Program Learning Objectives

Upon completion of this educational activity, participants should be able to:

- Implement best current treatment of intracranial vascular lesions
- Have a working algorithm for management of all traumatic brain injuries
- Articulate and implement current standard of care in spinal surgery with regards to diagnosis, initiation of treatment, and surgical techniques
- Discuss evolving medical/business/legislative issues in neurosurgery
- Discuss current best treatment of intracranial neoplasms

Friday, August 10th, 2012

- 5:00-7:00pm Exhibitor Setup
6:00-8:00pm Opening Reception at the Sheraton Read Hotel
8:00-10:00pm Free "Nightfall Concert Series" at Miller Plaza

Saturday, August 11, 2012

6:15-7:15 Bike Ride to Chickamauga Dam and Back (18 Miles total, all relatively flat)-Meet at the Sheraton Hotel Parking Lot –YOUR OWN BIKE

- 7:00-8:00 Registration, Continental Breakfast, Exhibits
8:00-8:05 Welcome, Announcements, Introduction-
Dr. Daniel B. Kueter, President, TNS 2012

8:05-10:10 Scientific Session Block I –Moderator Dr. D. Phillip Megison

- 8:05-8:25: Adam S. Arthur: Update on Stroke: What a neurosurgeon needs to know.
8:25-8:45: Clarence B. Watridge: The Business end of the Carotid Endarterectomy –
Pearls for the distal arteriotomy closure
8:45-9:05: Timothy A. Strait: Recent trends in craniofacial surgery
9:05-9:25: Biggya L. Sapkota: Lasers, Electrodes, and Stem Cells:
International High Tech for Acute Stroke Treatment
9:25-9:45: Joseph S. Neimat: Effects of STN stimulation on emotional function
9:45-10:05: Peter Boehm Jr.: The history of neurosurgery in Chattanooga

10:05-10:30: Discussions over coffee in exhibit hall

10:30-12:30 Scientific Session Block II – Moderator: Dr. Michael R. Gallagher

- 10:30-10:50: W. Charles Sternbergh: Life of a neurosurgeon after neurosurgery
10:50-11:10: Michael D. Fromke: Emerging trends in spine surgery
11:10-11:30: Seyed M. Emadian: Practicing cutting edge neurosurgery in a rural community
11:30-11:50: Daniel Kueter: Concussion Management and Sports Medicine:
What is the current standard of care?
11:50-12:10: Matthew McGirt: Outcomes Data Collection in the changing healthcare environment:
Defining the quality and value of your care

12:10-12:40 Discussions over Working Catered Lunch with exhibitors

12:40-2:00: Scientific Session Block III – Moderator Dr. Daniel B. Kueter

12:40-1:00: Robin Smith, Neuro-Spine Committee: Government, Healthcare and the Law

1:00-1:20: L. Michael Madison: Skull base neoplasms

1:20-1:25 Introduction of Key Note Speaker – Dr. Daniel B. Kueter

1:25-2:00 Keynote Address - Dr. Jon H. Robertson – The Past, Present and Future of Neurosurgery

2:10-2:30 Annual Business Meeting

3:00 - Afternoon Golf Outing or Neurosurgery Watersports

6:30-8:00 Physicians & Meeting attendees only: Dockside Reception at Ross's Landing; Free Riverside Nights concert adjacent to reception at Ross' Landing

Sunday, August 12th

6:15: Bike ride through North Chattanooga (20 miles total)

7:00-8:00: Breakfast with Exhibitors/Registration

8:00-10:05: Scientific Session Block IV - Moderator Dr. Frederick A. Boop

8:00-8:20: Jeffrey M. Sorenson: Neurosurgical Anatomy - Beyond the Textbook

8:20-8:40: Paul Klimo: Intraoperative MRI - the LeBonheur experience

8:40-9:00: Matthew W. Wood: Challenges of Neurosurgery in the Tennessee Highlands

9:00-9:20: Paul E. Hoffmann: Transitioning from neurosurgical inpatient to rehab hospital: Making it smooth for

9:20-9:40: Julius Fernandez: Scoliosis treatment with attention to elderly

9:40-10:10: Discussions over coffee in exhibit hall

10:10-12:30: Scientific Session Block V – Moderator: Dr. L. Madison Michael “The Resident Corner”

10:10-10:30 Heather Kistka: Neuro-oncology related

10:30-10:50: Tyler Auschwitz: Pediatric Occipital-Cervical Fusion, the UT experience

10:50-11:10: Scott Parker: Minimally invasive –versus- open transforaminal lumbar interbody fusion (TLIF) for degenerative spondylolisthesis: Comparative effectiveness and cost-utility analysis

11:10-11:30: Berkeley Bate: Stereotactic radiosurgery for spinal metastases, with or without initial open surgical decompression and stabilization: Neurologic outcome and local disease control

11:30-11:50: Cyrus Wong: The high relative impact of lumbar spondylosis and value of lumbar spine surgery in the United States

11:50-12:10: Mike DeCuypere: Analysis of a formal paradigm for the management and diagnosis of pediatric intracranial gunshot wounds

12:10-12:30: Jonathan Forbes: What is the current statewide standard of care for intra-operative spinal cord and nerve monitoring

12:30: Adjourn

Disclosure

The AANS and the Tennessee Neurosurgical Society control the content and production of this CME activity and attempt to ensure the presentation of balanced, objective information. In accordance with the Standards for Commercial Support established by the Accreditation Council for Continuing Medical Education, (ACCME), speakers, paper presenters/authors and staff (and the significant others of those mentioned) are asked to disclose any relationship they or their co-authors have with commercial companies which may be related to the content of their lecture. The ACCME defines “relevant financial relationships” as financial relationships in any amount occurring within the past 12 months that create a conflict of interest.

This activity will consist of live presentations, with interactive discussion, case studies, and abstract presentations.

Participants’ Profile – Tennessee Neurosurgeons, Neurosurgical Residents from Vanderbilt and the University of Tennessee, Advanced Nursing Personnel, Office managers/administrators

FEATURED SPEAKER - TNS 2012



Dr. Jon H. Robertson

Dr. Jon Hobson Robertson attended Southwestern College (now Rhodes) in Memphis, Tennessee, receiving his BA degree in 1968. He graduated from the University of Tennessee Medical School in 1971. After completing an internship and year of General Surgery at the City Of Memphis Hospitals, he worked for several years in general practice before beginning his residency in Neurosurgery in 1975 at the University of Tennessee Center for the Health Sciences.

Immediately following his residency training in 1979, Dr. Robertson became a member of the Semmes-Murphey Clinic and Assistant Professor in the Department of Neurosurgery at the University of Tennessee Center for Health Sciences. He was promoted to Associate Professor in 1984, served as Interim Chairman 1995-1996, and assumed the Chairmanship of the Department of Neurosurgery at the University of Tennessee in 1997. He retired from the University of Tennessee in July 2011.

Dr. Robertson has been active in numerous national and local neurosurgical organizations. He was President of the North American Skull Base Society in 2002, President of the Society of University Neurosurgeons in 2005, President of the American Association of Neurological Surgeons in 2008, and a Director on the American Board of Neurological Surgeons 2000-2006. Over the past two decades he has served on the Board of Directors of Semmes-Murphey Neurologic Spine Institute and the Medical Education & Research Institute in Memphis, Tennessee.

In addition to his volunteer and academic activities, Dr. Robertson has maintained an active practice in neurological surgery with the Semmes-Murphey Neurologic & Spine Institute over the past 35 years. His clinical practice has focus on the surgical management of tumors affecting the cranial base of the skull.

Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the AANS and the Tennessee Neurosurgical Society. The AANS is accredited by the ACCME to provide continuing medical education for physicians.

The AANS designates this live activity for a maximum of 9 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Scientific Program Director

Daniel B. Kueter, M.D., TNS President 2012

Joint Sponsorship Disclaimer

The material presented at the Tennessee Neurosurgical Society 2012 Meeting has been made available by the Tennessee Neurosurgical Society and the AANS for educational purposes only. The material is not intended to represent the only, nor necessarily the best, method or procedure appropriate for the medical situations discussed, but rather it is intended to present an approach, view, statement, or opinion of the faculty, which may be helpful to others who face similar situations.

Neither the content (whether written or oral) of any course, seminar or other presentation in the program, nor the use of a specific product in conjunction therewith, nor the exhibition of any materials by any parties coincident with the program, should be construed as indicating endorsement or approval of the views presented, the products used, or the materials exhibited by the Tennessee Neurosurgical Society and jointly sponsored by the AANS, or its Committees, Commissions, or Affiliates.

Neither the AANS nor the Tennessee Neurosurgical Society makes any statements, representations or warranties (whether written or oral) regarding the Food and Drug Administration (FDA) status of any product used or referred to in conjunction with any course, seminar or other presentation being made available as part of Tennessee Neurosurgical Society 2011 Meeting. Faculty members shall have sole responsibility to inform attendees of the FDA status of each product that is used in conjunction with any course, seminar or presentation and whether such use of the product is in compliance with FDA regulations.

*FACULTY DISCLOSURE POLICY
AANS and Tennessee Neurosurgical Society*

AANS Disclosure of Financial Relationships

ACCME's Updated Standards for Commercial Support requires that anyone in a position to control the content of the education activity has disclosed all financial relationships with any commercial interest (see Glossary of Terms below). If you indicate on this form that you may have a conflict of interest, you are asked to excuse yourself from any portion of the educational activity where a commercial bias might exist. Please indicate your financial relationships by checking the appropriate box below: (PLEASE NOTE: This disclosure is valid for 12 months...please update as needed). This information will be made available to participants prior to the beginning of any CME activity of which you are a part.

*TENNESSEE NEUROSURGICAL SOCIETY ANNUAL MEETING
AUGUST 10-12, 2012*

Each member of the faculty has been asked to complete a Faculty Disclosure Form regarding commercial affiliations and off label uses of medical products with reference to his/her presentation.

<i>Faculty name</i>	<i>Commercial Association</i>	<i>Off label use</i>
<i>Adam Arthur</i>	<i>Consultant – (paid by hr for teaching) by Stryker, Teruma, Covidien</i>	<i>none</i>
<i>Seyed Emadian</i>	<i>none</i>	<i>none</i>
<i>Clarence Watridge</i>	<i>NIH NINDS; Medtronic; Spinal motion Investigator, MERI, Surgeons PAC CREST</i>	<i>none</i>
<i>Jon Robertson</i>	<i>none</i>	<i>none</i>
<i>L. Michael Madison</i>	<i>none</i>	<i>none</i>
<i>Matthew McGirt</i>	<i>AANS;Depuy Spine</i>	<i>none</i>
<i>Robin Smith</i>	<i>none</i>	<i>none</i>

<i>Mike Fromke</i>	<i>Globus Medical; consultant</i>	<i>none</i>
<i>Mike DeCuypere</i>	<i>none</i>	<i>none</i>
<i>Jeffrey Sorenson</i>	<i>none</i>	<i>none</i>
<i>Jonathan Forbes</i>	<i>none</i>	<i>none</i>
<i>W. Charles Sternbergh</i>	<i>none</i>	<i>none</i>
<i>Julius Fernandez</i>	<i>none</i>	<i>none</i>
<i>Timothy Strait</i>	<i>none</i>	<i>none</i>
<i>Matthew Wood</i>	<i>none</i>	<i>none</i>
<i>Paul Klimo Jr.</i>	<i>none</i>	<i>none</i>
<i>Scott Parker</i>	<i>none</i>	<i>none</i>
<i>Paul Hoffmann</i>	<i>none</i>	<i>none</i>
<i>Cyrus Wong</i>	<i>none</i>	<i>none</i>
<i>Heather Kistka</i>	<i>none</i>	<i>none</i>

The Tennessee Neurosurgical Society wishes to thank the following companies for their generous contributions to this annual meeting.

Exhibitor Company Name

Aspen

Alphatec Spine

Baxter

Biomet Microfixation-W Lorenz

BrainLab

Depomed

Elekta

Globus Medical

Integra LifeSciences Corporation

Medtronic Advanced Energy

Medtronic Spinal/Biologics

Medtronic Surgical

Osteomed

Spaulding Surgical LLC

Spinology, Inc

Stryker CMF

SurgicalOne Inc

Symmetry Surgical

Synthes CMF

Synthes Spine

US Accuscreen

Zimmer

Zymogenitics

Saturday - August 11, 2012

8:05

Scientific Session Block I - Moderator: Dr. D. Phillip Megison

Saturday - August 11, 2012

8:05 - 8:25

Dr. Adam S. Arthur

Update on Stroke: What a neurosurgeon needs to know

Saturday - August 11, 2012

8:25 - 8:45

Dr. Clarence B. Watridge

“The Business end of the Carotid Endarterectomy - Pearls for the distal arteriotomy closure”

Saturday - August 11, 2012

8:45 - 9:05

Dr. Timothy A. Strait

“Recent trends in craniofacial surgery”

Saturday - August 11, 2012

9:05 - 9:25

Dr. Biggya L. Sapkota

**“Lasers, Electrodes, and Stem Cells:
International High Tech for Acute Stroke Treatment”**

Saturday - August 11, 2012

9:25 - 9:45

Dr. Joseph S. Neimat

“Effects of STN stimulation on emotional function”

Saturday - August 11, 2012

9:45 - 10:05

Dr. Peter E. Boehm, Jr.

“The history of neurosurgery in Chattanooga”

Saturday - August 11, 2012
10:30 – 12:30

Scientific Session Block II - Moderator: Michael R. Gallagher, MD

Saturday - August 11, 2012

10:30 - 10:50

Dr. W. Charles Sternbergh

“Life of a neurosurgeon after neurosurgery”

I thank Dr Kueter and the Tennessee Neurosurgical Society for inviting me to present these thoughts. I suppose these remarks should be considered color commentary or such, but they may provoke some food for thought.

How will you handle the end of your clinical neurosurgical practice? There are many choices and no right or wrong for these very personal decisions. I recommend you do some planning. Look at the role models around you. Friends and colleagues in neurosurgery, other physicians, family members. How did their actions work out for them and their families over time?

I have observed that individuals who are forced to stop practice abruptly and unexpectedly, for any reason, health, disciplinary issues, whatever, have a difficult time finding a positive equilibrium of self worth and life in general. Hopefully none of you will be tasked to deal with this scenario.

Let me tell you what happened to me since I pushed away the operating microscope. It may be positive or negative data for your end of practice decisions.

My role models included my father, a radiologist who had a strong German work ethic, and few interests outside of radiology. He worked in a group until he was 70 and then did locum tenens in small hospitals until he was 78 years old. By then, progressive dementia and my mother's deteriorating health prevented development of new interests or different physical activities.

I loved neurosurgery and practice with the Neurosurgical Group of Chattanooga. The group now has a nifty new name which includes spine, but still provides quality neurosurgical care for everybody who needs our services, as has been the case since 1942. I was the managing partner/chairman from 1994 until 2003. Dr. Gallagher and Dr. Megison will confirm that job is like herding cats. My practice was about 1/2 cranial and 1/2 spine. I especially enjoyed tumor work and more especially in the posterior fossa. Without modesty, my practice was high-quality and my leadership of the group was pretty darn good. This took long hours every week and my physical and emotional energies were used up on a consistent basis. I loved to sail, but couldn't get to the boat enough. I began to go to Haiti, doing medical work, but not very often. I wanted to stop practice at the top of my game and still have enthusiasm and ability for the next chapter in life. I gave the group a one year heads up, that in January 2003, I would retire from practice. I was 63 years old.

I had enough insight to understand that after 30 years of neurosurgery, I would need some structure in my life every day. I would need to use my skills of critical thinking about neurosurgical issues to stay engaged. About 6

months before I retired, I got a call from a local insurance company Unum whose primary product is disability insurance. This job appeared to offer a strategy to deal with those requirements.

After negotiation, the job was to be part-time and portable. We have a vacation home on the Gulf coast and one requirement was to be able to work from there as well as Chattanooga. What I do is read medical records and provide an opinion concerning the level of physical work activity a claimant could reasonably sustain. In contrast to an insurance company which pays for medical care, I do not provide an opinion about the treating physician's proposed evaluation and treatment. My responsibility is to focus on the functional outcome of patients with neurosurgically related difficulties. I am not an advocate for the patient or for the company. My job is to provide a disinterested medical opinion which is accurate within the information which is available to me.

I call this job my post-practice education. In practice we are all big fish in a small pond. I was now a grain of sand on the beach of corporate America, working for a Fortune 500 company. My new colleagues did not immediately understand that I was a nearly world famous brain surgeon and community hero. The view from my cubicle was limited. My computer skills were even more limited. My new best friends in the adjoining cubicles were patient and instructive when I crashed the computer again and again. But, if you leave your ego in the parking lot and keep your sense of humor you make new friends and learn about the environment of corporate America you never knew existed. This job does not have the clinical urgency or passion we live with in practice. No calls from the ER or ICU describing progressive hemiparesis or decreasing loss of consciousness while you are in the middle of the busy clinic. Want to meet a friend for lunch? no problem. Want to meet your wife for a 4:30 PM movie and then dinner, no problem.

I'm frequently asked if I miss doing neurosurgery. Of course I do. I miss the fellowship of the folks in the office, the operating room, the ICU, the floor nurses. Perhaps not so much the emergency department. I miss walking into the operating room early in the morning for a big case with that mix of excitement, anxiety, and confidence surrounded by a team of folks who are on your side. However, there is wonderful world out there where you sleep through each and every night and every day is, to a certain extent, a holiday.

Martha, my wife and lifetime partner, has loved being on the gulf coast for 4 months this spring. We have gone coastal cruising on our sail boat for a couple of weeks in May for the last 7 years. The name of our boat is Carpe Diem, translate that as Seize the Day. We've had a few adventures, comparable to intraoperative rupture of an aneurysm, but no serious injuries to people or the boat. I have acquired skills other than navigation and weather forecasting, which include diesel mechanic, electrician, and nautical plumber. We've caught fish, walked on beautiful deserted beaches, and sat in the cockpit under a moon so bright you could read a book.

We have traveled a bit. I recommend going to Turkey. It is the ultimate crossroads of all the cultures and religion that created European and American civilizations. Go to Istanbul and visit the assai Sophia, a huge dome-shaped Christian church built in 540 AD. So tall the Statue of Liberty could stand inside with room to spare. Think about that; built in 540 AD. Nearby there is a cistern built by the Romans in about 600 AD to hold a water supply. A beautiful underground chamber with all the original brick and stone supported by marble columns from the previous Greek temples. Go to Ephesus and walk on marble streets where you can see tracks worn into the stone from the Roman chariots. There is a big wide world out there folks. Take your children and/or grandchildren with you, a few at a time. You've been in the hospital all your life, now get out and finally get to know your family. London, Paris, Normandy, Africa, wherever, all experienced without it being an accessory to a medical conference.

Give your skills away. Martha and I have been going to Haiti since 1998. You will not be doing neurosurgery, but you will be overwhelmed with the service you provide. You will learn to treat worms, malaria, typhoid, cholera, scabies, and you will suffer at the inability to treat the straightforward medical problems because of lack of medical resources. Clean water, immunizations, and proper food are the priority needs. The Children's Nutrition Program of Haiti was founded in Chattanooga in 1998. In Leogane, about 25 miles from Port au Prince, incidence of acute malnutrition in kids under 5 years old was 24%. Moms would bring moribund children to our clinics. We created a grass roots educational program to teach fundamental skills to improve use of their own resources. By 2011, acute malnutrition had improved to less than 3%. Find your own cause and try it out. As physicians, even neurosurgeons, we are all caregivers at heart.

Meanwhile, back at my little day job, I am observing some disturbing things about spine care these days. In the next talk, Dr. Fromke, will provide a more authoritative discussion of this subject. My observations, which are anecdotal and strictly my opinion, apply to all spine surgeons, regardless of specialty. It applies to community practitioners, as well as name brand Medical Centers.

Observation #1. Most spine surgery is technically done well with a low incidence of iatrogenic neurological deficit. With chemical amendments and instrumentation, bone fusion is consistent and dependable with a low rate of pseudoarthrosis. These facts, plus attractive reimbursement, set the stage for overuse of surgical strategies. This is not a new revelation and has been the subject of media stories, including the Wall Street Journal.

Observation #2. Computerized medical records in general stink. They are designed to maximize reimbursement under Medicare rules, but not to take care of people. Frequently the information, including physical examinations and current medications is inaccurate. There is usually no data concerning the patient's current physical activities or lack thereof. Buried in 4-6 pages of boiler plate verbiage may be found a brief narrative by the surgeon, PA, or

nurse practitioner. Example: "Doing well 4 weeks after lumbar discectomy, but still has a Foley catheter and uses a walker."

Observation #3. Initial evaluation of a spine patient suggests that complaints of pain and degenerative changes on the MR scan drive the decision toward surgery like a moth to flame, even though there is no symptomatic neural impingement. On the initial evaluation, often done by a PA or nurse practitioner, a surgical recommendation is frequently made. The patient is invited to return next week to actually meet the Doctor. On this visit, doctor supports the surgical treatment plan and will read the patient his rights before moving on to bright lights and cold steel.

Substantial obesity and heavy tobacco use are generally disregarded. It is infrequent for the record to reveal that in addition to complaints of increased back pain, the patient is in jeopardy of losing his job, his spouse, or both. I ask you, do think that might be an important factor in explaining increasing pain complaints? In the doctors discussion of surgical therapy, disclaimers concerning infection, neurological deficit, and failure to improve are stated regularly. There is almost never a realistic discussion that the proposed surgery will decrease the functional capacity in some way. For example, will the 49-year-old man who is currently driving a truck delivering cases of beer or soft drinks return to his job after his 3 level lumbar fusion? Will the 52-year-old woman return to her job on a poultry processing line after a 3 level cervical fusion?

Patient selection for surgical treatment is often poorly thought out for a reasonable functional outcome. Remember the old-fashioned considerations, does the history correlate with the physical findings? Does the imaging fit with the history and physical? Is there a surgery which will resolve or greatly improve the symptoms and findings with little probability of creating new impairment?

After surgery, the surgeon and his staff will proudly monitor the bone healing and position of instrumentation. Unfortunately, the patient's functional ability frequently lags behind the bone healing, and often never catches up. The surgeon professes surprise and disappointment as he provides release from his care and referral to pain management, noting that although complaints of pain are improved from the preoperative level, the patient cannot resume physical activities which allow return to his previous job.

Observation #4: How do you measure outcomes from spine surgery? At recent meetings, outcome was measured by the patient's completion of Oswestry questionnaires or similar documents. Bone healing is documented. I do not see data which documents physical abilities in terms of work activities described as sedentary, light, medium which are standardized definitions in the workplace. Surely, if the surgeon understood that a significant proportion of his patients did not have a satisfactory functional outcome, he would rethink the decision to offer his next patient aggressive surgical therapy on the basis of MR findings without bona fide clinical correlation. However, reimbursement for the procedure was pretty darn good.

This is you, Mr. Neurosurgeon. Look at this proud and handsome creature. Look at the scrapes and scars on his face. He has been scuffed up a bit. In the early days of neurosurgery, it was sometimes said that a neurosurgeon needed to have the heart of a lion and the hand of the woman. In today's world of spine surgery, there needs to be more thoughtful consideration before going forward with aggressive surgical strategies. In your busy life, reflect upon the future that a 20 or 30-year-old person will have after multilevel fusions in the lumbar or cervical area. Listen well and consider the patient's story beyond complaints of pain. You are being trusted for your judgment, not just your ability to cut and sew. It is difficult to ignore the pressures of commerce when encouraging the right choice for your patient. Have the heart of a lion, do the right thing for your patients.

Thanks for listening.

Saturday - August 11, 2012

10:50 – 11:10

Dr. Michael D. Fromke

“Emerging trends in spine surgery”

Saturday - August 11, 2012

11:10 - 11:30

Dr. Seyed M. Emadian

“Practicing cutting edge neurosurgery in a rural community”

Practicing Cutting-Edge Neurosurgery in a Rural Community

Seyed M. Emadian, MD, PhD
Premier Neurosurgery & Spine Center

Background: Following a successful training in neurological surgery, the physician is always faced with the difficult task of choosing a practice setting that would allow him/her to achieve both professional and financial success. Current options include academic practice, group private practice (single or multispecialty), solo practice, and seen more recently as a common trend among physicians of all specialties--hospital employment.

Objective: Evaluate the current neurosurgery solo practice trends in the United States as well as its merits and disadvantages for the practicing neurosurgeon. In addition, discuss my current 10-year experience practicing neurosurgery in a solo setting in a rural community.

Results: The most recent available data on neurosurgical practice profile is a 2006 report from the National Neurosurgical Procedural Statistics. In this report, 16% of the respondents to the survey indicated solo practice setting as their form of practice. It is reported that this percentage is progressively becoming smaller as the healthcare environment continues to change rapidly. This same study found a 13% decline in solo practice from 1999 to 2006. This decline may be even greater in the rural setting since in the current healthcare economic environment most rural community hospitals may not be able to justify the expense of setting up a full spectrum neurosurgery service.

Conclusion: Despite a clear decline in the number of solo neurosurgical practices in the USA (particularly in rural communities), cutting-edge neurological surgery practice in a rural community can be a rewarding experience professionally and financially.

Key Words: Solo neurosurgery practice. Rural community neurosurgery practice.

Saturday - August 11, 2012

11:30 – 11:50

Dr. Daniel B. Kueter

*“Concussion management and sports medicine:
What is the current standard of care?”*

Saturday - August 11, 2012

11:50 - 12:10

Dr. Matthew McGirt

“Outcomes data collection in the changing healthcare environment: Defining the quality and value of your care”

Saturday - August 11, 2012
12:40 - 2:00

Scientific Session Block III – Moderator: Daniel Kueter

Saturday - August 11, 2012

12:40 - 1:00

Robin Smith

Neuro-Spine Committee

“Government, Healthcare and the Law”

Saturday - August 11, 2012

1:00 - 1:20

Dr. L. Madison Michael

“Skull base neoplasms”

Saturday - August 11, 2012

1:20 - 1:25

Dr. Daniel Kueter

Introduction of Key Note Speaker

1:25 - 2:00

Dr. Jon H. Robertson

“The Past, Present and Future of Neurosurgery”

Sunday – August 12, 2012

8:00 - 10:05

Scientific Session Block IV – Moderator: Dr. Frederick A. Boop

Sunday – August 12, 2012

8:00 – 8:20

Dr. Jeffrey M. Sorenson

“Neurosurgical anatomy – beyond the textbook”

Sunday – August 12, 2012

8:20 - 8:40

Dr. Paul Klimo Jr.

“Intraoperative MRI – the LeBonheur experience”

Sunday – August 12, 2012

8:40 – 9:00

Dr. Matthew W. Wood, Jr.

“Challenges of neurosurgery in the Tennessee highlands”

Sunday – August 12, 2012

9:00 - 9:20

Dr. Paul E. Hoffmann

*“Transitioning from neurosurgical inpatient to rehab hospital:
Making it smooth for everyone”*

Sunday – August 12, 2012

9:20 - 9:40

Dr. Julius Fernandez

“Scoliosis treatment with attention to the elderly”

Sunday – August 12, 2012

10:10 – 12:30

Scientific Session Block V – Moderator: Dr. L. Madison Michael

The Resident's Corner

Sunday – August 12, 2012

10:10 – 10:30

Dr. Heather Kistka

“Neuro-oncology”

Sunday – August 12, 2012

10:30 – 10:50

Dr. Tyler A. Auschwitz

“Pediatric occipital-cervical fusion, the UT experience”

Sunday – August 12, 2012

10:50 - 11:10

Dr. Scott Parker

*“Minimally invasive – versus - open transforaminal lumbar interbody fusion
(TLIF) for degenerative spondylolisthesis:
Comparative effectiveness and cost-utility analysis”*

Sunday – August 12, 2012

11:10 - 11:30

Dr. Berkeley Bate

*“Stereotactic radiosurgery for spinal metastases, with or without initial open surgical decompression and stabilization:
Neurologic outcome and local disease control”*

Sunday – August 12, 2012

11:30-11:50

Dr. Cyrus Wong

“The high relative impact of lumbar spondylosis and value of lumbar spine surgery in the United States”

Sunday – August 12, 2012

11:50-12:10

Dr. Mike DeCuypere

*“Analysis of a formal paradigm for the management and diagnosis of
pediatric intracranial gunshot wounds”*

Sunday – August 12, 2012

12:10 - 12:30

Dr. Jonathan Forbes

“What is the current statewide standard of care for intraoperative spinal cord and nerve monitoring”

THE FOLLOWING ARE TEAR OUT SHEETS TO BE
SUBMITTED TO AANS/TNS

CME SHEETS FOR CREDIT

AND

EVALUATION FORMS

PLEASE FILL OUT AND THEN TEAR OUT OF BOOKLET AND
GIVE TO THE MEETING CORRDIRATOR - SO YOUR CME
CREDITS WILL BE MAILED/EMAILED TO YOU.

THANK YOU

TENNESSEE NEUROSURGICAL SOCIETY 2012 ANNUAL MEETING
Jointly Sponsored by the American Association of Neurological Surgeons (AANS)
August 10-August 12, 2012
Sheraton Read Hotel – Chattanooga, Tennessee

PARTICIPATION ATTENDANCE VERIFICATION FORM

If all sessions are attended, a maximum of 9.0 AMA PRA Category 1 Credit(s)TM will be awarded.

<i>TIME:</i>	<i>PRESENTATION</i>	<i>CREDITS</i>	<i>SUBJECT</i>	<i>CREDITS SPECIALTY CLAIMED</i>
8:05-10:05 am Saturday, August 11	Scientific Session Block I	2.0	General	_____
10:30-12:10 pm Saturday, August 11	Scientific Session Block II	1.75	General	_____
12:40-2:00pm Saturday, August 11	Scientific Session Block III	1.25	General	_____
8:00-10:00 am Sunday, August 12	Scientific Session Block IV	2.0	General	_____
10:10-12:30 pm Sunday, August 12	Scientific Session Block V	2.0	General	_____
 <i><u>TOTAL POSSIBLE CME CREDITS</u></i>		 <i><u>9.0</u></i>	 <i>Total # you are claiming</i>	 _____

I hereby certify that the above information is correct and that I attended the meeting identified and earned the credits

Name (Please Print Clearly)

Mailing Address for CME Certificate

Signature **Date**

Email address

PLEASE RETURN THIS FORM TO THE ADMINISTRATORS DESK BEFORE YOU LEAVE THE MEETING.
This form must be completed and returned to AANS within 30 days of the CME activity in order to earn CME credit.

THANK YOU

Tennessee Neurosurgical Society 2012 Meeting
Sheraton Read Hotel, Chattanooga, TN
Jointly Sponsored by AANS
August 11-12, 2012

Participant Evaluation Tabulation

Rating Scale (overall score)

A=Excellent B=Very Good C=Good D=Fair E=Poor

LEARNING OBJECTIVES

How well were the following objectives met?

Upon completion of this educational activity participants should be able to:

- | | | | | | | |
|----|---|---|---|---|---|---|
| 1. | Implement best current treatment of intracranial vascular lesions: | A | B | C | D | E |
| 2. | Have a working algorithm for management of all traumatic brain injuries: | A | B | C | D | E |
| 3. | Articulate and implement current standard of care in spinal surgery with regards to diagnosis, initiation of treatment and surgical techniques: | A | B | C | D | E |
| 4. | Discuss evolving medical/business/legislative issues in neurosurgery: | A | B | C | D | E |
| 5. | Discuss current best treatment of intracranial neoplasm: | A | B | C | D | E |

Comments: _____

PROGRAM

- | | | | | | |
|---|---|---|---|---|---|
| 1. Topics addressed completely | A | B | C | D | E |
| 2. Content relevant to my practice | A | B | C | D | E |
| 3. Opportunities for questions/discussion | A | B | C | D | E |

4. What did you like most about this meeting? _____

5. What changes do you intend to make in your practice as a result of the meeting?

6. How could this meeting be improved? _____

7. Did you perceive any commercial bias during this program? ___Yes ___No

If yes, please explain what was perceived as promotional and not educational, (Please include The presentation title and presenter). _____

8. What topics for future programs or information would be of greatest interest to you? _____

FACULTY

Faculty communicated clearly and effectively within the allotted time:

Content and performance grade A B C D E

Comments regarding faculty: _____

Presentations:

Saturday 08/11/2012

8:05-8:25: Adam Arthur: Update on Stroke: What a neurosurgeon needs to know.

A B C D E

8:25-8:45: Clarence Watridge: The Business end of the Carotid Endarterectomy - Pearls for the distal arteriotomy closure

A B C D E

8:45-9:05: Tim Strait: Recent trends in craniofacial surgery

A B C D E

9:05-9:25: Biggya Sapkota: Lasers, Electrodes, and Stem Cells: International High Tech for Acute Stroke Treatment

A B C D E

9:25-9:45: Joseph Neimat: Effects of STN stimulation on emotional function

A B C D E

9:45-10:05: Gregory Lanford: New paradigms in neurosurgical reimbursement

A B C D E

10:30-10:50: Charles Sternbergh: Life of a neurosurgeon after neurosurgery

A B C D E

10:50-11:10: Mike Fromke: Emerging trends in spine surgery

A B C D E

11:10-11:30: Seyed Emadian: Practicing cutting edge neurosurgery in a rural community

A B C D E

11:30-11:50: Paul Klimo: Intraoperative MRI - the LeBonheur experience

A B C D E

11:50-12:10: Matt McGirt: Outcomes Data Collection in the changing healthcare environment: Defining the quality and value of your care

A B C D E

12:40-1:00: Robin Smith: Government, Healthcare and the Law

A B C D E

1:00-1:20: Madison Michael: Skull base neoplasm's
A B C D E

1:25-2:00 Keynote Address - Dr. Jon Robertson – The Past, Present and Future of Neurosurgery
A B C D E

Sunday, August 12, 2012

8:00-8:20: Jeff Sorenson: Neurosurgical Anatomy - Beyond the Textbook
A B C D E

8:20-8:40: Peter Boehm Jr.: The history of neurosurgery in Chattanooga
A B C D E

8:40-9:00: Matt Wood: Challenges of Neurosurgery in the Tennessee Highlands
A B C D E

9:00-9:20: Paul Hoffmann: Transitioning from neurosurgical inpatient to rehab hospital: Making it smooth for everyone
A B C D E

9:20-9:40: Julius Fernandez: Scoliosis treatment with attention to elderly
A B C D E

9:40-10:00: Daniel Kueter: Concussion Management and Sports Medicine: What is the current standard of care?
A B C D E

10:30-10:50: Tyler Auschwitz: Pediatric Occipital-Cervical Fusion, the UT experience
A B C D E

10:50-11:10: Scott Parker: Minimally invasive –versus- open transforaminal lumbar interbody fusion (TLIF) for degenerative spondylolisthesis: Comparative effectiveness and cost-utility analysis
A B C D E

11:10-11:30: Berkeley Bate: Stereotactic radiosurgery for spinal metastases, with or without initial open surgical decompression and stabilization: Neurologic outcome and local disease control
A B C D E

11:30-11:50: Cyrus Wong: The high relative impact of lumbar spondylosis and value of lumbar spine surgery in the United States
A B C D E

11:50-12:10: Mike Decuyper: Analysis of a formal paradigm for the management and diagnosis of pediatric intracranial gunshot wounds
A B C D E

12:10-12:30: Jonathan Forbes: What is the current statewide standard of care for intraoperative spinal cord and nerve monitoring?
A B C D E

Other comments: