Agenda Spine Section Executive Committee Meeting
February 27, 2008
Washington DC

Members Present:

Guests:

1. Secretary's report D. Resnick
    a) Minutes review and approval
    b) Updated Executive Grid and welcome new members
    c) Updated email addresses
    d) Informational items
        Results of elections
        Results of fellowships vote
        Results of MOC certification vote
        Brief follow-up on MOC issue

2. Treasurer's Report C. Wolfla

    a) Review and Approve Budget
    b) The section reimbursement form and policy is included.

3. Committee Reports (see reports in agenda book)
    a) Annual Meeting J. Hurlbert/C. Kuntz

    b) CPT J. Cheng

    c) Exhibits J. Knightly/P. Mumanneni

    d) Future sites I. Kalfas

    e) World Spine E. Benzel

    f) Research and Awards P. Gerszten

    g) Education M. Groff

    h) Guidelines M. Kaiser

    i) Outcomes Z. Ghogawala

    j) Peripheral nerve TF A. Moniker

    k) Publications M. Wang/L. Holly

l) Public Relations	M. Steinmetz
m) Membership	M. Wang
n) Washington Committee	TBA
o) Fellowships	P. Mummaneni
p) PAC	M. Rosner
q) Web Site	J. Cheng
r) CME	E. Mendel
s) Nominating Committee	C. Branch
t) Rules and Regs	T. Choudhri
u) Newsletter	M. Groff
v) ASTIM	G. Trost
w) NREF	?
x) AANS PDP	?
y) Young neurosurgeons committee	E. Potts

4. Old Business

<u>Updates Only</u>:

Past President's Council	J. Alexander
Industry Relationships	C. Branch
Lumbar Fusion Task Force	D. Resnick

<u>Issues to Discuss</u>

Liaisons	M. Rosner
Orthopedic membership	G. Trost
Web site development	J. Cheng/C. Shaffrey

5. New Business:

AANS/CNS SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL NERVES

American Association of Neurological Surgeons

A Section of the
American Association of Neurological Surgeons
and
Congress of Neurological Surgeons

Education and Innovation

DATE: February 19, 2008

TO: AANS/CNS Section on Spine and Peripheral Nerves Executive Committee

FROM: Daniel K. Resnick, MD

Please check your schedule and be sure to include the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves Executive Committee Dinner on Tuesday, February 26 at 6:00 pm. Dinner will be at Fulton's Crab House located in Downtown Disney. Shuttle will depart from the Buena Vista Palace Hotel & Spa Convention Drive (located outside of Great Hall Assembly) at 5:45 pm.

Our Executive Committee Meeting is scheduled for Wednesday, February 27 from 8:00 am to 1:00 pm in the Sapphire room. I hope you will be joining us for both the dinner and the meeting.

Please indicate below whether or not you will be able to attend. I look forward to seeing you in Orlando!

Sincerely,

Daniel K. Resnick, MD
Secretary

Name

Executive Committee Dinner Tuesday, February 26	☐ Will Attend ____ Number Attending. ☐ Will Not Attend
Executive Committee Meeting Wednesday, February 27	☐ Will Attend ☐ Will Not Attend

Please return via fax to (847) 240-0804 or email jmb@1cns.org by February 21.

Minutes of Spine Section Executive Committee Meeting
September 17, 2007
Washington DC

Members Present: Joe Alexander, Daniel Resnick, Charles Branch, Mike Groff, Charles Kuntz, John Hurlbert, Chris Wolfla, Mike Rosner, Marjorie Wang, Eric Potts, Mike Kaiser, Joe Cheng, Eric Zager, Allan Maniker, Peter Gerszten, Tanvir Choudhri, Zo Ghogowala, Robert Heary, Paul Matz, Steve Ondra, Mike Steinmetz, Paul McCormick, Pat Johnson, Ehud Mendel, Praveen Mummaneni, Chris Shaffrey, Mike Wang, Kevin Foley

Guests: Ron Englebreit, Katie Orrico

The meeting was called to order by Dr. Alexander at 12:30 pm.

1. Secretary's report D. Resnick
    a) Minutes reviewed and approved
    b) Updated Executive Grid and welcome new members
    c) Updated email addresses
    d) Informational items
        Letterhead
        Report to Parent Organizations
        Washington Committee activities

2. Treasurer's Report C. Wolfla

a) Reviewed and Approved Budget- overall the section has lost some money over the past year due to the NREF contribution. However, annual meeting performance was outstanding (thanks to the annual meeting team and exhibits and marketing) which offset most of this expense.

b) The section reimbursement form is included.

3. Committee Reports (see reports in agenda book)

a) Annual Meeting J. Hurlbert/C. Kuntz

Annual meeting planning is well on its way to completion. Membership survey was very successful and over 150 members responded leading to new ideas for courses. Joe Cheng was thanked for his assistance with the survey process.

b) CPT J. Cheng

Report is in agenda book. "MUE's" (medically unusual exceptions) are a new issue for the CPT committee to address. DRG issues related to acuteness of care and implant classification are areas of active investigation. CHAMPS was also described. A question

regarding the section's position of coding of cervical disc arthroplasty was raised- no one on the executive committee was aware that the AANS/CNS CPT committee (though the Washington Committttee) was supporting a category one code for the procedure. Katie Orrico offered to investigate this and provided a CPT report prepared by Pat Jacobs regarding this topic. Closer communication between the CPT committee and the section was requested and should be forthcoming as Joe Cheng is moving to the Washington Committee this year while maintaining a seat on the spine executive committee.

c) Exhibits J. Knightly/P. Mumanneni

no report

d) Future sites I. Kalfas

The "Shingle Creek" resort has been chosen for 2010. Report in agenda book. Discussion of succession and institutional memory regarding future sites occurred- those interested are to let leadership know.

e) World Spine E. Benzel

No report

f) Research and Awards P. Gerszten

g) Education M. Groff

See attached report. Liaison with AANS PDP and the Pain section have occurred and we are cooperating to develop content for various symposium (neither the section nor the CNS are sponsoring these CME activities).

h) Guidelines P. Matz/M. Kaiser

Cervical myelopathy guidelines are reaching completion. The plan is to submit to the JGC for approval and then JNSG in the spring for peer review. The NASS lumbar radiculopathy effort was established with several executans participating. The AANS/CNS joint guidelines committee (JGC) has requested that thoracolumbar trauma be a topic for future investigation. The JGC will also review any guidelines that are sponsored by the AANS/CNS/Section. Questions related to who will pay for guidelines produced in conjunction with other sections at the behest of the JGC were raised. Dr. Resnick will contact JGC leadership to clarify policy.

i) Outcomes M. Kaiser/Z. Ghogawala

Reports are in agenda book.

j) Peripheral nerve TF A. Maniker

Allan Maniker was introduced and will assume duties as of today. Kline lecture will be Rothberg from the United Kingdom.

k) Publications M. Wang

Sixty two manuscripts were submitted to JNSG from the section meeting. Issues related to getting a "section related" meeting journal together have been problematic. Dr. Shaffrey reported from the JNSG perspective. The main issue was the timing of submission and the needs of JNSG for an adequate number of submissions in a timely fashion. Several options were discussed. Details regarding which presentations were going to be invited and the overall process were discussed.

A motion was made to attempt to create a dedicated peer reviewed meeting issue of JNSG through cooperation between the publication and scientific meeting committees to guarantee a certain number of papers submitted by June 1st. This year extended abstracts will be requested at the time of acceptance for podium presentations. Next year extended abstracts will be required if expedited review for publication is desired.

This motion was approved. Dr. Shaffrey was asked to work with Dr. Wang to produce a reference document describing the submission process and codifying the arrangement for future reference.

l) Public Relations M. Steinmetz

Mike Steinmetz reported that statements regarding SPORT and the Lumbar Fusion Outcomes project went out via eblast. Mechanisms to improve communication with our membership and with the public were described. The section's desire to work with the Washington Committee and the AANS public relations committee was communicated to Katie Orrico.

m) Membership M. Wang

284 members were delinquent in dues. A letter was sent and now we are down to 136 members. A second letter will be sent and termination notices sent 90 days thereafter. Free membership offer to neurosurgical spine or peripheral nerve fellows was discussed. Moved, and approved.

Greg Trost, Chris Shaffrey, and Steve Ondra will work with Marjorie Wang to develop a proposal for potential membership of orthopedic spine surgeons in the section including a description of what bylaws changes (if any) would be necessary, how JNSG worked an arrangement with the AANS to allow Alex Vaccaro (an orthopedic surgeon) to become a member, and what our parent organizations think about such an arrangement.

n) Washington Committee K. Orrico

Katie Orrico summarized some of the Washington Committee efforts regarding coding and reimbursement, interactions with the CMS, and projects related to P4P. She briefly described the CHAMP legislation and then answered questions from the executans.

o) Fellowships P. Mummaneni

No report

p) PAC S. Ondra

No report.

q) Web Site J. Cheng

Logo contest- submission 3 won- the winning logo will be spruced up and presented to the general membership for vote on whether or not to use the logo. Dr. Cheng requested an allocation of $8000 to record section meeting. This motion passed.

r) CME E. Mendel

No report- Dr. Mendel will be tasked with interacting with the CNS education committee to clarify CME process.

s) Nominating Committee C. Branch

Dr. Chris Shaffrey has been nominated for president-elect, Dr. Michael Groff for secretary, and Dr. Eric Zager as member at large. Mark McLaughlin was nominated to fill Dr. Shaffrey's MAL spot. Members of the nominating committee included Drs. Branch, Rodts, Trost, and Midha. The slate was approved by the executive committee. Dr. Resnick will asked Dr. Cheng to communicate this slate to our membership via the website and via eblast in a timely fashion prior to the annual meeting. .

t) Rules and Regs T. Choudhri

Updated bylaws were not received in time for review. The only changes are related to committee membership restrictions and reflect the desire of the EC to grant committee chairmen flexibility in designing their committees. These will be distributed by Dr. Choudhri to the spine exec for approval within next month.

u) Newsletter M. Groff

Newsletter going out via CNS Q.

v) ASTIM G. Trost

no report

w) NREF J. Guest

no report

x) AANS PDP M. Groff

see education report

y) Young neurosurgeons committee E. Potts

no report

4. Old Business

Updates Only:

CME Issues D. Resnick

Nothing new to report

Industry Relationships C. Branch

Done and approved in April

Past President's Council J. Alexander

Tabled until spring

Issues to Discuss

Liaisons M. Rosner

Steve Ondra reported progress in establishing communication channels with the SRS, issues related to joint membership.

Lumbar Fusion Task Force D. Resnick

Dr. Resnick presented a request for section support of the lumbar fusion task force (see documentation in agenda book) via letter of intent and commitment to fund $10,000 if required for support of administrative or consultative support.

The role of this task force and the role of the senior advisory committee in participating in this process was discussed.

This motion was seconded and approved.

New Business:

Bone and Joint Representative M. Wang

Mike Wang reported on his participation in the Bone and Joint Initiative as a representative of the AANS.

ABNS Request for Comment J. Alexander

See documentation in agenda book.

Drs. Branch and McCormick presented the ABNS request for input from the section regarding resident training. A discussion ensued. Overall, a favorable opinion regarding option 3, the "Recognition of Focused Practice" certificate earned by MOC participation, spine section membership, and case submission to the ABNS to document such focused practice was expressed. Concerns related to residency training were expressed by many committee members and there was reticence to abandoning generalized neurosurgical training as a pre-requisite for neurosurgical certification. Also, concerns regarding potential reverse liability if a "spine recognized" neurosurgeon does intra-cranial work were discussed. Finally, the concept that "neurosurgery is spinal surgery" was discussed and the purpose of such certification was questioned.

It was moved that the spine section advise the ABNS that it does not support options one and two. This motion was approved.

It was moved that the spine section executive committee appoint a task force to examine option 3, develop recommendations, and communicate to the overall executive committee for approval or disapproval by electronic vote prior to January 1st. Robert Heary will chair this task force.

This motion was approved.

Members: Heary, Alexander, Groff, Matz, Kaiser, Wolfla, Johnson

3) FDA approval for off label uses of alternatively approved devices (eg lateral mass screws)

Dr. Heary proposed that the section pursue solicitation of the FDA regarding adding lateral mass screw indications. Drs. Alexander, Heary, Ghogowala, and Wang will participate.

4) Executive committee meeting times

A plan to move the fall spine exec meeting to Sunday 8-12 am was made and was favorably received. While this will require all executans to arrive a day earlier, the activities of the section have grown substantially and more time is required to adequately

discuss important initiatives. Dr. Kaiser will communicate with the CNS PC committee to minimize spine content on Sunday morning. Dr. Resnick will request appropriate space at the time of the next CNS meeting.

There being no further business, the meeting was adjourned at 3:30 pm.

Respectfully Submitted by Daniel K. Resnick, Secretary.

Executive Committee

Officers and Committee Chairs

JOINT SECTION ON DISORDERS OF THE SPINE & PERIPHERAL NERVES

February, 2008

Position	2004-05	2005-06	2006-07	2007-2008	2008-2009
Chair	G. Rodts	R. Heary	C. Branch	J. Alexander	D. Resnick
Chair Elect	R. Heary	C. Branch	J. Alexander	D. Resnick	C. Shaffrey
Immediate Past Chair	R. Haid	G. Rodts	R. Heary	C. Branch	J. Alexander
Secretary	C. Branch	D.Resnick	D. Resnick	D. Resnick	M. Groff
Treasurer	T. Ryken	T. Ryken	C. Wolfla	C. Wolfla	C. Wolfla
Members at Large	D. Kim R. Apfelbaum J. Alexander	J. Alexander D. Kim K. Foley	D. Kim K. Foley G. Trost	K. Foley G. Trost C. Shaffrey	G. Trost M. McLaughlin E. Zager
Ex-Officio Members	Z. Gokaslan	Z. Gokaslan	C. Shaffrey G. Rodts	Regis Haid Eric Woodard Pat Johnson	J. Hurlbert J. Knightly
Annual Meeting Chair	C. Shaffrey	M. Groff	M. McLaughlin	J. Hurlbert	C. Kuntz
Scientific Program Chair	M. Groff	M. McLaughlin	J. Hurlbert	C. Kuntz	P. Matz
Exhibit Chair	M.McLaughlin	J. Knightley	J. Knightly	J. Knightly/P. Mumanneni	P. Mumanneni
Future Sites	J. Alexander	J. Alexander	I. Kalfas	I. Kalfas	I. Kalfas
Education Committee Chair	J. Hurlbert	J. Hurlbert	C. Kuntz	M. Groff/P. Matz	Mike Wang
CME Representative	T. Ryken	T. Ryken	E. Mendal	E. Mendel	E. Mendel
Newsletter	L. Khoo	J. York	M. Groff	M. Groff	M. Steinmetz
Rules and Regulations Chair	D. DiRisio	D. DiRisio	T. Choudhri	T. Choudhri	T. Choudhri
Nominating Committee Chair	R. Haid	R. Rodts	R. Heary	C. Branch	J. Alexander
Research and Awards Committee Chair	J.Guest	C. Wolfla	P. Gerszten	P. Gerszten	P. Gerszten
Publications Committee Chair	C. Dickman	C. Dickman	M. Wang	Mike Wang	Langston Holly
Web Site Committee Chair	C. Wolfla	C. Wolfla	C. Wolfla	Joe Cheng	J. Cheng
Guidelines Committee Chair	D. Resnick	P. Matz	P. Matz	P. Matz M. Kaiser	M. Kaiser
Membership Committee	G. Trost	G. Trost	Z. Gokoslan	Z. Gokoslan, Marg. Wang	Marg. Wang
Outcomes Committee Chair	P. Gerszten	M. Kaiser T. Choudhri	M. Kaiser	M. Kaiser Z. Ghogawala	Z. Ghogawala
CPT Committee	W. Mitchell	W. Mitchell R. Johnson	R. Johnson	J. Cheng	J. Cheng
Peripheral Nerve Task Force Chair	R. Midha	E. Zager	E. Zager	E. Zager	A. Maniker
Washington/FDA	P. McCormick	R. Rodts	R. Heary	J. Alexander/R. Heary	R. Heary
Section Rep.,P.A.C.	S. Ondra	S. Ondra	S. Ondra	Z. Gokoslan	Z. Gokoslan

Public Relations	C. Kuntz T.Choudhri	C. Kuntz T. Choudhri	T. Choudhri	M. Steinmetz	M. Steinmetz
Fellowships		J. Alexander	P. Mummaneni	P. Mummaneni	P. Mummaneni
NREF Advisory Board			J. Guest	J. Guest	
AANS PDP Representative			M. Groff	M. Groff	
Young Neurosurgeons Representative				H. Aryan	Eric Potts/Dan Sciubba
FDA Disability				G. Trost	G. Trost
ASTIM				G. Trost	G. Trost
Inter- Society Liaison				S. Ondra/M. Rosner	M. Rosner

JOINT SECTION ON DISORDERS OF THE SPINE & PERIPHERAL NERVES

Committee Membership
September, 2007

	2003-04	2004-05	2005-06	2006-07	2007-08
Nominating Committee Mem	R.Fessler	J. Campbell	V. Traynelis	R. Apfelbaum	R. Midha
	J.Campbell	V. Traynelis	R. Apfelbaum	R. Midha	G. Trost
	V.Traynelis	R. Apfelbaum	R. Midha	G. Trost	G. Rodts
Strategic Planning Committe	R.Haid	R. Rodts	R. Heary	C. Branch	J. Alexander
	C.Branch	R. Heary	C. Branch	J. Alexander	D. Resnick
	R.Rodts	C. Branch	T. Ryken	D. Resnick	C. Wolfla
	T.Ryken	T. Ryken	G. Rodts	C. Wolfla	C. Branch
	N. Baldwin	R. Haid		R. Heary	
Research and Awards Comm	C.Wolfla	J. Guest	C. Wolfla		
	P.Sawin	C. Wolfla	J. Guest		
	G.Trost	G. Trost	G. Trost		
		C. Shaffrey	C. Shaffrey		
Fellowships			J. Alexander S. Ondra C. Shaffrey Z. Gokaslan C. Kuntz		

Spine and Peripheral Nerve Section Executans:

I have enclosed correspondence regarding several issues for your perusal and in two cases, vote.

Issue 1: MOC and special certification
This topic was raised at the exec meeting (see minutes) and Bob Heary presented a report six weeks ago (called prop 3 heary). We have all had the chance to review it and a string of email correspondence is enclosed (MOC certification). The consensus from the exchange appears to be that the spine section supports a modular examination for MOC purposes but does not support special "certification" in spinal surgery for the reasons outlined by Bob. I am asking for a vote on this issue by Wednesday – a non-response will be considered tacit approval. You can vote via email.

Issue 2: Fellowships
Praveen has worked hard with SNS representatives to work out the final kinks in the fellowship accreditation process. The email correspondence is enclosed (Fellowship accreditation correspondence). This information was shared in September and votes were supposed to be due on October 1st. I have received feedback only in the affirmative. Unless there is a groundswell of discontent, Joe and I will draft a formal letter to the SNS indicating our approval of the process with the caveats described in the correspondence.

Issue 3: Rules and Regs
The updated rules and regs document is enclosed and open for discussion. Committee chairs, please have a look. If there are no problems, please vote to approve. If there are problems, please communicate those. I'd like to get this voted on by Friday of this week.

Issue 4: Informational
I enclosed the spine section's response to the Washington State fusion guidelines for your perusal- no action is necessary.

Thank you for your attention and assistance in getting these issues off the table

An electronic vote was tallied and motions 1 and 2 were approved. The Rules and Regulations document was updated based on feedback from the executans, approved, and forwarded to the AANS and CNS executive bodies.

Submitted October 17, 2007.
Daniel K. Resnick
Secretary, AANS/CNS Section on Disorders of the Spine

American Association of Neurological Surgeons

5550 Meadowbrook Drive
Rolling Meadows, IL 60008

member services: 888.566.AANS
phone: 847.378.0500
fax: 847.378.0600
web: www.AANS.org

January 15, 2008

Christopher Wolfla, MD
Department of Neurosurgery
9200 W. Wisconsin Ave.
Milwaukee, WI 53226

Dear Doctor Wolfla:

The enclosed financial statements for the AANS/CNS Section on Disorder of the Spine & Peripheral Nerves are for the Quarter Ended December 31, 2007, and comparative information for the Quarter Ended December 31, 2006.

After your review of the financial statements, if you have any questions, please do not hesitate to contact me at 847-378-0561 or rpc@aans.org.

Sincerely,

Rebecca Calloway-Blyth
Section Accountant

Enclosures

Cc: Joseph T. Alexander, MD
Jon H. Robertson, MD
Anthony L. Asher, MD
Paul C. McCormick, MD
Joel D. MacDonald, MD
Laurie Behncke
Ronald W. Engelbreit

AANS/CNS Section on Disorders of the Spine
Statement of Financial Position
As of December 31, 2007

	Current Year 12/31/07	Prior Year 12/31/06
ASSETS		
Checking & Short Term Investments	$668,696	$823,855
Accounts Receivable, net of Allowance for Uncollectible Accounts	32,500	52,600
Prepaid Expenses	12,398	12,398
Long-Term Investment Pool, at Market	1,382,522	805,163
TOTAL ASSETS	***$2,096,116***	***$1,694,015***
LIABILITIES AND NET ASSETS		
Liabilities		
Deferred Dues	56,200	56,350
Total Liabilities	*$56,200*	*$56,350*
Net Assets		
Unrestricted	$1,922,406	$1,991,980
Net Revenue (Expense)	117,511	(354,315)
Total Net Assets	*$2,039,916*	*$1,637,665*
TOTAL LIABILITIES AND NET ASSETS	***$2,096,116***	***$1,694,015***

AANS/CNS Section on Disorders of the Spine
Statement of Activities
For the Six Months Ending December 31, 2007

	FY '06 Final	FY '07 Final	YTD FY '07	YTD FY '08		FY '08 Budget
REVENUES						
Membership Dues	49,488	55,975	31,300	27,375		49,750
Mailing List Sales	1,500	1,475	885	885		
Publications Sales Revenue						
Fellowship/Award Sponsorship	203,000	129,390	59,000	90,000		133,000
Miscellaneous Revenue		108				
Contributions for Operating Expenses	8,672	9,368	4,757	3,106		10,864
Annual Meeting Revenue	730,042	915,425				
TOTAL REVENUES & SUPPORT	***992,702***	***1,111,741***	***95,942***	***121,366***		***193,614***
EXPENSES						
Audio Visual	2,979	1,011	471	1,561		1,000
Bank Fee	297	484	122	230		508
Contributions & Affiliations	25,000	75,000				85,000
Decorating	504	594				250
Facility						
Food & Beverage	1,936	3,636		1,301		5,000
Fellowships	89,491	140,092				139,500
Grants		500,000	500,000			
Gifts & Gratuities						
Honoraria & Awards		300				
Marketing & Advertising						
Legal Services						
Office & other Supplies	521	229	206	354		600
Photocopy	90	0	0			200
Postage & Distribution	1,182	1,214	693	545		2,000
Printing/Typesetting	36					
Professional Services	538	3,192		3,021		15,500
Signs						
Speaker Expenses	5,134					
Telephone	27	2				250
Temporary Personnel						
Volunteer Travel		1,462		1,188		1,500
Uncollectible Accounts						
Staff Coordination	8,781	9,461	4,800	3,106		10,864
Miscellaneous			548			
Cervical Degenerative Spine Guidelines Project		15,948	6,356			33,600
Lumbar Fusion Guidelines Project						
Annual Meeting Expense	568,396	583,402	40,067	40,000		
TOTAL EXPENSES	***704,911***	***1,336,028***	***553,264***	***51,307***		***295,772***
Investment Earnings	86,112	154,713	103,008	47,451		53,000
NET REVENUE	***373,903***	***(69,574)***	***(354,315)***	***117,511***		***(49,158)***

AANS/CNS SECTION ON DISORDERS OF THE SPINE

NOTES TO FINANCIAL STATEMENTS

December 31, 2007

General & Administrative

Audio Visual – Budget $1,000, Actual $1,561

The Audio Visual expenses from the CNS meeting were more than anticipated.

Contributions – Increased Budget from $75,000 to $85,000

An additional $10,000 was added to the contributions budget for the Lumbar Fusion Task Force. This item was not originally included in the budget for FY08.

Professional Services – Increased Budget from $7,500 to $15,500

$8,000 was added to the professional services budget for Dr. Cheng to podcast the 2008 meeting. This item was not originally included in the budget for FY08.

Annual Meeting

Annual Meeting Expense – Budget $0, Actual $40,000

The management fee from CNS was not included in the budget.

EXPENSE VOUCHER

AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves

For Non-Annual Meeting expenses send to:

AANS
5550 Meadowbrook Drive
Rolling Meadows, IL 60008

For Annual Meeting expenses send to:

Congress of Neurological Surgeons
10 N. Martingale Rd., Suite 190
Schaumburg, IL 60173

Date						
Name				S.S. or Tax ID #:		
Address						
City			State		Zip	
Telephone			Fax			
Email						
Meeting/Function Attended:						
Date:						**Total**
Air Fare						
Taxi-Limo						
Auto (Parking, Tolls, Mileage)						
Breakfast						
Lunch						
Dinner						
Housing						
Telephone						
Gratuities						
Other (attach itemized list by date)						
Total by Day						
						Grand Total

- *Vouchers should be submitted within 30 days following a reimbursable expenditure*
- *Please refer to the AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves "Reimbursement Policy" for an explanation of reimbursable expenses*

I hereby attest that the above expenses are valid and in accordance with Section Policy_____

Signature

AANS/CNS JOINT SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL NERVES

Reimbursement Policy (2007.04.16)

A. Chair

Registration	Fee waived. Spouse and Children fee waived
Travel	Complimentary. Includes: ▪ Advance purchase (within 30 days of departure) economy airfare for President only. ▪ Ground transportation to and from airport (limousine).
Hotel	Complimentary Includes: ▪ Presidential suite at VIP hotel ▪ Incidentals placed on master bill for official meetings and entertainment purposes.
Meals	As related to travel.
Misc.	Items necessary for completion of Section business may be reimbursed.

B. Executive Officers, Annual Meeting Chairman, Scientific Program Chairman, Past President

Registration	Fee waived.
Travel	No reimbursement.
Hotel	Complimentary for Past Chair, Chair-Elect, Secretary, Treasurer
Meals	No reimbursement.
Misc.	Items necessary for completion of Section business may be reimbursed.

C. Executive Committee

Registration	No reimbursement.
Travel	No reimbursement.
Hotel	No reimbursement
Meals	No reimbursement.
Misc.	Items necessary for completion of Section business may be reimbursed.

D. Non-Neurosurgeon, Non-Member, Invited Keynote Speakers at Annual Meeting

Registration	Fee waived
Travel	Complimentary Includes: ▪ Advance purchase (within 30 days of departure) economy airfare (domestic travel) or business class airfare (international travel) or mileage @ .485/mile. ▪ Ground transportation to and from airport
Hotel	Housing at meeting hotel complimentary ▪ Does not include incidentals
Meals	As related to travel
Honorarium	North American physician **keynote** speaker - $1,000.00 Non North American physician **keynote** speaker- $2,000.00

	Special nonmember non-physician **keynote** speaker - Chair/ SPC discretion
Misc.	Items necessary for completion of Section business may be reimbursed

*AMC/SPC is responsible for making sure sponsorship has been obtained prior to invitation

E. Meritorious Service Award Winner

Registration	Fee waived
Travel	Complimentary Includes: ▪ Advance purchase (within 30 days of departure) economy airfare (domestic travel) or business class airfare (international travel) or mileage @ .485/mile. ▪ Ground transportation to and from airport
Hotel	Housing at meeting hotel complimentary ▪ Does not include incidentals
Meals	As related to travel
Honorarium	Guidelines left to discretion of AMC, SPC.
Misc.	Items necessary for completion of Section business may be reimbursed

*AMC/SPC is responsible for making sure sponsorship for these speakers has been obtained prior to invitation

F. Neurosurgeon Invited Speakers at Annual Meeting (Excludes Honored Guest, Keynote Speakers Identified by the Scientific program Committee)

Registration	No reimbursement Non-Section Members charged at Member rate
Travel	No reimbursement.
Hotel	No reimbursement
Meals	No reimbursement.
Misc.	Items necessary for completion of Section business may be reimbursed

G. Invitees to Sanctioned Section Committee Meetings Separate From Annual Meeting

Travel	Complimentary Includes: ▪ Advance purchase (within 30 days of departure) economy airfare or mileage @ .485/mile. ▪ Ground transportation to and from airport
Hotel	Housing at meeting hotel, for meeting duration • Incidentals at the discretion of the Committee Chair and/or Treasurer
Meals	As related to travel
Misc.	Items necessary for completion of Section business may be reimbursed

Ad Hoc Committee on American College of Radiology Appropriateness Criteria Report February 2008

The Washington Committee Joint Guidelines Committee charged the Spine Section with reviewing spine related topics appearing in the American College of Radiology Appropriateness Criteria documents. Specifically, the Ad Hoc Committee evaluated the criteria formed for three topics: myelopathy, chronic neck pain, and low back pain. These are consensus statements recommending imaging studies for various disorders.

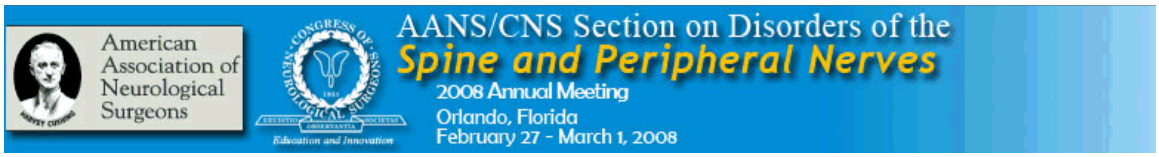
After review, we noted several items of concern. The most significant is the fact that the recommendations are not evidence-based guidelines, but rather consensus statements. Each subtopic contains a brief literature review, and a list of the reference cited. However, an evaluation of the levels of evidence is not provided. Therefore, it is not clear whether Class I or Class IV data have been used, and their relative weight in rating determination is not described. Furthermore, the recommendations appear to have been made without any significant input from neurosurgeons or other clinicians within the field. Thus, the important role of clinical experience in determining the appropriateness of diagnostic studies is inadequately represented.

Additionally, the target of the criteria is not clear. While some early diagnostic imaging would likely be ordered by primary care physicians, many of the studies listed would be more appropriately chosen by a specialist. Moreover, it seems more likely that many of the conditions such as traumatic myelopathy would be worked up by a specialist rather than a PCP. There are a number of specific issues regarding the rating of individual studies. These are listed on a separate attachment. Some of the specific concerns include the fact that flexion and extension views are rarely ranked or listed. CT myelography is a very helpful study in many clinical situations, but has been relatively downgraded in some of the subtopics. The term “clinical correlation” is not well described; for example, bowel or bladder incontinence is not listed as a red flag in the low back pain criteria except under the category of "focal neurologic deficit progressive or disabling symptoms." Thus, for a number of reasons the Ad Hoc Committee is quite concerned about the American College of Radiology Appropriateness Criteria documents.

Sincerely,

Marjorie Wang, M.D., M.P.H

Langston Holly, M.D.



CPT Ad Hoc Committee Report (February 11, 2008)

Chair: Joseph Cheng, MD, MS

Members: Robert Johnson, MD, Jack Knightly, MD, Michael Rosner, MD, FACS, Karin Swartz, MD, David Hart, MD, Kurt Eichholz, MD

CPT Course (Annual Meeting)

1. Wednesday: February 27, 2008 (1:30pm – 5:30pm)
2. Faculty for course
    a. Co-Chairs: Drs. Joseph Cheng, Robert Johnson
    b. Faculty: Dr. Jack Knightly, Dr. Karin Swartz, Dr. Michael Rosner, Dr. Patrick Jacob, Dr. Richard Roski
3. Topic selection
    a. Introduction and New Codes
    b. Surgical Modifiers
    c. 22000 Series
    d. 63000 Series
    e. CPT/RUC Process
    f. Coding Scenarios

Recent Coding Updates

1. New 2008 Codes Related to Spine
    a. Posterior Subtraction Osteotomy (PSO)
        i. New guidelines to clarify the procedures and define the three columns referred to in the code descriptors. Parenthetical notes added to instruct users.
        ii. Unit of service is one vertebral segment. Three columns defined.
        iii. 22206 Thoracic region
        iv. 22207 Lumbar region
        v. 22208 Add-on code for each additional vertebral segment; reported with 22206 or 22207
    b. Non Face-to-Face Codes for Non-Physician (NP/PA)
        i. 98966 Telephone assessment and management
            1. 5-10 min, 0.25 RVUs
        ii. 98967
            1. 11-20 min, 0.50 RVUs
        iii. 98968
            1. 21-30 min, 0.75 RVUs
        iv. 98969
            1. On-line assessment and management
        v. Carrier priced
    c. Non Face-to-Face Codes for Physician
        i. 99441 Telephone assessment and management
            1. 5-10 min, 0.25 RVUs
        ii. 99442
            1. 11-20 min, 0.50 RVUs

iii. 99443
    1. 21-30 min, 0.75 RVUs
iv. 99444
    1. On-line assessment and management
v. Carrier priced

d. Modifier 22 Updated
    i. Changed “unusual” to “increased”
    ii. Eliminates ambiguity of prior definition
    iii. Substantially greater services than typically provided must be performed
    iv. Documentation must support
    v. Increased intensity, time, or technical difficulty
    vi. Severity of the patient’s condition
    vii. Physical and mental effort required

e. Modifier 51 Exempt Changes
    i. New criteria for multiple procedure reduction (51 Modifier Exempt)
    ii. Changed 152 times
    iii. Only retained for 7 surgical codes
    iv. “The physician may need” changed to “It may be necessary”
    v. Deleted reference to specific users to include other health care professionals
    vi. Large amounts of pre- and post-service times in RV codes now reducible
    vii. Add-on codes

f. Removal From -51 Modifier Exempt List
    i. 20660
        1. Placement of cranial tongs
        2. 0 day global
        3. Revised as -51 applicable
    ii. 22840-22852
        1. Spinal Instrumentation
        2. Revised as add-on codes

2. Phase V MUE Edits
    a. Stand-Alone Posterior Osteotomy Codes
        i. 22206 thoracic and 22207 lumbar have MUE Edit of 1
            1. Surgeon can only do 1 first level osteotomy (similar to 22612 for fusion)
        ii. Additional level code (22208)
            1. No comment requested yet of this for MUE.
            2. Suggested MUE of 3 (if requested) as 4 would lead to 160 degrees of correction (MUE range of a 170 degree deformity) given geometry of 30–40 degrees of correction per level.
3. CPT Editorial Board Updates (February 7-10, 2008)
    a. Acknowledgment: Drs. Pat Jacob and Jeff Cozzens accomplished much of the work as reported below.
    b. Deletion of 61793 to be replaced by new code series
        i. Two base codes: one for simple and one for complex lesions.
        ii. Two add on codes: one simple and one complex, each reportable up to 4 times.
        iii. Spinal SRS accepted as an add-on code for additional lesions up to 2.
    c. Cervical arthroplasty
        i. Accepted as an all inclusive code to be valued individually.

ii. Codes for revision/replacement and removal accompanied the parent code.

d. Passed (NASS): Editorial change to 63020 to match 63030 (include endoscopic).
e. Passed (NASS): Pre-Sacral Approach (TranS1) to Category III.
f. Passed (NASS): Disc space remobilization to Category III (Adjunct to Arthroplasty)
    i. +228X1 Remobilization, simple, Release of posterior and posterolateral longitudinal ligament including posterior annular attachments to inferior and superior vertebral bodies and removal of any disc material remaining after discectomy at time of lumbar disc arthroplasty; single interspace (Use only in conjunction with 22857, 22862)
    ii. +228X2 Remobilization, complex, Resection of posterior longitudinal ligament, includes removal of bony osteophytes and any disc material remaining after discectomy and/or balanced release of lateral annular ligaments when performed at time of lumbar disc arthroplasty; single interspace (Use only in conjunction with 22857, 22862)
    iii. Remobilization and balanced release of the soft-tissues of the disc space is performed at the time of lumbar disc arthroplasty. These procedures are performed after a standard discectomy and are vital to the success of the procedure. The descriptors for the existing codes for lumbar disc arthroplasty (22857, 22862) do not include the remobilization and tissue balancing procedures. Therefore, the remobilization and tissue balancing procedures, and the work values associated with them, are not captured with existing codes.

4. Reimbursement Issues
    a. Local CMS carriers still denying lumbar arthroplasty.
    b. Bush Administration Proposes $200 Billion In Medicare, Medicaid Spending Reductions

As always, comments or suggestion are always welcome. Please feel free to contact me at: joseph.cheng@vanderbilt.edu.

Respectfully Submitted,

Joe Cheng, M.D.
Vanderbilt University

Proposal for Development of Evidence- Based Guidelines for the Management of Metastatic Spinal Disease

Meic Schmidt, MD and Timothy Ryken, MD

Submitted to the Executive Committee of the AANS and CNS Joint Section on Disorders of the Spine and Peripheral Nerves for consideration of funding January 19, 2008

Goal:
In response to the recommendations of the AANS and CNS Joint Guidelines Committee to develop evidence-based guidelines within each neurosurgical subspecialty areas of interest this proposal outlines a multi-disciplinary project to review the medical literature and formulate evidence-based guidelines for the management of metastatic spinal disease.

Proposal:
This proposal will generate a set of evidence-based reviews and recommendations for the management of metastatic spinal disease. A panel of spinal surgeons from the Joint Section will be established and augmented by experts in medical oncology, radiation oncology and epidemiology. This panel will compile and critically review the medical literature, grade the data based on previously established criteria and produce a set of guideline documents suitable for publication and distribution. In evaluating critiques of previous guideline efforts, this proposal seeks to integrate expertise in epidemiology on a consulting basis and review prior to generation of the final drafts. Following the generation of the initial draft documents, the product will be submitted to the Joint Section Guideline Committee Chair and Executive Committee for additional comment and review and subsequently to the AANS and CNS Joint Guideline Committee prior to submission to the parent organizations for final approval and subsequent publication.

Committee:
Co-chairs:
Meic Schmidt, MD University of Utah
Timothy Ryken, MD University of Iowa

Tentative committee membership:
Not all members have been confirmed and we anticipate additional volunteers and recruitment as the project develops
Langston Holly, MD University of California Los Angeles
Larry Khoo, MD University of California Los Angeles
Kurt Eichholz, MD Vanderbilt University
Joseph Cheng, MD Vanderbilt University
Larry Rhines, MD MD Anderson
Ehud Mendel, MD MD Anderson
Ziya Gokaslan, MD John Hopkins
Paul Klimo, MD PhD University of Alabama
Peter Gerszten MD MPH University of Pittsburgh

John Kestle MD MPH University of Utah
Mark Bilsky, MD Sloan Kettering

Former Guideline Committee Chairs - Advisors and Reviewers
Paul Matz, MD
Daniel Resnick, MD

Panel of Medical Oncologists and Radiation Oncologist to be determined
Epidemiology consultant to be determined

Proposed Topic Outline:

Introduction and Methodology

Functional Outcome Assessment for Metastatic Spinal Disease

Radiographic Assessment – Instability and Risk of Pathologic Fracture

Non-chemotherapeutic Medical Management – (i.e. Steroids, Bis-phosphonate)

Role of Surgery in Symptomatic Metastatic Spinal Cord Compression: Posterior approaches

Role of Surgery in Symptomatic Metastatic Spinal Cord Compression: Anterior and Combination approaches

Role of Combination Surgery and Radiotherapy in Symptomatic Metastatic Spinal Cord Compression

Role of Combination Surgery and Radiotherapy in Asymptomatic Metastatic Spinal Cord Compression

Role of Intraoperative Radiation Therapy Techniques for Metastatic Spine Disease

Role of Radiosurgery and Intensity Modulated Radiotherapy for Metastatic Spine Disease

Role of Vertebral Augmentation (Kyphoplasty, Vertebroplasty) in Metastatic Spine Disease

Role of Pre-operative Embolization for Spinal Metastatic Disease

Role of Implantable Pain Devices for Metastatic Spine Disease

Treatment Recommendations for Specific Diagnoses
(May consider incorporating these in each individual chapter after review)

Renal Cell Cancer

Breast Cancer
Melanoma
Lung Cancer and subtypes
Colorectal Cancer
Multiple myeloma, Plasmacytoma
Prostate cancer
Other: lymphoma, thyroid, PNET, intramedullary metastases, germ cell tumors

Timeline:
Estimate time to completion 12 to 24 months from initial meeting.
This proposal has some specific challenges due to the multi-disciplinary nature of the patient with metastatic spinal disease. Based on previous guideline efforts of a similar nature, the members of the committee not directly involved with the Joint Section may not share the same motivation and on occasion it has been necessary to alter the committee structure in order to maintain progress. These replacements if needed dramatically slow the process as new members are brought up to the level of interest and expertise needed. Previous efforts have projected a 12-month target for completion and fallen behind. We seek to be as realistic as possible and feel at the 12-month time point we will be able to give a better projection of completion but if the final approval is achieved within 24 months we feel this would be successful.

Year One:
March - April 2008 – Proposal approval.
Co-chairs compiling preliminary materials and committee members invited. Co-chairs consulting with medical and radiation oncology colleagues.

April –May 2008 – Committee members confirmed.
April– May 2008 – Co-chair meeting to encompass input from medical oncology and radiation oncology advisors, organize and create work-flow. Final working teams and topics assigned.

May – June 2008 - Organizational and educational meeting. Those members experienced in process will lead with their preliminary work.

September 2008 – First round of evidentiary tables, reference lists and working drafts due.

October – December 2008 – First round of critiques returned. Formal meeting of members to review evidentiary tables and grading of key papers. Next round of topics discussed and preliminarily assigned.

December- January 2008 - First round of topic revisions due. Next round of topics and working groups confirmed.

January- April – 2009 – Second round of topics evidentiary tables, reference lists and preliminary drafts due for circulation and critique. Formal meeting to review second round of topics.

Start Year 2:
March- April 2009 – Identification of chapters that have fallen behind target. Potential replacement of members that have not achieved goals. Previous authors will still be included if have participated but will be removed as authors and reassigned as reviewers (will be credited but not included as co-authors). Review of timeline for completion.

April – June 2009 - Possible formal meeting to finalize drafts, review evidentiary tables and grade key articles.

June 2009 – December 2009 – Submission to review process.

Budget:
Meeting and travel expenses:
Tentatively up to four group meetings will be planned. Two shorter meetings (two-day) at the beginning and the end of the project and two four-day working meetings. In addition two co-chair organizational meetings will be planned the first near the beginning and the second in the mid-portion of the project. These may be incorporated into national meeting times to limit travel expense but the larger meetings will be kept away from national meeting times, as these have not been productive in the past. The location of the group meetings will be near major airline hubs such as Chicago. Previous expenses for single meetings from the lumbar fusion and cervical guideline meetings were on the order of $7000 per meeting. All efforts will be made to minimize costs and travel to what is felt to be required to keep the effort moving forward. **Budget request for these 4 meetings is $30,000.**

Formal Epidemiology Consultation and Review:
Currently the Joint Tumor Section has contracted their Guideline for the Management of Metastatic Intracranial Disease to an outside group for an estimated cost of over $250,000. One of the critiques of the lumbar fusion guideline was the lack of formal outside epidemiological review. We believe that the best group to formulate guideline that affect the Spine section membership are those that have primarily been formulated by the membership. What we are proposing is a hybrid of previous Spine Section efforts and the course taken by the Joint Tumor Section. We will seek an outside consultant to review and guide but not formulate the guideline coming from this effort. We are requesting a budget item of up to $20,000 for an outside individual or group to provide this oversight. **Budget request for outside consultants $20,000.**

Administrative Support and Miscellaneous:
Similar to the cervical guideline budget up to a one-quarter time employee for 1 year will be requested for assistance with literature compilation and distribution, booking, communication and bookkeeping. In addition, members may require software licensing

(all will be required to use ENDNOTE for reference management) and other journal, reference, epidemiology texts and materials). **Budget request of $10,000.**

Publication Support:
Previously this has been negotiated as the project is completed. In some cases this has been possible with agreement by editors to involve minimal expense. We would like to request potential section support at this time but not place a specific cost to this item. By next budget cycle if it appears there will be substantial costs for publication and addended request will be placed.

Total Budget Request (not including publication support): $60,000

Hypothermia and Human Spinal Cord Injury: Position Statement and Evidence Based Recommendations from the AANS/CNS Joint Sections on Disorders of the Spine and the AANS/CNS Joint Section on Trauma

Daniel K. Resnick, Michael J. Kaiser, Michael Fehlings, Paul C. McCormick

Recommendation: There is insufficient evidence to recommend for or against the practice of either local or systemic therapeutic hypothermia as a treatment for acute spinal cord injury. Clinicians should be aware that despite a biological rationale to consider the use of cooling to attenuate secondary injury in the setting of spinal cord injury, systemic hypothermia has been associated with significant medical complications and is not supported by well-designed clinical trials.

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Deleted: in the head injured population prior to considering this treatment modality.

Background:
Induced regional and/or mild systemic hypothermia have long been regarded as potentially beneficial treatments for the treatment of spinal cord injury. A recent high profile case of a spinal cord injury in a professional football player and the publicized use of hypothermia in the lay press have raised the public awareness regarding the potential use of this modality for the management of acute spinal cord injury. In response to requests from our membership, an ad hoc committee was asked to formulate an evidence-based position statement based upon review of the current literature.

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Literature Search:
A computerized search of the National Library of medicine database was performed using PubMed and the search terms “hypothermia and spinal cord injury and human.” One hundred and sixty three references were obtained. The titles and abstracts of these references were then reviewed, allowing the elimination of many basic science, vascular surgical, and technical reports. Thirteen papers were identified that dealt with human traumatic spinal cord injury and therapeutic hypothermia.

Scientific Foundation:
These papers consist of case reports, very small case series, and reviews. No studies comparing outcomes of patients with spinal cord injury with or without local or regional hypothermia have been published. There are therefore no data to suggest that outcomes of patients treated with therapeutic hypothermia are improved compared to those not treated with therapeutic hypothermia. The use of local therapeutic hypothermia via cold saline epidural lavage at the time of surgery appears to be generally safe, however criteria for temperature, duration, and volume of lavage are not established.

Conclusions:
At this point in time, there is not enough evidence available to recommend for or against the practice of either local or systemic therapeutic hypothermia as a treatment for acute spinal cord injury. Clinicians should be aware that systemic hypothermia has been associated with medical complications in the head injured population prior to considering this treatment modality.

Directions for Future Research:
Prior to the adoption of hypothermia as a treatment modality for patients with spinal cord injury, controlled clinical trials must be performed.

References:

1. Bernard, S., *New indications for the use of therapeutic hypothermia.* Crit Care, 2004. **8**(6): p. E1.
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3. Demian, Y.K., et al., *Anaesthesia for laminectomy and localized cord cooling in acute cervical spine injury. Report of three cases.* Br J Anaesth, 1971. **43**(10): p. 973-9.
4. Fehlings, M.G. and D.C. Baptiste, *Current status of clinical trials for acute spinal cord injury.* Injury, 2005. **36 Suppl 2**: p. B113-22.
5. Feuer, H., *Management of acute spine and spinal cord injuries. Old and new concepts.* Arch Surg, 1976. **111**(6): p. 638-45.
6. Inamasu, J., Y. Nakamura, and K. Ichikizaki, *Induced hypothermia in experimental traumatic spinal cord injury: an update.* J Neurol Sci, 2003. **209**(1-2): p. 55-60.
7. Koons, D.D., et al., *Local hypothermia in the treatment of spinal cord injuries. Report of seven cases.* Cleve Clin Q, 1972. **39**(3): p. 109-17.
8. Martinez-Arizala, A. and B.A. Green, *Hypothermia in spinal cord injury.* J Neurotrauma, 1992. **9 Suppl 2**: p. S497-505.
9. Meacham, W.F. and W.F. McPherson, *Local hypothermia in the treatment of acute injuries of the spinal cord.* South Med J, 1973. **66**(1): p. 95-7.
10. Negrin, J., Jr., *Spinal cord hypothermia in the neurosurgical management of the acute and chronic post-traumatic paraplegic patient.* Paraplegia, 1973. **10**(4): p. 336-43.
11. Negrin, J., Jr., *Spinal cord hypothermia. Neurosurgical management of immediate and delayed post-traumatic neurologic sequelae.* N Y State J Med, 1975. **75**(13): p. 2387-92.
12. Selker, R.G., *Icewater irrigation of the spinal cord.* Surg Forum, 1971. **22**: p. 411-3.
13. Tator, C.H., *Acute spinal cord injury: a review of recent studies of treatment and pathophysiology.* Can Med Assoc J, 1972. **107**(2): p. 143-5 passim.
14. Clifton, G.L., et al., *Hypothermia on admission in patients with severe brain injury.* J Neurotrauma, 2002. **19**(3): p. 293-301.

Evidentiary Table:
Hypothermia and SCI

Authors and Year	Class	Description of Study	Comments
Selker 1971	IV	This case series describes the effect of localized spinal cord cooling in patients presenting with either acute spinal cord injury or chronic spasticity. Each treatment group contained four patients and surgery was performed within 3 hours of injury. The details of the operative procedure were not described. There is no mention of adjuvant therapy. Only one patient in the acute trauma group regained two segmental levels of function; however the author conceded that other factors, such as the surgical decompression, may have contributed to this result. The author concluded that the results for acute trauma did not duplicate the data from animal studies and that cooling produced no detectable change with chronic spasticity.	The small number of patients, descriptive outcomes, and lack of control comparisons make it impossible to determine the effect of localized cooling.
Demian et. al., 1971	IV	The technique of localized spinal cord cooling is described in three patients presenting with quadriplegia following acute cervical spinal cord injury, with an emphasis on anesthetic issues. Ice-cold saline (1-3ºC) was applied to the exposed spinal cord for 3 hours in two patients and 1.5 hours in the third (due to unsatisfactory positioning). The interval between injury and surgery was not described. A descriptive clinical assessment was performed at two years following surgery. Two patients demonstrated mild improvement of lower cervical segments while one patient demonstrated recovery of lower extremity motor function. The authors make no claims of improved outcome with this treatment, but imply that no lower extremity recovery should have been observed given the presenting injuries.	The lack of a control group, absence of objective outcomes, and limited number of patients makes it impossible to attribute the observed recovery to local hypothermia.
Koons et	IV	The authors present a simplistic technique for subarachnoid cooling	This limited case series does not provide

al, 1972	of the spinal cord and describe the clinical results in five patients presenting with acute traumatic injuries and two patients with iatrogenic injuries. All patients underwent decompressive laminectomies and 30 minutes of local cooling with iced Ringers or saline solution. All patients received post-operative steroids. Six of the seven patients were treated within 7 hours after injury. No complications attributed to the technique of local hypothermia were described. Three of the seven patients, one with an iatrogenic injury, demonstrated neurologic recovery however objective measures were not utilized. The authors make no definitive claims regarding the efficacy of local hypothermia but urge that further clinical studies be performed.	adequate evidence to support a favorable treatment effect of local hypothermia. Confounding factors include the decompressive surgery and application of steroids.

Tator, 1972	IV	The author reviews the experimental evidence regarding the effect of local hypothermia in animal models of acute spinal cord injury. Although several studies have demonstrated a beneficial effect of local hypothermia, there is evidence to suggest that the models of acute spinal cord injury do not produce a consistent injury. The author includes a limited description of four patients treated with local hypothermia, of which two demonstrated mild neurological improvements. The details and timing of the cooling technique are not described. There is no mention of adjuvant therapy, a lack of objective outcomes, and no comparison to a control group.	The lack of a control group, absence of objective outcomes, and limited number of patients makes it impossible to attribute the observed recovery to local hypothermia.
Negrin 1973	IV	The technique and instrumentation used to obtain local hypothermia of the spinal cord are described. The clinical results of two patients presenting with acute spinal cord injury and one patient with chronic spasticity following an acute injury are included. Patients underwent either epidural or subarachnoid cooling for 45 to 60 minutes. The cooling temperature and irrigating fluid were not described. Significant recovery of neurological function was observed in one acute injury patient and the one patient presenting with chronic spasticity. No objective outcome measures are included. One patient developed a superficial infection at the catheter insertion site that was treated with intravenous antibiotics. The authors attributed the improved outcomes to the application of local hypothermia and recommended its use for both conditions.	The lack of an objective outcomes measure makes it difficult to appreciate the true treatment effect. The small number of patients and study design are insufficient to support the author's claim and validate local hypothermia as an effective treatment modality.
Meacham and McPherson, 1973	IV	This case series describes the response of 14 patients treated with local hypothermia following acute spinal cord injury. Patients underwent cooling by irrigating the	This is one of the larger case series exploring the safety/efficacy of local hypothermia however suffers from the same study design flaws as the smaller

		exposed spinal cord with 4ºC saline for 3 hours. The time between the traumatic event and surgery ranged from 3.75 to 8 hours. Eleven out of 14 patients received steroids. The mortality rate, attributed to respiratory complications associated with the spinal cord injury, was 28.6%. No complications were attributed to the surgery. 50% of the patients demonstrated some degree of neurological recovery however only 3 patients experienced sufficient recovery to allow assisted ambulation. The authors concluded that the technique deserves further investigation, although no definitive conclusions can be formulated based on the present series.	series. In addition, one is unable to determine the treatment effect due to the application of steroids and effects of decompressive surgery.
Negrin 1975	IV	This manuscript is very similar to the author's 1973 publication with the identical three patients presented. There is no relevant new information contained in this manuscript.	This replication of the author's previous manuscript suffers from the same limitations and does not provide sufficient evidence to support the use of spinal cord hypothermia.

Feuer 1976	V	The author provides a limited review of the current experimental and clinical data regarding the use of hypothermia for the treatment of acute spinal cord injury. No independent data is reported.	No study reviewed by the author provides convincing evidence to support the use of hypothermia as a treatment alternative in acute spinal cord injury.
Bricolo et al., 1976	IV	The authors describe their technique of local hypothermia for acute spinal cord injury and the clinical results in 11 patients presenting with complete spinal cord injuries, three added in an addendum to the manuscript. All patients underwent a decompressive surgery, one via an anterior approach, and removal of compressive tissue. Intradural cooling was performed with 5ºC up to 20 minutes followed by epidural cooling for up to eight days. All patients received corticosteroids, antifibrinolytic agents and reserpine. Closed reduction was performed for dislocated cervical injuries. Surgery was performed between 7 and 26 hours after injury. Clinical improvement was observed in six of the eleven patients, although objective data was not reported. The authors admit that no definitive conclusions can be formulated concerning the effectiveness of this treatment, but results are encouraging and require further investigation.	The evidence presented is insufficient to demonstrate a definitive treatment effect of hypothermia due to the confounding treatments applied. The lack of objective outcomes and limited number of patients further compromises any conclusions.
Marinez-Arizala and Green 1992	V	The authors performed a comprehensive review of the experimental and clinical literature regarding the use of hypothermia in spinal cord injury. Most of the experimental literature supports a beneficial effect of local spinal cord cooling in acute spinal cord injury models. No definitive conclusions could be formulated from the clinical data secondary to numerous study design flaws; such as small sample size, lack of controls, limited follow-up, lack of objective outcomes analysis, and variable treatment protocols. Only three case series contain at least ten patients. Functional recovery was reported in up to	There is no novel evidence presented regarding the potential for therapeutic hypothermia. The experimental evidence is supportive of further investigation however the clinical observations are compromised by numerous study design flaws.

		50%; however the interpretation is confounded by factors, such as steroid administration and effects of decompressive surgery. The authors include their experimental series of six rats treated with modest hypothermia and observed decreased tissue destruction and hemorrhage in the hypothermia cohort.	
Inamasu et al., 2003	V	The authors present a review of more recent peer-reviewed papers investigating the utility of induced hypothermia in experimental traumatic spinal cord injury models. No data regarding clinical trial in humans was included. Improvement of functional outcome has been more consistently demonstrated in mild to moderate models of spinal cord injury. One study demonstrated a synergistic effect between steroids and hypothermia. The authors' acknowledge that more data is required prior to formulating any conclusions regarding the efficacy of hypothermia in traumatic spinal cord injury.	This review provides no clinical data supporting the use of hypothermia in the treatment of traumatic spinal cord injury in humans.
Bernard 2004	V	The author presents his opinion on the use of therapeutic hypothermia for the treatment of various neurological conditions. He cites a case report describing the use of therapeutic hypothermia for spinal cord injury. The author points out the difficulty in performing a well-designed randomized trial to evaluate the efficacy of hypothermia with various neurological conditions. Based on the author's previous experience, treating pre-hospital cardiac arrest with hypothermia and the low rate of complications, he recommends the use of therapeutic hypothermia for the conditions described.	There is no data presented supporting the use of therapeutic hypothermia for the treatment of spinal cord injury.
Fehlings et al., 2005	V	The authors perform a review of the completed prospective randomized trials which have investigated the therapeutic efficacy of various pharmacological compounds in acute spinal cord injury patients. A review of therapeutic hypothermia was not performed; however the authors comment that this is a promising potential therapy.	There is no clinical data supporting the use of therapeutic hypothermia in the management of spinal cord injury.

Outcomes Committee Report
Spine Section Executive Committee Meeting
Wednesday, February 27, 2008

Committee Members:

Mike Kaiser mgk7@columbia.edu
Tanvir Choudrhi tanvir.choudhri@mountsinai.org
Zoher Ghogawala zoher.ghogawala@yale.edu
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A. Clinical Trials Award – Zoher Ghogawala

1. We have created a Clinical Trials Award to promote more clinical trials in neurosurgery in general and spinal surgery in particular. We have obtained a $52,000 grant from the Mr. and Mrs. David and Jean Wallace (Wallace Foundation) to support this endeavor.

2. We received 7 formal proposals. All seven were reviewed by the committee with each one assigned to a committee member for a formal review.

3. Three proposals were selected for $ 500 awards:

   Khalid Abbed, MD, Yale University, Assistant Professor
   Proposal: To compare minimally invasive T-LIF versus open T-LIF for grade I spondylolisthesis with symptomatic spinal stenosis.
   Design: 100 pts, 3 sites, non-randomized.
   Outcome: SF-36 PCS and ODI

   Daniel Lu, MD, UCSF (Senior Resident), Planned Fellowship – Kevin Foley, MD
   Proposal: To compare minimally invasive microdiscectomy versus open for herniated lumbar disc.
   Design: 260 pts, 10 sites, randomized.
   Outcome: Roland Disability Questionnaire for Sciatica (RDQ)

   David Hasan, MD, Univ Missouri, Assistant Professor
   Proposal: To determine if rh-BMP-2 creates significant subsidence when used with single level PLIF.
   Design: 150 pts, 10 sites, randomized.
   Outcome: Re-operation for subsidence with fusion or hardware failure within 1 year of surgery

4. In addition, we are keeping the section website current with a section on all active clinical trials registered with the NIH site clinicaltrials.gov that relate to spinal diseases. There are currently 30 clinical trials relating to spinal disorders registered with ClinicalTrials.gov – all are listed on our section website.

B. MOC instruments for Evidence of Performance in Practice

a) Updated/reassessed at the request of the ABNS

C. Joint Section Clinical Outcomes Research award -$2000

a) To be awarded at the Annual Meeting
   i) Abstract 1708

Title - "Safety, efficacy and Quality of Life after CyberKnife Stereotactic Robotic Irradiation of Spinal Tumors"

QualitisPlus -- Thomas C. Hokenson

Bill To

Council of State Neurosurgical Societies
Dr. Michael Steinmetz
1211 Union Ave, Suite 200
Memphis, TN 38104-3562

Service Invoice

Invoice #	284
Invoice Date	7/2/2007
Ship Date	7/23/2007
Due Date	8/22/2007

Date	Service Item	Description	Quantity	Amount
4/3/2007	Development	- Members only: Import list of members from Excel to database; logic for logging on, first time authentication/registration logic, change password logic, forget/reset password logic; addition of password encryption	6.5	487.50
4/5/2007	Development	- Members only: setup of test user group; testing of account related logic; document reorganization (upload folder and meeting reports)	6.5	487.50
4/10/2007	Development	- Members only: Navigation updates; welcome letter logic; admin section logic for maintaining account data	4.5	337.50
4/12/2007	Development	- Members only: Wiki section updates and feedback (include file references at sub-folder level); document reorganization (upload folder, resolutions)	6	450.00
4/13/2007	Development	- Members Only: Troubleshooting password logic; admin section logic updates	2.5	187.50
4/18/2007	Development	- Members Only: Committee section reorganization and document links update;, Washington Committee reorganization and document links updates; Resolution page updates and document link updates	6	450.00
4/20/2007	Development	- Members Only: Verbiage updates; preparation for initial test users; code for password rules and first time registration; code for users with no email address; search functionality modifications	6.25	468.75
4/25/2007	Development	- Website update: Troubleshooting admin functionality due to changes related to Members Only section; added additional logic for PHP error reporting code	4	300.00
5/1/2007	Development	- Members Only: Verbiage updates; migration of additional code from dev to Production for preparation/testing for launch to test users	3	225.00
5/8/2007	Development	- Members Only: Follow-up emails	0.25	18.75
5/14/2007	Development	- Project Management: Telephone call with Joe Cheng and website committee; follow-up items	1	75.00
5/15/2007	Development	- Members Only: merge of M/O and Admin security logic; incorporation of password encryption	4	300.00
5/16/2007	Development	- Members Only: merge of M/O and Admin security logic creation of common log-in screen; addition of new security logic across admin section	4	300.00
5/17/2007	Development	- Website update: Home page/news article logic to always direct to archive page - Members Only: incorporation of security logic changes from dev site to live site - Website Update: troubleshooting/code changes on admin section 'internal error' message (due to new security logic and with improperly formatted $POST and $GET usage)	6	450.00
5/18/2007	Development	- Members Only: incorporation and testing of security logic changes - Members Only: file reorganization of common use include files and functions; template modifications	6.5	487.50

Invoice Total

Please make checks payable to:
Qualitis Plus
147 Fairfield Lane
Carol Stream, IL 60188

Phone 630-784-9574
Fax 571-323-0750
Email thokenson@qualitisplus.com
Web Site QPlusWeb.com

For any questions regarding this invoice, please contact us. Payments may also be made online through PayPal using a credit card or debit card. If interested in this payment method, please contact us.

QualitisPlus -- Thomas C. Hokenson

Bill To

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Dr. Michael Steinmetz
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Memphis, TN 38104-3562

Service Invoice

Invoice #	284
Invoice Date	7/2/2007
Ship Date	7/23/2007
Due Date	8/22/2007

Date	Service Item	Description	Quantity	Amount
5/21/2007	Development	- Project Management: Email update on recent activities; various email responses	1.5	112.50
5/22/2007	Development	- Members Only: Admin functionality for maintaining user accounts; troubleshooting Noreen's user ID	2.25	168.75
5/23/2007	Development	- Members Only: Admin functionality for maintaining user accounts	2.5	187.50
5/24/2007	Development	- Website update: setup/transition/documentation for additional hosting account access - Members Only: Introduction to 2nd level of testers	5	375.00
5/25/2007	Development	- Website update: setup/transition/documentation for additional hosting account access	2	150.00
5/29/2007	Development	- Website update: correction to home page; setup of accounts for website committee members - Members Only: setup of accounts for website committee members; testing admin functionality	2	150.00
5/30/2007	Development	- Members Only: Email responses; task organization	2	150.00
5/31/2007	Development	- Email responses (Members Only section and website reorganization activities)	0.75	56.25
6/7/2007	Development	- Members Only: Troubleshooting password reset functionality; Wiki functionality feedback; Meeting Reports functionality; website reorganization efforts	3	225.00
6/8/2007	Development	- Members Only: Troubleshooting Wiki Permission error on posting articles; additional of Wiki disclaimer message; Website reorganization efforts	2.5	187.50
6/11/2007	Development	- Website reorganization: coordination emails with Ben	1.25	93.75
6/13/2007	Development	- Website reorganization: coordination emails with Ben	0.5	37.50
6/18/2007	Development	- Members Only: Troubleshooting login for Gary B. - Website reorganization activities: navigation updates and new site database setup	4.25	318.75
6/22/2007	Development	- Website reorganization activities: call with Ben	2	150.00
6/26/2007	Development	- Website reorganization activities; Members Only: Migration of content from dev to live site for preparation of Members Only launch	6	450.00
6/27/2007	Development	- Members Only: Troubleshooting login for Gary B.	0.25	18.75
6/29/2007	Development	- Website reorganization activities; Members Only: Migration of content from dev to live site for preparation of Members Only launch	2	150.00

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Invoice Total $8,006.25

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RESEARCH AND AWARDS COMMITTEE REPORT

Spine Section Executive Committee Meeting
Orlando, FL
February 27th, 2008

Mayfield Basic Science Award Winner:
Ann Margaret Parr, MD, PhD
University of Toronto
"Transplanted Adult Spinal Cord Derived Neural Stem/Progenitor Cells Promote Early Functional Recovery through Neuroprotection after Rat Spinal Cord Injury"

Mayfield Clinical Science Award Winners (two given this year):
Dennis E. Cramer, MD
University of Cincinnati
"Major Neurological Deficits Immediately Following Adult Spinal Surgery: Incidence and Etiology Over 10 Yeas at One Institute"

Matthew M. Kang, MD
New York University – Medical Center
"Quantitative Analysis of Cervical Spondylosis Using Diffusion Tensor Imaging"

Outcomes Committee Award Winner:
Fraser C. Henderson, MD
"Safety, Efficacy and Quality of Life after CyberKnife Stereotactic Robotic Irradiation of Spinal Tumors"

Ronald Apfelbaum Research Award:
Vassilios Dimopoulos, MD
University of Rochester
"Role of nogo receptors NgR1 and NgR2 to promote spinal cord injury"

David Kline Research Award:
Nathan J. Ranalli, M.D.
University of Pennsylvania
"Restoring peripheral nerve pathways through tissue engineering with transplantable living constructs comprised of stretch-grown tissue"

Sanford Larson Research Award:
Omar N. Syed, M.D.
Columbia University
"Generation and validation of patient specific 3D models of the human cervical spine"

WEDNESDAY, FEBRUARY 27

1:30 - 5:30 PM YEOMAN/CAPTAIN

SPECIAL COURSE I: Spinal Coding Update and Review

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Robert R. Johnson, II, Joseph S. Cheng
FACULTY: R. Patrick Jacob, John J. Knightly, Richard A. Roski, Michael K. Rosner, Karin R. Swartz

COURSE DESCRIPTION:
This course will provide up to date information on current issues in spine coding. Coding scenarios will be reviewed for the correct coding of routine as well as complex spinal procedures.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
> Recognize the newest changes in CPT coding for spine.
> Review the methodology for correct spine coding.
> Identify specific difficult coding scenarios and bring clarity to the coding process.

1:30 - 1:50 PM
Introduction and New Codes
Joseph S. Cheng

1:50 - 2:10 PM
Surgical Modifiers
John J. Knightly

2:10 - 2:50 PM
22000 Series
Karin R. Swartz

2:50 - 3:30 PM
63000 Series
Michael K. Rosner

3:30 - 3:45 PM
Beverage Break

3:45 - 4:15 PM
CPT/RUC Process
R. Patrick Jacob

4:15 - 5:30 PM
Coding Scenarios
Robert R. Johnson, II, Richard A. Roski

1:30 - 5:30 PM GREAT HALL WEST

SPECIAL COURSE II: Spine and Nerve Oral Board and Recertification Review

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Michael G. Kaiser, Charles L. Branch, Jr.
FACULTY: Paul C. McCormick, Robert F. Heary, Vincent C. Traynelis, Michael W. Groff, John E. McGillicuddy, Robert J. Spinner, Allen H. Maniker

COURSE DESCRIPTION:
This course is intended to familiarize participants with the ABNS process of certification, with an emphasis on strategies for successful completion of the ABNS oral board exam. The certification process, including maintenance of certification (MOC), will be explained through a series of didactic lectures. Participants will have an opportunity to practice these strategies during mock oral exams.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
> Discuss the requirements for ABNS certification.
> Review the requirements for Maintenance of Certification (MOC).
> Outline strategies for successful completion of the oral board exam.

1:30 - 5:30 PM CLOISTER NORTH

SPECIAL COURSE III: Learning Adult Spinal Deformity Surgery: Principles and Techniques

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Stephen L. Ondra, Michael Y. Wang
FACULTY: Charles Kuntz, IV, Tyler R. Koski, Frank La Marca, Peter D. Angevine, Praveen V. Mummaneni, Michael K. Rosner

COURSE DESCRIPTION:
This course will provide an introduction to adult spinal deformity. With an aging population in North America, adult and geriatric spine deformity is increasingly being evaluated in all spinal clinics. The course will be dedicated to the evaluation and classification of spinal deformity as well as treatment options for spinal deformity.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
> Review the evaluation and classification of adult and geriatric deformity.
> Discuss the nonsurgical and surgical management of spinal deformity with an emphasis on surgical correction principles.
> Evaluate complications, complication management and operative outcomes.
> Assess the social and economic implications in treating the aging spine.

1:30 - 1:50 PM
Demographics, Definitions and Classification of Adult Spinal Deformity
Charles Kuntz, IV

1:50 - 2:15 PM
Patient Selection for Surgical and Non-Surgical Treatment
Stephen L. Ondra

2:15 - 2:40 PM
Techniques and Biomechanics of Spinal Deformity Correction: Osteotomies
Tyler R. Koski

2:40 - 3:05 PM
Reconstruction Strategies and Biomechanics
Michael K. Rosner

3:05 - 3:30 PM
Strategies for managing Spinal Deformity in the Aging and Osteoporotic Spine
Michael Y. Wang

3:30 -3:45 PM
Beverage Break

3:45 - 4:05 PM
Surgical Planning and Peri-Operative Management of the Adult Spinal Deformity Patient
Stephen L. Ondra

4:05 - 4:25 PM
Complications: Rates, Avoidance, Management
Frank La Marca

4:25 - 4:45 PM
Economic Issues in the Aging Spine: Hospital Reimbursement Issues and the Implications for A Society with An Aging Population
Peter D. Angevine

4:45 - 5:30 PM
Case Examples, Discussion and Course Wrap-Up
Michael Y. Wang, Stephen L. Ondra

1:30 - 5:30 PM CLOISTER SOUTH

SPECIAL COURSE IV: Advances in the Treatment of Thoracic and Lumbar Spine Trauma

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Robert F. Heary, Gregory R. Trost
FACULTY: Allan D. Levi, Paul G. Matz, Michael K. Rosner, Ira M. Goldstein, Christopher P. Ames, Ziya L. Gokaslan, Russ P. Nockels, Richard P. Schlenk, Michael P. Steinmetz

COURSE DESCRIPTION:
This course will review the current treatment of thoracic and lumbar spine trauma. Nonsurgical and surgical treatment options, including surgical timing and operative approaches, will be evaluated. The management of post-traumatic deformity and failed fracture treatment will be assessed. This course will include the evaluation of routine as well complex spinal injuries.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
> Review the evaluation and classification of thoracic and lumbar spine injuries.
> Discuss the nonsurgical and surgical management of thoracic-lumbar injuries.
> Evaluate complications, complication management and operative outcomes.

1:30 - 1:42 PM
Classification Schemes in TL Trauma
Michael P. Steinmetz

1:42 - 1:54 PM
Treatment of Thoracic Trauma
Allan D. Levi

1:54 - 2:06 PM
Treatment of TL Junction Trauma
Richard P. Schlenk

2:06 - 2:18 PM
Treatment of Lumbar Trauma
Paul G. Matz

2:18 - 2:30 PM
Thoracic Pedicle Screw Placement
Christopher P. Ames

2:30 - 2:42 PM
Lumbosacral Pelvic Fixation
Ziya Gokaslan

2:42 - 2:54 PM
Minimal Access Surgery in TL Trauma
Ira M. Goldstein

2:54 - 3:06 PM
Trauma in the Deformity Patient and the Previously Operated
Russ P. Nockels

3:06 - 3:18 PM
Penetrating TL Trauma
Michael K. Rosner

3:18 - 3:30 PM
Questions

3:30 - 3:45 PM
Beverage Break

3:45 - 5:30 PM
Case Presentations
Gregory R. Trost, Robert F. Heary

1:30 - 5:30 PM GREAT HALL EAST

SPECIAL COURSE V: Advances in Minimally Invasive and Outpatient Spine Surgery

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Kevin T. Foley, Mark R. McLaughlin
FACULTY: Langston T. Holly, Paul Park, Robert E. Isaacs, Richard G. Fessler, Nirav K. Shah, Christopher H. Comey, Daniel K. Resnick

COURSE DESCRIPTION:
This course will provide up to date information on the newest minimally invasive and outpatient spine surgery techniques. The role of minimally invasive surgery in deformity correction, tumor resection, and revision surgery as well as spinal reconstruction will be reviewed. Outpatient surgical options and operative outcomes will be evaluated.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Understand the importance of minimally invasive spine surgery.
> Discuss methods for extending existing minimally invasive decompressive surgical techniques to more complex spinal disorders.
> Evaluate complications, complication management and operative outcomes.

1:30 - 5:30 PM SENATE/GALLERY

SPECIAL COURSE VI: Evaluation and Management of the Spine Trauma Patient

Special Course for Nurses, Nurse Practitioners and Physician Assistants.

Additional $110 for medical registrants. Includes Lunch.

DIRECTORS: Peter C. Gerszten, Andrea L. Strayer, MSN, CNRN, ACNP, Erin Villard, RN, MN, ACNP
FACULTY: David O. Okonkwo, James S. Harrop, Michael P. Steinmetz, Al Melillo, R. John Hurlbert

COURSE DESCRIPTION:
This course will provide up to date practical information on spine trauma with particular emphasis on cervical spine clearance, spinal imaging, operative versus nonoperative management, and spinal cord injury. Current treatment strategies will be reviewed including management of central cord syndrome, intensive care considerations; geriatric patient considerations, and new rehabilitation technologies. Expert advanced practice nurse, physician assistant, and neurosurgeon faculty will explore the challenges of caring for this complex patient population.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
- Discuss the epidemiology of spine trauma.
- Review cervical spine clearance and indications for imaging studies.
- Analyze the decision making for operative versus non-operative treatment.
- Evaluate the current treatment options for spinal cord injury and review new rehabilitation technologies available to the spinal cord injured patient.

1:30 - 1:45 PM
Epidemiology of Spine Trauma
Peter C. Gerszten

1:45 - 2:15 PM
Imaging of Spine Trauma and Clearance of the Cervical Spine
David O. Okonkwo

2:15 - 2:45 PM
Operative versus Non-Operative Management of Spine Trauma
James S. Harrop

2:45 - 3:15 PM
Spinal Cord Injury and Current Treatments
James S. Harrop

3:15 - 3:30 PM
Central Cord Syndrome: Clinical Presentation and Timing of Surgery
Al Melillo

3:30 - 3:45 PM
Beverage Break

3:45 - 4:00 PM
Central Cord Syndrome: Timing of Surgery
R. John Hurlbert

4:00 - 4:30 PM
ICU Considerations of Patients with Spine Trauma
Erin Villard, RN, MN, ACNP

4:30 - 4:45 PM
The Geriatric Patient: Special Considerations
Andrea L. Strayer, MSN, CNRN, ACNP

4:45 - 5:15 PM
New Rehabilitation Technologies for Patients with Spine Trauma
Michael P. Steinmetz

5:15 - 5:30 PM
Questions

Physician attendees will not be awarded CME credit for this course. Nursing contact hours will be provided through AANN. The American Association of Neuroscience Nurses is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Physician assistants will receive credit for attendance. Each physician assistant will need to contact his or her individual membership association and certification board to determine the requirements for accepting credits. All attendees will receive a confirmation of attendance.

6:00 – 8:00 PM POOLSIDE

Opening Reception

Enjoy a wonderful assortment of hors d'oeuvres and refreshments as you visit with old friends and new colleagues at the Opening Reception. The reception will be held poolside at the Buena Vista Palace Hotel & Spa in the Walt Disney World® Resort. All medical attendees and spouse/guests receive one (1) complimentary ticket. Additional tickets will be available for purchase in registration (Great Hall Assembly) during registration hours, from 6:00 AM – 6:00 PM. Resort casual attire is recommended for this event.

THURSDAY, FEBRUARY 28

6:30 – 6:55 AM GREAT HALL NORTH

Case Presentations

MODERATORS: Edward C. Benzel, Frank La Marca

6:55 – 7:00 AM GREAT HALL NORTH

Introductory Remarks and Meeting Announcements
Joseph T. Alexander

7:00 – 9:30 AM GREAT HALL NORTH

SCIENTIFIC SESSION I
Back to the Future: Legends in Spine and Peripheral Nerve Surgery

MODERATORS: R. John Hurlbert, Charles Kuntz, IV

SESSION DESCRIPTION:
This Scientific Session will review the evolution in treatment of spine and peripheral nerve disorders. The history of spine and peripheral nerve surgery will be examined, and senior surgeons will give their perspective on the evaluation and treatment of spine and peripheral nerve disorders.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
- > Review the evolution in treatment of spinal disorders.
- > Understand the evolving field of peripheral nerve surgery.
- > Evaluate the current treatment of pediatric cervical spine trauma, lumbar spinal stenosis, and spinal deformity.
- > Gain wisdom by knowing the history of our subspecialty.

7:10 - 7:30 AM
History of Spinal Surgery
Volker K. H. Sonntag

7:30 - 7:50 AM
Management of Pediatric Cervical Spinal Trauma
Dachling Pang

7:50 - 8:10 AM
Diagnosis and Treatment of Lumbar Spinal Stenosis
Philip R. Weinstein

8:10 - 8:30 AM
Evolution of Peripheral Nerve Surgery
David G. Kline

8:30 - 8:50 AM
Deformity Surgery over 30 Years: Lessons Learned
David S. Bradford

8:50 - 9:00 AM
Panel Discussion

9:00 AM
Presidential Address: Back to the Future: Legends in Spine and Peripheral Nerve Surgery
Joseph T. Alexander

9:10 AM
Meritorious Award Winner
Ronald I. Apfelbaum

Meritorious Award Presentation: Evolution of Cervical Instrumentation

9:30 – 10:15 AM EVENT CENTER

Beverage Break with Exhibitors

9:30 AM – 10:15 PM GREAT HALL CENTER

What's New Session I

MODERATOR: J. Patrick Johnson

10:15 AM – 12:30 PM GREAT HALL NORTH

Oral Platform Presentations I

MODERATORS: Mark R. McLaughlin, Chad J. Morgan

10:15 - 10:23 AM
100. Comparison of BRYAN Cervical Disc Arthroplasty with Anterior Cervical Decompression and Fusion: Clinical and Radiographic Results of a Randomized Controlled Clinical Trial
Richard G. Fessler, Stephen M. Papadopoulos, Paul Anderson, John Heller, Rick Sasso

10:23 - 10:31 AM
101. Reorganization of the Primary Motor and Sensory Cortices in Patients with Spinal Cord Compression: A Pre and Post-surgical Evaluation Using Functional MRI
Neil Duggal, Marie Fink, Doran Rabin, Robert L. Barry, Robert Bartha, Joseph S. Gati

10:31 - 10:39 AM
102. Anterior vs. Posterior Surgery for Cervical Spondylotic Myelopathy: A Large Prospective Multi-Center Clinical Trial
Michael G. Fehlings, Rick Sasso, Branko Kopjar, Eric J. Woodard, Paul M. Arnold, Darrel S. Brodke, Alexander R. Vaccaro, Jens Chapman, David G. Kline

10:39 – 10:45 AM
Discussion

10:45 - 10:53 AM
103. Assessment of Qualitative and Quantitative MRI Parameters as Predictors of Neurological Improvement in Patients with Acute Cervical Traumatic Spinal Cord Injury: A Multi-Center Prospective Study in 60 Consecutive Patients
Julio C. Furlan, Michael G. Fehlings, Bizhan Aarabi

10:53 - 11:01 AM
104. Mortality and Neurological Recovery in the Geriatric Population following Acute Traumatic Spinal Cord Injury: A Cohort Study of 485 Patients
Julio C. Furlan, Michael G. Fehlings, Michael Bracken

11:01 - 11:09 AM
105. Functional Outcomes in the Surgical Management of Cervical Spondylotic Myelopathy (CSM): A Prospective Observational Study in 93 Patients with Independent Review
Sukhvinder Kalsi-Ryan, Eric M. Massicotte, Michael G. Fehlings

11:09 - 11:17 AM
106. A Nationwide Evaluation of How Premorbid Myelopathy and Surgical Approach Impacts on Perioperative Complications after Cervical Spine Fusion
Mohammed F. Shamji, Robert E. Isaacs, Chad Cook, Chris Brown

11:17 – 11:23 AM
Discussion

11:23 - 11:31 AM
107. Dense Bone Engagement in Osteoporotic Vertebra Using a Novel Pedicle Screw Trajectory Results in Enhanced Fixation
Richard A. Hynes, MeLeah A.W. Henson, Christian M. Puttlitz, Brandon Santoni

11:31 - 11:39 AM
108. Predictors of Ambulatory Function following Decompressive Surgery for Metastatic Epidural Spinal Cord Compression
Kaisorn L. Chaichana, Dan M. Sciubba, Graeme F. Woodworth, Ziya L. Gokaslan, Matthew McGirt, Ali Bydon

11:39 - 11:47 AM
109. Transplantation of Neural Stem Cells with Biodegradable Microspheres Releasing Sonic Hedgehog Significantly Improves Recovery from Spinal Cord Injury in Mice
Reid Gooch, Natalia Lowry, Sally Temple

11:47 – 11:53 AM
Discussion

11:53 AM - 12:01 PM
110. Repair of Cauda Equina Injuries Using Nerve Guidance Channels and Nanosphere Technology
Donald John Blaskiewicz

12:01 - 12:09 PM
111. Prospective Assessment of Axial Back Pain Symptoms Before and After Bariatric Weight Reduction Surgery
Paul Khoueir, Michael Y. Wang, Mary Helen Black, Peter F. Crookes, Howard S. Kaufman, Namir Katkhouda

12:09 - 12:17 PM
112. Heterotopic Bone Formation in Cervical Total Disc Replacement: Experience from 270 Levels in 158 Patients with Up to Four-Years Follow-up
Luiz Pimenta, Etevaldo Coutinho, Leonardo Oliveira, Thomas Schaffa, Juliano Lhamby, Carlos Fernando Arias Pesántez

12:17 - 12:25 PM
113. Analysis of Triggered Electromyographic Threshold of Thoracic Pedicle Screws Assessed by Computed Tomography
Amer F. Samdani, David Clements, Josh Pahys, Jahangir Asghar, Randal Betz

12:25 – 12:30 PM
Discussion

12:30 – 1:25 PM EVENT CENTER
Lunch Break with Exhibitors

12:30 – 1:25 PM GREAT HALL CENTER
What's New Session II
MODERATOR: Michael K. Rosner

1:25 – 1:30 PM GREAT HALL NORTH
Meeting Announcements

1:30 – 5:30 PM GREAT HALL NORTH
SCIENTIFIC SESSION II
Spinal Alignment and Treatment Implications

MODERATORS: Eric J. Woodard, Robert E. Isaacs

SESSION DESCRIPTION:
This Scientific Session will review "normal" neutral upright spinal alignment in asymptomatic individuals. Because the human condition is in part defined by the ability to comfortably stand upright and because the treatment of many patients with spinal disorders is directed at restoring this condition, the importance of neutral upright spinal alignment will be reviewed in relation to operative outcomes.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
- Review "normal" Neutral Upright Spinal Alignment in asymptomatic individuals.
- Evaluate cervical spinal alignment and treatment of cervical myelopathy.
- Understand the classification of spinal deformity and the importance of spinal alignment in patient outcomes.
- Discuss techniques for restoring Neutral Upright Spinal Alignment.

1:30 - 1:45 PM
Cervical Spinal Alignment in Asymptomatic Adults
Michael W. Groff

1:45 - 2:00 PM
Treatment of Cervical Myelopathy
Junichi Mizuno

2:00 - 2:15 PM
Thoracic-Lumbar-Pelvic Alignment in Asymptomatic Adults
Stephen L. Ondra

2:15 - 2:30 PM
Classification of Adult/Geriatric Spinal Deformity
Christopher I. Shaffrey

2:30 - 2:45 PM
Importance of Spinal Alignment in Patient Outcomes
Tyler R. Koski

2:45 - 3:00 PM
Restoring Spinal Alignment
Praveen V. Mummaneni

3:00 - 3:15 PM
Panel Discussion

3:15 – 4:00 PM EVENT CENTER

Beverage Break with Exhibitors

3:15 - 4:00 PM GREAT HALL NORTH

What's New Session III

MODERATOR: Langston T. Holly

4:00 – 5:30 PM GREAT HALL NORTH

Oral Point Presentations I (Concurrent Session)

MODERATORS: John J. Knightly, Daniel H. Kim

4:00 - 4:03 PM
200. Assessment of Canal/Spinal Cord Compromise in Patients with Cervical Spondylotic Myelopathy using Flexion-Extension Cervical MRI
Tanvir Choudhri, Harlan Jason Bruner, Steve McAnany, Nancy Montero-Barletta, Tom Naidich

4:03 - 4:06 PM
201. Laminoplasty Versus Laminectomy is Associated with a Decreased Incidence of Spinal Deformity after Resection of Intramedullary Spinal Cord Tumors in Children
Matthew McGirt, Frank Attenello, Timothy F. Witham, Kevin C. Yao, Ali Bydon, George I. Jallo, Kaisorn L. Chaichana

4:06 - 4:09 PM
202. CT Evaluation of Rotation Correction in Adolescent Idiopathic Scoliosis (AIS): A Comparison of All Pedicle Screw Construct vs. a Hook Rod System
Amer F. Samdani, Randal Betz, Jahangir Asghar, David Clements, Josh Pahys

4:09 - 4:15 PM
Discussion

4:15 - 4:18 PM
203. The Effect of Bumetanide Administration on Thermal Hyperalgesia following Contusive Spinal Cord Injury in Rats
Sharad Rajpal, John Cain, Daniel K. Resnick, Christopher Baggott, Sam Cramer, Jessica Tilghman, Bradley Allcock, Gurwattan MIranpuri, Dandan Sun

4:18 - 4:21 PM
204. Is One Cage/One Side Pedicle Screw Fixation Sufficient for PLIF in Single Level Fusion?
Douglas B. Moreland, Harold L. Asch, Gregory A. Czajka, Jennifer Weaver

4:21 - 4:24 PM
205. The Postoperative Spinal Epidural Hematoma after Lumbar Spinal Surgery: Magnetic Resonance Imaging Study of Consecutive 89 Patients
Dong Yeob Lee, Sang-Ho Lee

4:24 - 4:30 PM
Discussion

4:30 - 4:33 PM
206. Functional Outcome following Dynamic Neurtralization System for the Treatment of Spondylolisthesis without Adjunct Decompression
Fras Dakhil-Jerew, John Shepperd

4:33 - 4:36 PM
207. Outcome of Chiari-Associated Syringomyelia after Hindbrain Decompression in Children: Analysis of 49 Consecutive Cases
Matthew McGirt, Frank Attenello, Ghazala Datoo, Benjamin S. Carson, George I. Jallo, Muraya Gathinji

4:36 - 4:39 PM
208. Value of Age and Comorbidity Indices in the Prediction of In-Hospital Mortality and Length of Hospitalization in Patients with Acute Spine Trauma
Julio C. Furlan, Deepa Kattail, Michael G. Fehlings

4:39 - 4:45 PM
Discussion

4:45 - 4:48 PM
209. Management of Spinal Infection: A Retrospective Case Series
Chandan G. Reddy, Patrick W. Hitchon, Megan Moritz, Hala Shamsuddin, Daniel James Guillaume

4:48 - 4:51 PM
210. Outcome and Cost Comparison between Instrumented Posterolateral Fusion and TLIF in 191 Patients
Sanjay S. Dhall, Berkeley G Bate, Gerald E. Rodts, Jr., Praveen V. Mummaneni, Michael Y. Wang

4:51 - 4:54 PM
211. The Total Facet Arthroplasty System® (TFAS®) in the Treatment of Spinal Stenosis: Worldwide Experience with Longest Follow-up of 24 Months
David Wiles, Charles H. Wingo, Alejandro Perez-Oliva, Guillermo Bajares, Barton L. Sachs, Ioan M.D. Branea, Antonio Castellvi, Michael Halperin, Radu Prejbeanu, Scott Webb, Courtney Brown

4:54 - 5:00 PM
Discussion

5:00 - 5:03 PM
212. Neurological Recovery and Patient Satisfaction following Early Treatment of Spinal Cord Injury with Oscillating Field Stimulation
Scott A. Shapiro, Philip Yoder Smucker, Robert Pascuzzi, Richard B. Borgens, Richard B. Rodgers

5:03 - 5:06 PM
213. A Comparison of ^{2}-TCP+BMA vs. RhBMP-2 in Anterior Lumbar Interbody Fusion: A Prospective, Randomized Trial with 1-Year Interim Clinical and Radiographic Outcomes
Jeffrey R. McConnell, Charis Mitchell

5:06 - 5:09 PM
214. Effect of Lumbar Total Disc Arthroplasty on the Segmental Motion and Intradiscal Pressure at the Adjacent Level: An In Vitro Biomechanical Study
Chandan G. Reddy, Jim Torner, Aditya Ingalhalikar, Patrick W. Hitchon, Tae-Hong Lim

5:09 - 5:15 PM
Discussion

5:15 - 5:18 PM
215. Treatment of Piriformis Syndrome by Distal Piriformis Section, As Assessed by FAIR EMG
Michael A. Amaral

5:18 - 5:21 PM
216. Multicenter Reliability Study to Assess Differences between Neurosurgeons and Orthopaedic Surgeons in Classifying Cervical Dislocation Injuries and Making Assessment and Treatment Decisions
Paul M. Arnold, Jared Wilsey, Christopher I. Shaffrey, Christopher Bono, James S. Harrop, Raja Y. Rampersaud, Joon Y. Lee, Andrew T. Dailey, Alexander R. Vaccaro, Darrel S. Brodke, Jonathan Grauer, Ahmad Nassr, Marcel Dvorak

5:21 - 5:24 PM
217. Predictors of Infection following Sacral Tumor Resection: A Five-Year Institutional Experience
Dan M. Sciubba, Graeme F. Woodworth, Beryl Gok, Kaisorn L. Chaichana, Clarke Nelson, Gregory Stuart McLoughlin, Ziya L. Gokaslan, Matthew McGirt

5:24 – 5:30 PM
Discussion

4:00 – 5:30 PM GREAT HALL EAST

Oral Point Presentations II (Concurrent Session)

MODERATORS: Andrew T. Dailey, James M. Schuster

4:00 - 4:03 PM
218. Association of Degree of Resection and Survival after Resection of Malignant Intramedullary Astrocytomas of the Spinal Cord
Matthew McGirt, Kaisorn L. Chaichana, George I. Jallo, Karl F. Kothbauer, Michael E. Tobias, Ira M. Goldstein

4:03 - 4:06 PM
219. Radiographic and Clinical Evaluation of Free-Hand Placement of C2 Pedicle Screws
Dan M. Sciubba, Gregory Stuart McLoughlin, Jean-paul Wolinsky, Ziya L. Gokaslan, Joseph C. Noggle, Ananth K. Vellimana

4:06 - 4:09 PM
220. Discriminating Properties of a Novel Approach to Quantitatively Assess the Extent of Canal Stenosis and Spinal Cord Compression in Patients with Cervical Spine Trauma: A Prospective Responsiveness Study
Julio C. Furlan, Ahilan Kailaya-Vasan, Bizhan Aarabi, Michael G. Fehlings

4:09 - 4:15 PM
Discussion

4:15 - 4:18 PM
221. Load Sharing Differences between Uni-Directional and Bi-Directional Translational Plates following Two-Level ACDF Using a Finite Element Model
Eric A. Potts, Ahmad Faizan, Vijay K. Goel, John C. Coleman, Alexander R. Vaccaro

4:18 - 4:21 PM
222. Transplantation of Autologous Schwann Cells within a NeuraGen® Tube to Repair a Lengthy Gap of the Sciatic Nerve
Yerko A. Berrocal, Allan D. Levi, Xiuming Li, Kang T. Lim, David M. Panczykowski

4:21 - 4:24 PM
223. Comparison of Image-Guidance to Conventional in Vivo Application of Thoracic and Lumbar Pedicle Screws: A Meta-Analysis
John E. O'Toole, Richard G. Fessler, Dino Samartzis, Tibor Boco

4:24 - 4:30 PM
Discussion

4:30 - 4:33 PM
224. Short Incision + Adhesion Barrier Avoid Scar Tissue
Iñaki Arrotegui

4:33 - 4:36 PM
225. An Injectable Biopolymer Depot for Sustained Drug Release following Perineural Administration
Mohammed F. Shamji, Lyman W. Whitlatch, Allan H. Friedman, Ashutosh Chilkoti, William J. Richardson, Lori A. Setton

4:36 - 4:39 PM
226. Electrophysiologic Test and Grip Strength in a Rat Median Nerve Injury Model
Huan Wang, Robert J. Spinner, Eric J. Sorenson, Anthony J. Windebank

4:39 - 4:45 PM
Discussion

4:45 - 4:48PM
227. New Observations of Vascular/Osseous Anatomical Variations within the Atlanto-axial Complex: A Radiographical Study Using CT Angiography
Parham Moftakhar, Nestor R. Gonzalez, Langston T. Holly, Larry T. Khoo

4:48 - 4:51PM
228. Embryonic Stem Cells Used for Disc Regeneration in an In-Vivo Model of Disc Degeneration
Ramiro Perez de la Torre, Rasul Chaudhry, David M. Svinarich, Cristopher Facek, Mick J. Perez-Cruet, Hormoz Sheikh

4:51 - 4:54 PM
229. Clinical Result of Early Laminoplasty for Acute Cervical Cord Injury Associated with Ossification of The Posterior Longitudinal Ligament or Cervical Spondylosis
Insoo Kim, Elmaan Kim, Eun-Ik Son

4:54 - 5:00 PM
Discussion

5:00 - 5:03 PM
230. Neurological Findings in Adults with Scoliosis: Incidences and Correlations with Operative versus Conservative Management
Justin S. Smith, Kai-Ming G. Fu, Peter Urban, Christopher I. Shaffrey

5:03 - 5:06 PM
231. Traumatic Spino-Pelvic Dissociation Injuries: Classification of Injuries, Rationale for Treatment, and Surgical Results with Posterior Stabilization
Andrew N. Nemecek, Ahmed M. Raslan, Robert Hart, Alex Ching

5:06 - 5:09 PM
232. Evaluation of Contact Forces in the Normal, Fused, and Degenerative Cervical Spine Using A Three-Dimensional in Vivo Model
Joseph S. Cheng, Richard D. Komistek, Mohamed Mahfouz, Fei Liu

5:09 - 5:15 PM
Discussion

5:15 - 5:18 PM
233. Transthoracic Surgical Treatment for Centrally Located Thoracic Disc Herniations Causing Myelopathy: A Five-Year Institutional Experience
Dan M. Sciubba, Selim Ayhan, Clarke Nelson, Jean-paul Wolinsky, Timothy F. Witham, Ali Bydon, Ziya L. Gokaslan, Joseph C. Noggle

5:18 - 5:21 PM
234. Effect Of Nerve Growth Factor (NGF) Releasing Polylactic-Co-Glycolic Acid (PLGA) Microspheres on Peripheral Nerve Regeneration
Ralph de Boer, Robert J. Spinner, Anthony J. Windebank, Huan Wang, Andrew M. Knight, Martijn J.A. Malessy, Michael J. Yaszemski

5:21 - 5:24 PM
235. Treatment of Cervical Stenotic Myelopathy: A Cost and Outcome Comparison of Laminoplasty vs. Laminectomy and Lateral Mass Fusion
Jason M. Highsmith, Praveen V. Mummanenir, Regis W. Haid Jr., Gerald E. Rodts, Jr.

5:24 - 5:30 PM
Discussion

5:30 – 7:00 PM EVENT CENTER

Reception with the Exhibitors
Enjoy refreshments and conversation with your colleagues and corporate contacts.

FRIDAY, FEBRUARY 29

6:30 – 6:55 AM GREAT HALL NORTH

Case Presentations
MODERATORS: Robert F. Heary, Paul G. Matz

6:55 – 7:00 AM GREAT HALL NORTH

Meeting Announcements

7:00 – 8:00 AM GREAT HALL NORTH

SCIENTIFIC SESSION III (PART 1)
Critical Review of New Randomized Controlled Trials for Lumbar Degenerative Disease

MODERATORS: Christopher E. Wolfla, Michael G. Fehlings

SESSION DESCRIPTION:
This Scientific Session will critically review the randomized controlled trials for the treatment of lumbar degenerative disease which have been published in the past twelve months. The results of the trials will be summarized and critically evaluated in reference to implications for clinical practice.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Discuss the results of the new randomized controlled clinical trials.
> Critically evaluate the study design and statistical methods of the trials.
> Review the theoretically and practical implications for clinical practice.

7:00 - 7:15 AM
Synopsis of Results
Robert E. Isaacs

7:15 - 7:30 AM
Critical Evaluation of Results
Richard G. Fessler

7:30 - 7:45 AM
Implications for Clinical Practice
Daniel K. Resnick

7:45 - 8:00 AM
Panel Discussion

8:00 – 9:30 AM GREAT HALL NORTH

SCIENTIFIC SESSION III (PART 2)
Clinical and Socioeconomic Implications of Spinal Surgery

MODERATORS: Charles L. Branch, Jr., P. Colby Maher

SESSION DESCRIPTION:
This Scientific Session will critically review the socioeconomic impact of spinal surgery on society. The influence of industrial sponsorship and the clinical impact of spinal surgery will be examined.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Discuss the socioeconomic impact of spinal surgery on society.
> Critically evaluate the influence of industrial sponsorship on the subspecialty.
> Review the clinical impact of spinal surgery for patients.

8:00 - 8:15 AM
Socioeconomic Impact of Spinal Surgery
Sohail K. Mirza

8:15 - 8:30 AM
Influence of Industrial Sponsorship
Paul C. McCormick

8:30 - 8:45 AM
Clinical Impact of Spinal Surgery
Christopher I. Shaffrey

8:45 - 9:00 PM
Panel Discussion

9:00 – 9:30 AM
Fellowship Awards and Updates
Peter C. Gerszten, Praveen V. Mummaneni

9:30 – 10:15 AM EVENT CENTER

Beverage Break with Exhibitors

9:30 - 10:15 AM GREAT HALL CENTER

What's New Session IV

MODERATOR: Carl Lauryssen

10:15 AM -12:15 PM GREAT HALL NORTH

Oral Platform Presentations II

MODERATORS: Rajiv Midha, Joseph S. Cheng

10:15 - 10:23 AM
114. Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of Lumbar Total Disc Replacement with the Charité™ Artificial Disc Versus Lumbar Fusion 5 Year Follow-up
Richard D. Guyer, Paul C. McAfee, Stephen H. Hochschuler, Richard T. Holt, Mohammed E. Majd, Scott L. Blumenthal, John J. Regan, Fred H. Geisler, Robert J. Banco, Louis G. Jenis, Douglas Wong, Andrew Capuccino, Scott G. Tromanhauser, Fabien Bitan, Noam Stad

10:23 - 10:31 AM
115. Radiographic Results from the BRYAN® Cervical Disc IDE Study
Richard G. Fessler, Rick Sasso, John Heller, Paul Anderson, Stephen M. Papadopoulos

10:31 - 10:39 AM
116. Suboccipital Decompression for Chiari-Associated Scoliosis: Risk Factors and Time Course of Deformity Progression
Matthew McGirt, George I. Jallo, Benjamin S. Carson, Ali Bydon, Timothy F. Witham, Frank Attenello

10:39 - 10:45 AM
Discussion

10:45 - 10:53 AM
117. Predictors of Motor and Sensory Dysfunction after Resection of Intramedullary Spinal Cord Tumors in Children
Matthew McGirt, Timothy F. Witham, Ali Bydon, Frank Attenello, George I. Jallo, Kaisorn L. Chaichana

10:53 - 11:01 AM
118. A Novel Grading System for Intramedullary Spinal Cord Tumors in Children: Predictive Value for Subsequent Progressive Spinal Deformity
Matthew McGirt, Kaisorn L. Chaichana, George I. Jallo, Frank Attenello, Ali Bydon, Kevin C. Yao, Timothy F. Witham

11:01 - 11:09 AM
119. Adjacent Vertebral Body Osteolysis with Bone Morphogenetic Protein Use in Transforaminal Lumbar Interbody Fusion
Chris J. Neal, Melvin D. Helgeson, Ronald A. Lehman, Michael K. Rosner, Andrew Mack

11:09 - 11:15 AM
Discussion

11:15 - 11:23 AM
120. Percutaneous CT-Guided Conformal Ultrasonic Ablation of Vertebral Tumors Using A Rabbit Tumor Model
Dan M. Sciubba, Chris Alix, William A. Pennant, Gabor Fichtinger, Ziya L. Gokaslan, Kieran P. J. Murphy, Joseph C. Noggle, Clif Burdette

11:23 - 11:31 AM
121. Lumbar Adjacent Segment Degeneration and Disease after Arthrodesis and Total Disk Arthroplasty
James S. Harrop, Neil Goldfarb, Mitchell G. Maltenfort, Peggy Vorward, Christopher Bono, Pascal Jabbour, Jim A. Youssef, Alexander R. Vaccaro

11:31 - 11:39 AM
122. CyberKnife Radiosurgery for Spine Tumors. Spinal Cord Radiation Dose and Volume Analysis
Alan T. Villavicencio, Lee McNeely, Melinda McIntyre, Sigita Burneikiene

11:39 - 11:45 AM
Discussion

11:45 - 11:53 AM
123. Charité™ Retrieval Experience in Varying Lumbar Levels: Successes and Disasters
Luiz Pimenta, Carlos Fernando Arias Pesántez, Juliano Lhamby, Leonardo Oliveira, Thomas Schaffa, Etevaldo Coutinho

11:53 - 12:01 PM
124. Incidence and Repair of Durotomy during Lumbar Spinal Surgery
Brian T. Jankowitz, Faught Ryan, Boyle C. Cheng, William Charles Welch, Dave S. Atteberry, Peter C. Gerszten, Patricia R.N. Karausky

12:01 - 12:09 PM
125. Preoperative Screening and Treatment of Occult Cardiac Disease in Adult Spinal Deformity Surgery
Russ P. Nockels, Gerardo Zavala, II

12:09 - 12:15 PM
Discussion

12:15 – 12:30 PM GREAT HALL NORTH

Annual Business Meeting
Daniel K. Resnick

12:30 PM
Lunch on Your Own

12:30 – 2:30 PM CLOISTER

LUNCHEON SYMPOSIUM I: Revision Spine Surgery and Complication Avoidance

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Christopher I. Shaffrey, Timothy C. Ryken
FACULTY: Regis W. Haid, Jr., Michael G. Fehlings, Patrick W. Hitchon, J. Patrick Johnson

COURSE DESCRIPTION:
This course will provide state of the art information on complication avoidance and revision spine surgery techniques. Senior surgeons will review their clinical experience and lessons learned. Extensive interactive case presentations will illustrate treatment and care considerations and explore complication avoidance algorithms and revision spine surgery techniques.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Understand management strategies and operative techniques for complication avoidance.
> Discuss the management of routine as well as complex post surgical cervical, thoracic, and lumbosacral nonunion and deformity.
> Review treatment options for adjacent segment disease, recurrent disk herniation, and failed fusion and arthroplasty as well as failed fracture treatment.

12:30 – 2:30 PM SENATE/GALLERY

LUNCHEON SYMPOSIUM II: Evolution of Minimally Invasive Spine Surgery Techniques

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Richard G. Fessler, John C. Liu
FACULTY: Mick J. Perez-Cruet, Praveen V. Mummaneni, Timothy E. Adamson, Robert E. Isaacs

COURSE DESCRIPTION:
This course will provide up to date information on the newest minimally invasive spine surgery techniques. Neurosurgeons who are relatively new to minimally invasive surgery and those with previous minimally invasive experience will benefit from this review of current minimally invasive technology. Extensive interactive case presentations will illustrate treatment and care considerations and explore the rapidly evolving field of minimally invasive spinal surgery.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Understand the importance of minimally invasive spine surgery.
> Discuss methods for extending existing minimally invasive decompressive surgical techniques to more complex spinal disorders.
> Recognize hybrid surgical techniques that combine conventional "open" methods with minimally invasive techniques.

12:30 – 2:30 PM KNAVE/SCRIBE

LUNCHEON SYMPOSIUM III: Treatment of Primary and Metastatic Spine Tumors

Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Ehud Mendel, Ziya L. Gokaslan
FACULTY: Laurence D. Rhines, Ehud Mendel, Mark H. Bilsky, Peter C. Gerszten

COURSE DESCRIPTION:
This course will review the natural history and management of primary and metastatic spinal tumors. Radiographic imaging, intervention strategies, and treatment algorithms will be reviewed. Surgical treatment including approaches will be discussed. Extensive interactive case presentations will illustrate treatment and care considerations and explore the challenges of caring for this complex patient population.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
> Understand the significance of tumor biology in considering management options.
> Review the indications and techniques for management of primary and metastatic spinal tumors.
> Discuss surgical approaches and techniques for tumor resection and spinal reconstruction.

1:30 – 5:30 PM GREAT HALL EAST

SPECIAL COURSE VII: Peripheral Nerve Exposures and Nerve Repair Techniques

Complimentary to Section Resident Members. Additional $200 for medical registrants. Includes Lunch.

DIRECTORS: Allen H. Maniker, Robert J. Spinner
FACULTY: Eric L. Zager, Allan J. Belzberg, Rajiv Midha, Line Jacques, Robert L. Tiel, John E. McGillicuddy

COURSE DESCRIPTION:
This course will demonstrate the common exposures to peripheral nerves in the upper extremity and common techniques used for peripheral nerve reconstruction. It is targeted to practicing surgeons, senior residents and fellows.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
> Understand the pertinent and practical surgical anatomy of the brachial plexus and peripheral nerves in the upper limb as related to common nerve injuries, nerve entrapments, and other nerve disorders.
> Review common techniques utilized in the reconstruction of peripheral nerves (direct repair, grafting, nerve transfers, and nerve conduits).
> This course will prepare residents for written board examinations and young neurosurgeons for oral board examinations.

Ulnar Nerve
Eric L. Zager

Supraclavicular Plexus
Allan J. Belzberg

Graffing and Conduits
Majiv Midha

Median Nerve
Line Jacques

Radial Nerve
Robert L. Tiel

Infraclavicular Plexus
John E. McGillicuddy

Nerve Transfers
Allen H. Maniker

Lower Extremity
Robert J. Spinner

1:30 – 5:30 PM GREAT HALL WEST

SPECIAL COURSE VIII:
Evaluation and Management of the Post-operative Spine Patient

Special Course for Nurses, Nurse Practitioners and Physician Assistants.
Additional $110 for medical registrants. Includes Lunch.

DIRECTORS: Gregory R. Trost, Andrea L. Strayer, MSN, CNRN, ACNP, Erin Villard, RN, MN, ACNP
FACULTY: Richard P. Schlenk, Ajit A. Krishnaney, Ann Henwood, NP, Katie Evanchick, PA, Andrew N. Nemecek

COURSE DESCRIPTION:
This course will provide up to date practical information in regards to the post operative care of the spine patient with particular emphasis on post operative radiographic evaluation and clinical outcome, spinal infection, acute pain management, post operative voiding issues, complication avoidance, and decision making strategies. Expert advanced practice nurse, physician assistant, and neurosurgeon faculty will explore the challenges of caring for this complex patient population.

LEARNING OBJECTIVES:
Upon completion of the course, participants should be able to:
- Discuss general post-operative care and complication avoidance.
- Analyze the indications for post-operative imaging and relation to outcome.
- Discuss the evaluation and management of post-operative wound infection.
- Review care considerations for post-operative pain management and voiding difficulties.

1:30 - 2:15 PM
Post Operative Radiographic Evaluation
Richard P. Schlenk

2:15 - 3:00 PM
Spinal Infection
Andrew N. Nemecek

3:00 - 3:30 PM
Pain Management
Ann Henwood, NP

3:30 - 3:45 PM
Beverage Break

3:45 - 4:05 PM
Evaluation and Management of Bladder Issues
Erin Villard, RN, MN, ACNP

4:05 - 4:50 PM
Spine Surgery Complications
Ajit A. Krishnaney

4:50 - 5:30 PM
Surgical Complication Case Studies
Katie Evanchick, PA, Gregory R. Trost

Physician attendees will not be awarded CME credit for this course. Nursing contact hours will be provided through the American Association of Neuroscience Nurses. The AANN is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Physician assistants will receive credit for attendance. Each physician assistant will need to contact his or her individual membership association and certification board to determine the requirements for accepting credits. All attendees will receive a confirmation of attendance.

SATURDAY, MARCH 1

6:30 - 6:55 AM GREAT HALL NORTH

Case Presentations
MODERATOR: Tanvir Choudhri, Gerald E. Rodts, Jr.

6:55 - 7:00 AM GREAT HALL NORTH

Meeting Announcements

7:00 – 8:00 AM GREAT HALL NORTH

SCIENTIFIC SESSION IV
Evolution of Motion Preservation

MODERATORS: Michael P. Steinmetz, Brian R. Subach

SESSION DESCRIPTION:
This Scientific Session will review the evolution of motion preservation techniques in the cervical and lumbar spine. Currently available technologies and rapidly evolving experimental techniques will be evaluated.

LEARNING OBJECTIVES:
Upon completion of this course, participants should be able to:
- Discuss the various motion preservation technologies.
- Be aware of the theoretically and practical risks and benefits of motion preservation technologies.
- Review the current experience of senior surgeons with these new technologies.

7:00 - 7:12 AM
Cervical Arthroplasty: From Trial to Practice - What is Reality?
Regis W. Haid, Jr.

7:12 - 7:24 AM
Lumbar Arthroplasty: New Disks Arriving
Iain H. Kalfas

7:24 - 7:36 AM
Posterior Dynamic Stabilization: 1 to 2 Year Follow-up Results
William C. Welch

7:36 - 7:48 AM
Facet Joint Replacement: Early Results
Larry T. Khoo

7:48 - 8:00 AM
Panel Discussion

8:00 – 9:30 AM GREAT HALL NORTH

David Cahill Memorial Controversies Session Spine and Nerve

MODERATORS: Eric L. Zager, Regis W. Haid, Jr.

SESSION DESCRIPTION:
This Scientific Session will involve a debate presentation format. Controversial clinical management decisions will be presented with experts arguing their perspective on what the spine and peripheral nerve literature supports.

8:00 - 8:22 AM
Spinal Balance: Important or Not?
FACULTY: Stephen L. Ondra vs. Peter D. Angevine

8:22 - 8:44 AM
Spinal Cord Injury: Emergent or Urgent Surgery?
FACULTY: Michael G. Fehlings vs. Edward C. Benzel

8:44 - 9:06 AM
Piriformis Syndrome: Real or Not?
FACULTY: Robert L. Tiel vs. Aaron G. Filler

9:06 - 9:30 AM
Low Back Pain from DDD: Normal Aging or Pathological Condition?
FACULTY: Sohail K. Mirza vs. Daniel K. Resnick

9:30 – 10:15 AM EVENT CENTER

Coffee Break with Exhibitors

9:30 – 10:15 AM GREAT HALL CENTER

What's New Session V

MODERATOR: Marjorie C. Wang

10:15 - 11:00 AM GREAT HALL NORTH

Mayfield Awards/Presentations

MAYFIELD BASIC SCIENCE AWARD

10:15 – 10:25 AM
126. Transplanted Adult Spinal Cord Derived Neural Stem/Progenitor Cells Promote Early Functional Recovery through Neuroprotection after Rat Spinal Cord Injury
Ann Margaret Parr, Iris Kulbatski, Tazneem Zahir, Xing-Hua Want, Carmen Yue, Armand Keating, Charles Tator

MAYFIELD CLINICAL SCIENCE AWARDS

10:25 – 10:35 AM
127. Major Neurological Deficits Immediately following Adult Spinal Surgery: Incidence and Etiology over 10 Years at One Institute
Dennis E. Cramer, P. Colby Maher, Ondrej Choutka, Andrew W. Grande, Charles Kuntz, IV

10:35 - 10:45 AM
128. Quantitative Analysis of Cervical Spondylosis Using Diffusion Tensor Imaging
Matthew M. Kang, Paul R. Cooper, Anthony Frempong-Boadu

OUTCOMES COMMITTEE AWARD

10:45 - 10:55 AM
129. Safety, Efficacy and Quality of Life after CyberKnife Stereotatic Robotic Irradiation of Spinal Tumors
Fraser C. Henderson, Jay Liao, Nadim Nasr, Donald A. McRae, Inge Molzahn, Gregory J. Gagnon

11:00 AM – 12:30 PM GREAT HALL NORTH

Oral Point Presentations III (Concurrent Session)

MODERATORS: Tyler R. Koski, Michael W. Groff

11:00 - 11:03 AM
236. Transplantation of Human Marrow Stromal Cells and Mono-Nuclear Bone Marrow Cells into the Injured Spinal Cord: A Comparative Study
Courtney Paul, Amer F. Samdani, Itzhak Fischer, Birgit Neuhuber, Randal Betz

11:03 - 11:06 AM
237. Forget IV PCA; Perioperative Multimodal Oral Analgesia for Spine Surgery
Sharad Rajpal, Debra Gordon, Teresa Pellino, Andrea L. Strayer, Gregory R. Trost, Daniel K. Resnick, Thomas A. Zdeblick

11:06 - 11:09 AM
238. Three-Dimensional Motion of the Cervical Spine under Various Clinical Conditions: An In Vivo Study
Joseph S. Cheng, Fei Liu, Mohamed Mahfouz, Richard D. Komistek

11:09 – 11:15 AM
Discussion

11:15 - 11:18 AM
239. Five-Year Reversal in Methylprednisolone Administration Patterns for Acute Spinal Cord Injury
R. John Hurlbert, Mark Hamilton

11:18 - 11:21 AM
240. The Mini-open Transforaminal Lumbar Interbody Fusion in Elderly Patients: A Minimum 3-year Follow-up Results
Dong Yeob Lee, Sang-Ho Lee

11:21 - 11:24 AM
241. Accuracy of Detecting Pedicle Screw Loosening Using Plain X-Rays
Fras Dakhil-Jerew, Harpal Jadeja, John Shepperd

11:24 - 11:30 AM
Discussion

11:30 - 11:33 AM
242. Single vs. Multilevel Lumbar Fusion Surgery: Comparison of Self-Reported Outcomes, Operative Time, Estimated Blood Loss, and Length of Hospital Stay in Patients Undergoing Minimally Invasive Transforaminal Lumbar Interbody Fusion
David S. Rosen, Sherise D. Ferguson, Lydia Johns, Apazra Burks, Richard G. Fessler, Alfred T. Ogden

11:33 - 11:36 AM
243. The Risk Assessment of Outpatient Anterior Cervical Discectomy and Fusion with Instrumentation
Alan T. Villavicencio, Sigita Burneikiene, Evan Pushchak, Ewell Lee Nelson

11:36 - 11:39 AM
244. Correlation of Medical Comorbidity and Treatment Decision in Patients with Adult Scoliosis
Kai-Ming G. Fu, Christopher I. Shaffrey, Justin S. Smith, Peter Urban

11:39 - 11:45 AM
Discussion

11:45 - 11:48 AM
245. Cervical Kyphotic Deformity Correction Using 360-degree Reconstruction
Eric W. Nottmeier, Barry D. Birch, Hugh Gordon Deen, Naresh P. Patel

11:48 - 11:51 AM
246. Biocompatable and Matched Piezoresistive Polymeric Films for Implantable Telemetric Force Sensors for in Vivo Spinal Biomechanical Measurements
Steven Charles Fulop, Massood Tabib-Azar, Michael K. Moore, David J. Hart

11:51 - 11:54 AM
247. Nerve Sheath Tumors of the Spine: Tumor Subtype and Histology Correlate with Extent of Resection
Rene Sanchez-Mejia, Christopher P. Ames, Terri Haddix, Michael Galvez, Tarik Tihan, Cynthia Chin, Philip R. Weinstein, Nicholas M. Barbaro

11:54 AM - 12:00 PM
Discussion

12:00 - 12:03 PM
248. Intra-Operative Epidural Anesthetic Injection for Control of Immediate Post Operative Pain in PACU after Lumbar Spinal Surgery
Fred H. Geisler, David R. Wenzel, Daniel T. Laich

12:03 - 12:06 PM
249. Comparison of Outcomes of Oscillating Field Stimulation in AIS A Patients to Spontaneous Recovery Alone
Beverly C. Walters, Richard B. Borgens, Fred H. Geisler, Scott A. Shapiro, William P. Coleman

12:06 - 12:09 PM
250. A Novel Lateral Percutaneous Interspinous System for the Treatment of Lumbar Stenosis: Early Clinical and Radiological Results up to one-year Follow-up
Luiz Pimenta, Etevaldo Coutinho, Carlos Fernando Arias Pesántez, Juliano Lhamby, Leonardo Oliveira

12:09 - 12:15 PM
Discussion

12:15 - 12:18 PM
251. Comparison of High-Energy and Low-Energy Injury Mechanisms of Injury in an International Spine Trauma Database
Joseph Riina, Jared Wilsey, Amisha Patel, Michael G. Fehlings, Alexander R. Vaccaro, Charles Fisher, Marcel Dvorak, David G. Schwartz

12:18 - 12:21 PM
252. Cervical Atrophy following Posterior Cervical Fusion
Jaypal Reddy Sangala, Tann A. Nichols, Thomas B. Freeman

12:21 - 12:24 PM
253. Os Odontoideum: Presentation, Diagnosis and Treatment of a Series of 72 Patients
Erica Fay Bisson, Paul Klimo, Douglas L. Brockmeyer, Ronald I. Apfelbaum, Ganesh Rao, Peter Kan

12:24 - 12:30 PM
Discussion

11:00 AM – 12:30 PM GREAT HALL EAST

Oral Point Presentations IV (Concurrent Session)

MODERATORS: James M. Schuster, Paul M. Arnold

11:00 - 11:03 AM
254. PEMF Increases ACDF Fusion Rates in Patients 50 or Older
Kevin T. Foley

11:03 - 11:06 AM
255. Demographic Characteristics of Neuropathic Pain Patients Diagnosed with Failed Back Surgery Syndrome: Data from the PROCESS Trial
Line Jacques, Simon Thomson

11:06 - 11:09 AM
256. Access to Spinal Care: A Tale of Two Cities
R. John Hurlbert, Ralph J. Mobbs, Charles Teo

11:09 – 11:15 AM
Discussion

11:15 - 11:18 AM
257. Scar Lumbar Fibrosis? Any Help
Iñaki Arrotegui

11:18 - 11:21 AM
258. Effects of Age on Perioperative Complications in Extended Fusions of the Cervicothoracic Spine
Jordan M. Cloyd, Frank L. Acosta. Christopher P. Ames

11:21 - 11:24 AM
259. Prospective Self-Reported Outcomes Analysis of 108 Patients Undergoing Minimally Invasive Transforaminal Lumbar Interbody Fusion
David S. Rosen, Apazra Burks, Lydia Johns, Sherise D. Ferguson, Richard G. Fessler, Alfred T. Ogden

11:24 - 11:30 AM
Discussion

11:30 - 11:33 AM
260. Safety of Direct Laryngoscopy as a Preferred Intubation Technique in Cervical Spinal Stenosis: A Retrospective Analysis of 615 Patients
Scott Solomon, Michael H. Lavyne, Robert B. Snow, Maria Bustillo, Patricia Mack, Cynthia Lien, Kane O. Pryor

11:33 - 11:36 AM
261. Effect of Prodisc-L Disc Replacement on Motion and Stress in the Lumbar Spine
Yabo Guan, Marjorie C. Wang, Frank Pintar, Narayan Yoganandan, Dennis J. Maiman

11:36 - 11:39 AM
262. Is Myelopathy a Contraindication for Cervical TDR?
Luiz Pimenta, Thomas Schaffa, Leonardo Oliveira, Juliano Lhamby, Carlos Fernando Arias Pesántez, Etevaldo Coutinho

11:39 - 11:45 AM
Discussion

11:45 - 11:48 AM
263. Prospective, Randomized, Multicenter FDA IDE Study of Charité™ Artificial Disc vs. Lumbar Fusion: Effect at 5-Year Follow-up of Prior Surgery on Clinical Outcomes following Lumbar Arthroplasty
Paul C. McAfee, Scott L. Blumenthal, Richard D. Guyer, Richard T. Holt, Mohammed E. Majd, Fred H. Geisler, Robert J. Banco

11:48 - 11:51 AM
264. Prospective, Randomized, Multicenter FDA IDE Study of Charité™ Artificial Disc vs. Lumbar Fusion: Effect at 5-Year Follow-up of Age on Clinical Outcomes following Lumbar Arthroplasty
Robert J. Banco, Fred H. Geisler, Mohammed E. Majd, Richard T. Holt, Richard D. Guyer

11:51 - 11:54 AM
265. Utilization of Iso-C/3D Stereotactic Navigation for Percutaneous Pedicle Screw Fixation in the Lumbar Spine: Comparison with Standard Fluoroscopy
Irie Dunne, Justin F. Fraser, Roger Hartl, Karishma Parikh

11:54 AM - 12:00 PM
Discussion

12:00 - 12:03 PM
266. Management Strategies of Spinal Fusion in Delayed Esophageal Perforation after Anterior Spinal Surgery
Juan S. Uribe, Fernando L. Vale, Jaypal Reddy Sangala

12:03 - 12:06 PM
267. The Incidence of Clinically Significant Dysphagia in Anterior Cervical Discetomy and Fusion with Recombinant Human Bone Morphogenetic Protein
Luis M. Tumialan, Gerald E. Rodts, Jr., Praveen V. Mummaneni

12:06 - 12:09 PM
268. Temporary Occipitocervical Instrumentation for Complex Craniocervical Fractures
Russ P. Nockels

12:09 - 12:15 PM
Discussion

12:15 - 12:18 PM
269. Anatomic Relationship of the Internal Carotid Artery to C1: Clinical Implications for Screw Fixation of the Atlas
Daniel Jin Hoh, Skorn Ponrartana, Marcel Maya, Carl Lauryssen

12:18 - 12:21 PM
270. Long-Term Survival with Surgical Management of Superior Sulcus Tumors with Vertebral Involvement
Laurence D. Rhines, Jason Weaver, David Rice, William Bolton, Adam Goodyear, Arelene Correa, Jeremy Erasmus, Wayne Hofstetter, Ziya L. Gokaslan, Ritsuko Komaki, Ara Vaporciyan, Reza Mehran, Katherine Pisters, Jack Roth, Stephen Swisher, Garrett L. Walsh

12:21 - 12:24 PM
271. Bilateral Cervical Facet Dislocation: Clinical Outcomes of Treatment by Anterior Cervical Surgery. A Review of 43 Consecutive Patients
Aminullah Amini, Peter Kan, Meic H. Schmidt, Ronald I. Apfelbaum

12:24 - 12:27 PM
272. Comparison of Outcomes and Cost between Minimally Invasive and Open TLIF
Sanjay S. Dhall, Praveen V. Mummaneni, Michael Y. Wang

12:27 - 12:30 PM
Discussion

YOUR OPINION COUNTS!

Please remember to turn in your course evaluation for each Scientific Session, Special Course and Luncheon Symposia you attend. Your feedback is critical in helping the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves plan future education and Annual Meetings. Course evaluations are located in the back of this book. Please turn them in at registration following each course or in the CME Evaluation form dropbox.

Bone and Joint DECADE
2002 - USA - 2011

Published for Friends of the Decade

Volume 9, Issue 3 December 2007 / January 2008

I N S I D E

New Mission

Just over halfway through the Bone and Joint Decade, the USBJD Board decided 2007 was the time to revisit the Strategic Plan. Thomas Nelson and Colin Rorrie, who have worked with healthcare-related organizations to develop similar plans, met with the Board in June 2007. The Board reviewed the results of a survey sent to USBJD participating organizations and individuals, and mapped out a fresh vision, mission, and goals. At the December 2007 Board meeting, this was further revised.

The Board had two objectives in mind in developing the new strategic plan: to plan the focus of the USBJD for the next four years; that the work of the USBJD cannot be done in a decade, and that an ongoing and sustained effort is required. Discussion focused on defining the unique role of the Decade and the need that this fills for the public, patients with musculoskeletal conditions, and the healthcare professional community.

The key word in the Mission and Goal is collaboration. The USBJD wants to move increasingly towards engaging the broad spectrum of the musculoskeletal community and address common issues of concern and opportunity. The Mission recognizes that the primary mission of most, if not all, of its participating organizations relates to education and research, and thus the role of the USBJD is to be focused on activities that enhance those areas. The USBJD also believes that it should be increasingly active as an advocate, most particularly as a patient advocate.

Four programs developed by the USBJD were mentioned frequently by survey responders as being the most important and successful to date: Project 100 (professional education), the Young Investigators Initiative (researchers), Fit to a T (public education), and The Burden of Musculoskeletal Conditions in the United States (prevalence data resource). The USBJD will seek increasingly to engage members of the musculoskeletal community, and as common issues are identified and new programs developed it will be prioritizing those around which the greatest number of participating organizations is unified.

VISION

To be the effective coalition of patient-focused and professional organizations that improves bone and joint health in all persons in the United States.

MISSION

To promote and facilitate collaboration among the public, patients, and organizations to improve bone and joint health through education, research and advocacy.

GOAL

The goal of the USBJD is to improve bone and joint health by enhancing collaborative efforts among individuals and organizations in order to:

1) **raise awareness of the growing burden of musculoskeletal disorders on society;**
2) **promote wellness and prevent musculoskeletal disease;**
3) **advance research that will lead to improvements in prevention, diagnosis and treatment.**

Young Investigators Initiative

$13,525,726 in approved grants

Seventeen more participants entered the USBJD's Young Investigators Initiative at the Oct. 28-Nov. 1 workshop in Toronto; they joined 10 young investigators who were attending their second workshop. More than 100 young clinical investigators have been accepted into the program.

The program does not provide grants, but trains promising investigators to become successfully funded. The commitment of

Faculty and participants at the Young Investigator Fall 2007 workshop.

(Continued on page 2)

mentors to this program is significant; faculty work with participants until they are funded. The multi-disciplinary nature of the program is an important aspect since participants benefit from the cross-disciplinary knowledge and experiences.

The program has had impressive outcomes. By year-end 2007, 28 participants had obtained a total of $13,525,726 in approved research grants since beginning the program.

First-time participant Lauren Beaupre said: *"The most exciting--and for lack of a better word, inspiring--part of the workshop was seeing how passionate these experienced researchers remained about their research areas. Their willingness to share their experiences, to try to smooth the way for junior investigators, was very much appreciated. I look forward to attending my second workshop."*

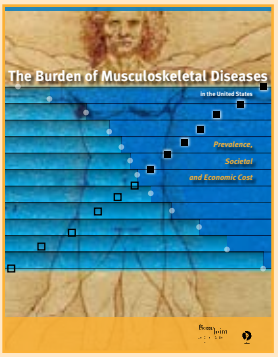
Beginning in 2008, the program will invite applications from young clinical investigators who have already received career development awards. Young clinical investigators that have a K grant/training award or foundation award, but have not obtained R01 funding may apply for the second part of the program centered around a workshop that focuses on the needs of grant applicants who have already submitted full proposals. The program will also now accept applications from basic scientists.

This workshop series is open to promising junior faculty, senior fellows or postdoctoral researchers who wish to secure funding for hypothesis-driven research. They must be nominated by their department or division chairs, have a faculty appointment in place or confirmed, and have a commitment to protected time for research. It is also open to senior fellows or residents doing research who have a faculty appointment in place or confirmed. For more information about the Young Investigator program www.usbjd.org/rd/?YII.

Burden of Musculoskeletal Diseases in the United States

Leading cause of disability – $847 billion – 7.7% of GDP

Joshua J. Jacobs, M.D.
Chair, Management Oversight Team, Burden of Musculoskeletal Diseases in the United States



The Burden of Musculoskeletal Diseases in the United States, to be released in February 2008, outlines why musculoskeletal disorders and diseases are the leading cause of disability in the United States and account for more that one-half of all chronic conditions in people over 50 years of age in developed countries. The economic impact of these conditions is also staggering: in 2004 the sum of the direct expenditures in health care costs and the indirect expenditures in lost wages has been estimated to be $849 billion dollars, or 7.7% of the national gross domestic product.

Beyond these statistics, the human toll in terms of the diminished quality of life is immeasurable. This situation is unlikely to improve in the foreseeable future and will likely be intensified by current demographic trends, including the graying of the baby boomer population, the epidemic of morbid obesity and the higher recreational activity levels of our elderly population.

Despite these compelling facts, the investment in musculoskeletal research in the United States lags behind other chronic conditions. While musculoskeletal diseases are common, disabling and costly, they remain under appreciated, under recognized and under resourced by our national policy makers.

Several professional organizations concerned with musculoskeletal health have collaborated to tabulate up-to-date data on the burden of musculoskeletal diseases to educate health care professionals, policy makers and the public. The information presented is an update of two previous editions entitled *Musculoskeletal Conditions in the United States,* published in 1992 and 1999 by the American Academy of Orthopaedic Surgeons. The present volume, renamed *The Burden of Musculoskeletal Diseases in the United States* represents a true collaboration of a coalition of professional organizations committed to the mission of the US Bone and Joint Decade.

These data should stimulate increased investment in basic, translational, clinical and health policy research to delineate the underlying mechanisms of these diseases and their response to treatment. Through such research, novel preventive and therapeutic approaches can emerge which promise to mitigate the societal and personal impact of musculoskeletal disease.

To order copies of the full publication in hard copy and the executive summary, email usbjd@usbjd.org. Put BMUS in the Subject field. The hard copy book is $50.00.

New Musculoskeletal Subject Examination

Washington University of St. Louis, Missouri, has been utilizing the NBME Musculoskeletal Subject Examination for more than a year, administering it to more than 100 students. Early statistical evaluation of the data shows that this examination differentiates well between students who have taken a MSK surgery and medicine course, and those who have not. It is hoped the examination will gain widespread acceptance, and be utilized by all programs to assess core knowledge in musculoskeletal science and clinical care as well as further stimulate development of musculoskeletal curricular content and quality. Project 100 co-chairs Joseph Bernstein, MD and George Lawry, MD strongly urge program

Musculoskeletal Subject Examination
Content Outline

Basic Science	20% - 30%
Normal Processes	20% - 25%
• Spinal cord	
• Peripheral nerve	
• Musculoskeletal organ structure/function	
Abnormal processes	75% - 80%
• Traumatic/mechanical disorders	
• Infections	
• Inflammatory	
• Fractures	
• Sprains/strains/dislocations	
• Repetitive motion injuries	
• Osteomalasia/osteoporosis/osteodystrophy	
• Degenerative disorders	

Clinical Science	70% - 80%
Categories	
• Neuromuscular	5% - 10%
• Infections	20% - 25%
• Degenerative/metabolic/nutritional	15% - 20%
• Inherited/congenital/developmental	5% - 10%
• Inflammatory/immunologic	10% - 15%
• Neoplasms	5% - 10%
• Traumatic injury/nerve compression	15% - 20%
Physician Task	
• Promoting Health and Health Maintenance	5% - 10%
• Understanding Mechanisms of Disease	5% - 10%
• Establishing a Diagnosis	70% - 75%
• Applying Principles of Management	10% - 15%

directors to use this examination for objective student assessment.

Using a content outline developed by NBME staff members in collaboration with a musculoskeletal task force of basic science and clinical faculty from several medical schools, a web-based exam comprised of 75 basic and clinical science items was assembled. The exam has been tested at Washington University in St. Louis, the University of Iowa, and the University of Rochester.

It's free for the next two years; the U.S. Bone and Joint Decade is underwriting the cost. For more information, contact Judith Miller (jmiller@nbme.org).

1st Advances in Rare Bone Diseases

The USBJD and Rare Bone Disease Patient Network are organizing a scientific and patient-interactive conference on rare bone diseases, titled "1st Advances in Rare Bone Diseases, (ARBD-1)," Oct. 23-23, 2008, on the NIH Campus in Bethesda, MD.

The conference objectives are:

1. to examine the latest advances in basic, translational and clinical research relating to a series of genetic bone diseases
2. to understand how recent advances may be applied to bone biology and clinical osteology
3. to allow selected trainees and junior faculty to present their work to experts in the field
4. to allow an interested lay audience to interact with scientific and medical experts in these diseases, as well as the pharmaceutical industry involved in bone and orphan diseases
5. to forge new areas of understanding and highlight the need for research and therapeutics.

Invited experts and attendees will include representatives in genetics, molecular biology, nanobiology, endocrinology, rheumatology, nephrology, gastroenterology, nutrition, exercise physiology, orthopedics, radiology, anthropology, immunology, cell biology and biomechanical engineering.

Conference co-chairs Dr. Michael Econs and Dr. Craig Langman, plus 16 international bone investigators serving as the Program Committee, have developed a scientific program that includes overarching plenary lectures, directed state of the art presentations, and lecturers from the Food and Drug Administration, the biomedical community and the pharmaceutical industry involved in orphan diseases to facilitate transfer of the latest technology from the biomedical research community to investigators working in the rare bone disease field, and Hot Topic discussions for seven specific disease entities.

For information on the conference, email usbjd@usbjd.org, and put Rare Bone Conference in the Subject field.

BJD World Network Conference

J. Edward Puzas, PhD
President, United States Bone and Joint Decade

Kenneth Koval, MD
Member, BJD International Steering Committee

The 7th World Network Conference of the International Bone and Joint Decade was held at Surfer's Paradise, Gold Coast, Australia, Oct. 13-14, 2007, with 34 countries represented by 115 participants. The scientific program focused on the economics and burden of musculoskeletal disease, new models of health funding, and back pain. Prior to the meeting, a two day patient advocacy seminar was held with sessions on data collection and presentation strategies to promote patient advocacy. Smaller sessions were held to discuss how to maintain efforts initiated during the Decade and to promote musculoskeletal awareness worldwide. A truly international event, the meeting highlighted advances that have occurred during the Bone and Joint Decade as well as future efforts.

Patient Meeting

The Oct. 2007 patient meeting in Australia was the 3rd gathering of those affected by bone and joint disorders. The goal is to educate key lay individuals from different countries on burden of musculoskeletal disease issues, and how to become effective advocates. The meeting sets them up to return to their country of origin and advance programs to increase awareness and advocate for research and education of bone and joint diseases. Over the past three years, there has been a measurable change in attitudes in Europe and Asia due to the

efforts of patients who have attended these meetings. The patient meeting was coordinated by Mr. Ben Horgan and Ms. Amye Leong, who brought their expertise to the gathering.

The U.S. patient representative in Australia was Kathleen Davis, a Ph.D.-trained educator from the University of Kansas. Kathy learned from her participation, contributed ideas to the other patient groups, and established networks that will help her spread the word of musculoskeletal burden in the U.S. The patient meeting ended with an exhilarating walk titled "BJD On The Move," commemorating International Arthritis Day and was well covered by Australian print and broadcast media.

National Action Network Bone and Joint Meeting

International Bone and Joint Decade chairman and Decade founder, Professor Lars Lidgren of Sweden, opened the National Action Network (NAN) meeting the following day, Oct. 13. The main topics: increase awareness of back pain and explore issues related to health economy. Both areas filled gaps in information for the delegates from participating countries.

As Lidgren explained, these topics add to the "collective vision of a society where prevention, treatment and care of people with musculoskeletal disorders are of high importance." Presentations ranged from scientific, to economic, diagnostic and treatment of back disorders. Of particular interest were two presentations, one on the epidemiology of the global burden of disease; the other on the use of the media to alter attitudes and outcomes for back pain. The epidemiological study, well presented by Professor Alan Lopez of the University of Queensland, Australia, was a sophisticated analysis of the worldwide burden of bone and joint diseases, highlighting the importance of research and education. Much of his data came from World Health Organization databases. Lopez and his colleagues will be updating their information and has asked the U.S. team working on the Burden of Musculoskeletal Diseases in the United States to participate in the latest data compilation.

Using the media to alter public behavior related to back pain was presented by Professor Rachelle Buchbinder of the University of Melbourne, Australia. In this fascinating study, she saturated television to change the attitude of patients with low back pain. Her outcome measures were quantifiable and statistically valid; she showed that with the right message she could accelerate a return to normal function and save health care dollars. Her work has been published in premier medical journals; these studies also won her Volvo Award for research excellence. Her research underscores the need to elevate the general public's awareness of musculoskeletal diseases.

Other presentations included what is new in surgery, biomechanical issues of the spine, educational programs and the role of allied health care professionals.

Beyond 2010

Breakout groups addressed the Bone and Joint Decade after 2010 (or 2011 in the United States). It was unanimously agreed that all of the programs that have been initiated and had success in the previous ten years should not be allowed to end. Strategic planning for the future of the International Bone and Joint Decade (as well as the United States NAN) is well underway.

Awards

The National Osteoporosis Foundation won the best video award for elevating public awareness of osteoporosis. The video, a hauntingly effective clip of celebrities and others viewed as if you were seeing their skeletons on an x-ray, highlighted the importance of skeletal structure in the functioning of our bodies.

2008 in Pune, India; 2009 in Washington DC

The India NAN will host the 2008 BJD meeting in Pune. The theme of the meeting has yet to be decided.

The international meeting of the Bone and Joint Decade will be the United States in Oct. 21-25, 2009, in Washington DC. Plans for the meeting, presented by Dr. Stuart Weinstein who, with Dr. Nancy Lane, are organizing the U.S. meeting, received unanimous approval from the international delegates. See item on following page for more.

Social Events

A welcoming dinner recognized specific programs carried out by NANs, and BJD ambassadorships were awarded. A Saturday night gala was held at the Australian Outback Spectacular, an indoor rodeo-like presentation of life in the outback.

Personal Reflections

As we remain intensely focused on our clinical and research duties, sometimes we forget about the plight of different cultures. Meetings such as this really bring into focus the value of a coordinated international approach to bettering musculoskeletal conditions. This idea was clearly brought out when the perspectives of the different countries were discussed. For example, delegates from Oman did not consider molecular and cellular research on bone and cartilage a high priority for their Bone and Joint Decade initiatives. Delegates from the United States and Western Europe didn't consider driving practices and road conditions as major risk factors. Yet both contribute hugely to the overall goal of bettering bone and joint health and dealing with trauma to the skeleton. Bringing together health care professionals in all of these areas can only accelerate achieving meaningful goals for our missions.

Public Education

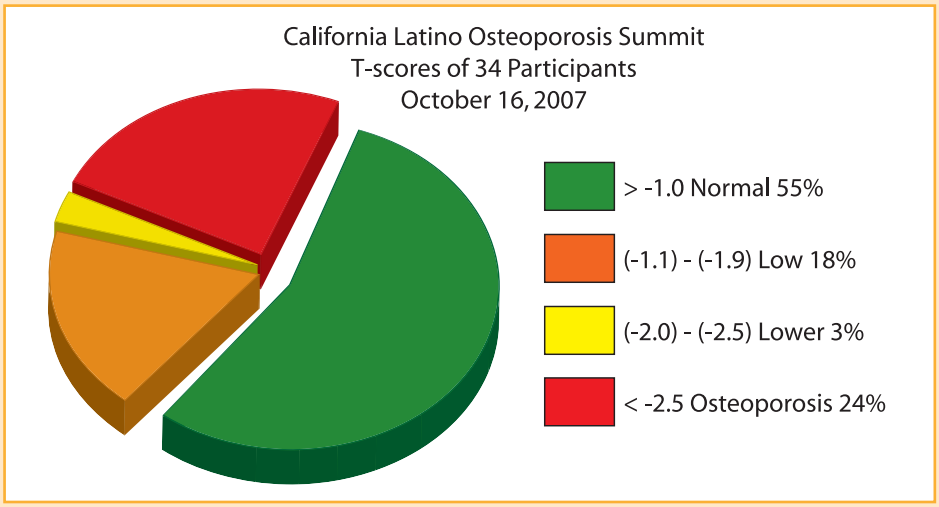
California Osteoporosis Summit

A Latino version of *Fit to a T* was launched at a gathering of advocates Oct. 16 in Sacramento, an event organized by the California Hispanic Osteoporosis Foundation, Foundation for Osteoporosis Research and Education, National Association for Commissions for Women, the California Orthopaedic Association and the USBJD. Participants were invited to take a bone-density screening test. TV anchor Bette Vasquez, who welcomed delegates to the session, moderated the program that included speeches by Mexican Consul General Alejandra Bologna; Toby King, USBJD Executive Director; Augusto Focil, MD, president of the California Hispanic Osteoporisis Foundation; patient Margaret Jarvis; Beverley Tracewell, Program Director, Foundation for Osteoporosis Research and Education, Mary Wiberg, Executive Director, State of California Commission on the Status of Women, Nancy Zelaya and John Dorsey of Procter & Gamble, and Kimberly Templeton, MD who presented *Fit to a T.*

Summit feedback suggests most attending were unaware of how devastating osteoporosis can be and the impact of osteoporosis on the Latino community.

Thirty four participants were tested, with results represented in the graph below. Note that attendees were predominantly younger than the age at which bone loss is traditionally a concern, yet 27 percent were in the range to raise concern.

The 34 participants who were tested learned about their bone health. All attendees were made California Osteoporosis Summit Embajadores (Ambassadors), challenged to increase their advocacy efforts in California's Latino community. Partner organizations are expected to continue working together to keep the Summit's momentum flourishing in the Latino community.



Mark your agendas!

Bone and Joint Decade Global Network Meeting October 21-25, 2009 Washington, DC, USA

In 2009, the USBJD will host this annual international meeting of physicians and researchers from many musculoskeletal medical and basic science disciplines, as well as patient advocates. It's theme? Awareness.

The two-part meeting includes: a patient advocates meeting and a Congress for all participants. Built primarily on disease categories representing 80 percent of the burden of disease, osteoarthritis, inflammatory arthritis, osteoporosis, back pain, trauma and pediatric musculoskeletal conditions, the meeting will highlight the latest global perspectives on the burden of these diseases. It will also focus on showing how changing health policies, funding for research and prevention activities in different countries can lower the burden, reflecting the mission of the Decade.

Patient advocates and professionals will be able to see advocacy in action; international delegates will meet with their ambassadors or embassy personnel, and U.S. attendees will meet with their congressional leaders on Capitol Hill. This will serve as an instructive "how-to" advocacy exercise. Each participant will have information and messages tailored to reflect their country's burden of disease musculoskeletal issues.

OsteoporosisCare Tool Launched

Free Application will Help Improve Bone Health of Americans

Primary care physicians now have a tool to help improve their patients' bone health: OsteoporosisCare. It was introduced Oct. 20, World Osteoporosis Day, in association with the USBJD and the New Jersey Academy of Family Physicians (NJAFP) at the American Osteopathic Academy of Orthopedics (AOAO) annual meeting in San Francisco. OsteoporosisCare is a point of care and clinical decision support tool that assists with the diagnosis and treatment of osteoporosis; it is available as a website, mobile website, and standalone application for PocketPC at www.OsteoporosisCare.org.

At the same session, Debra Spatz, DO, AOAO immediate Past President, introduced Laura Tosi, MD, who presented "Breaking Tradition: A New Look at Fracture Care." Kimberly Templeton, MD spoke on "Osteoporosis Intervention: Is it Ever Too Early?", then held a session on

Fit to a T, the USBJD's public education on bone health and osteoporosis.

In developing OsteoporosisCare, the NJAFP brought together osteoporosis experts in family medicine, internal medicine and endocrinology to develop content and recommendations for the application. NJAFP Executive Vice President Ray Saputelli, CAE notes, "OsteoporosisCare is unique in the way it combines evidence-based education and clinical decision support through the synthesis of a myriad of often conflicting guidelines into clear, actionable recommendations for clinicians who diagnose and treat osteoporosis."

OsteoporosisCare includes calculators for determining calcium intake, tools to help decide patients who need bone density scans or treatment with medication for osteoporosis, information about bone health, rehabilitation, treatment options, and patient education handouts. OsteoporosisCare's informtion is hyperlinked to allow rapid navigation and facilitate use of the application while a physician is with a patient.

Application developer Ryan Kauffman, MD said, "While this information is not new to physicians, this application organizes the data into a form that can be quickly accessed and applied in a minute or two such that it can fit within the constraints of even short office visits."

Osteoporosis thins bones so the risk of fracture is increased. Of the 10 million people in the U.S. with osteoporosis, half of the women and a quarter of the men over age 50 will suffer an osteoporosis-related fracture.

For more than 50 years, the New Jersey Academy of Family Physicians has been advancing the cause of family physicians and their patients; it has more than 1,500 members. The NJAFP is the largest primary care medical society in the state and a chapter of the American Academy of Family Physicians.

OsteoporosisCare can be accessed free of charge at www.OsteoporosisCare.org.

Experts in Arthritis

Free Public Seminar for People with Arthritis and People Who Care About Them

Rowland Chang, MD, Steven Goldring, MD, and Katie Lorig, RN, DrPH

One hundred and eighty participants attended Experts in Arthritis: A Meeting of World-Renowned Health Care Professionals and Researchers For Patients and Their Families on Nov. 10, 2007 in Boston at the annual scientific meeting of the American College of Rheumatology.

Organized by the USBJD, American College of Rheumatology, Arthritis Foundation, and American Academy of Pediatrics, 20 world-renowned experts, many delegates to the ACR meeting, participated with presentations, as moderators or as panelists in breakout sessions on osteoarthritis, rheumatoid arthritis, and juvenile arthritis. Attendees reported favorably on the quality of information provided and opportunities for exchange. Most patients attending were members of the Massachusetts and the Northern and Southern New England chapters of the Arthritis Foundation.

Neal Birnbaum, MD, President of the American College of Rheumatology, and Jack Klippel, MD, President and CEO of the Arthritis Foundation welcomed participants. A plenary session featuring Roland Chang, MD, Kate Lorig, RN, DrPH, and Amye Leong, was moderated by Steven Goldring, MD. Moderators and panelists at the breakout sessions who provided clinical and research updates and answered questions from participants included David Fox, MD, Allan Gibofsky, MD, JD, Carol J. Henderson, PhD, RD, Marc Hochberg, MD, MPH, Maura D. Iversen, DPT, MPH, ScD, Elinor A. Mody, MD, Geri B. Neuberger, RN, EdD, Peter A. Nigrovic, MD, C. Egla Rabinovich, MD, MPH, Christy Sandborg, MD, Michael H. Schiff, MD, Vibeke Strand, MD, Anthony D. Woolf, MBBS, FRCP.

Partner organizations are looking into repeating the seminar in 2008 in San Francisco.

USBJD Empowers Global Community on World Spine Day

In a global communications breakthrough for the USBJD, Dr. Milagros Rosado, a Life University faculty member, educated and empowered the global Spanish-speaking community on spinal health on CNN En Espanol. In a live interview with award-winning anchor Claudia Palacios, Dr. Rosado explained the importance of excellent posture and an active spine-healthy lifestyle. Using Straighten Up demonstrations, Dr. Rosado explained the significance of the Rancho Bernardo posture studies. These landmark studies, conducted by gerontologists at UCLA, demonstrated a positive correlation between stooped hyperkyphotic posture and increased mortality, functional disabilities and increased independent risk for osteoporotic fractures in elderly adults.

The photo of Dr. Rosado with Viviana Waggoner and Ron Kirk is courtesy of Jennifer Bennet of Life University. To view a video on Straighten Up America, go to http://www.life.edu/Chiropractic_and_Wellness/SUA_video.asp

In a related World Spine Day event, Dr. Jeff Miller and intern Christy Metz from the Clinics at Cleveland Chiropractic

College Kansas City demonstrated Straighten Up exercises on Kansas City's NBC affiliate, KSHB-TV.

Other exciting World Spine Day developments included new Straighten Up launches in the United Kingdom, Sweden and Cyprus with a new website. In Korea, Carol Grubstadt DC presented the Straighten Up Posture Pod to legislators and practitioners. Originating in the US, the rapidly growing Straighten Up initiative has been translated so far into eight languages.

USBJD Board

Joshua J. Jacobs, MD

Joshua J. Jacobs, MD, has been appointed as the representative of the American Academy of Orthopaedic Surgeons. Dr. Jacobs has been involved with the USBJD as a member of its research committee and faculty member of the Young Investigator Initiative. He is also chair of the Management Oversight Team for The Burden of Musculoskeletal Diseases in the United States.

Member News

Health Volunteers \Overseas

John Fisk, MD, has joined the Board of Directors of Health Volunteers Overseas. Dr. Fisk was previously professor of surgery in the Division of Orthopaedics and Rehabilitation and medical director of the Motion Analysis Laboratory at the Southern Illinois University School of Medicine.

Osteogenesis Imperfecta Foundation

The Osteogenesis Imperfecta Foundation has named Tracy Smith Hart as its new Chief Executive Officer. Ms. Hart was previously National Director for Development with the American Kidney Fund.

Pediatric Orthopaedic Society of North America

Musculoskeletal Pediatric Curriculum

This initiative has become a collaborative effort between the sections of orthopaedics and rheumatology of the AAP. Dr. Yuki Kimura from the rheumatology section and Dr. David Spiegel are coordinating the activities. The focus will be on using case-based discussions to achieve objectives listed for each module. The first two modules will be the screening musculoskeletal examination and the differential diagnosis of a limping child.

Annual Carl T. Brighton Workshop on Trauma Care in Developing Countries

The Annual Carl T. Brighton Workshop on Trauma Care in Developing Countries took place Dec. 8-11, 2007 in Ahmadabad, India with representatives from POSNA, WHO, CDC and World Bank among others. The goal: bring orthopaedic surgeons from different nations together to share ideas on improving musculoskeletal trauma care in resource challenged environments. The focus was on systems issues, on teaching/training, and on the role of international organizations in improving the delivery of services. Recommendations may help international organizations expand current trauma care training programs, especially in regions with limited resources. The principle sponsor is the Association of Bone and Joint Surgeons; co-sponsors include Stryker, Synthes, and OREF. Supporters include the Bone and Joint Decade and Orthopaedics Overseas. Proceedings will be published as a symposium in Clinical Orthopaedics and Related Research.

International Clubfoot Symposium

More than 200 participants from 44 countries attended the symposium in Coralville, Iowa, Sept. 12-14, 2007, an event funded by NIH and the Ponseti International Association in collaboration with WHO, CDC, POSNA, EPOS, AAP, and Shriners Hospitals for Children. The meeting was a unique forum that explored aspects of the etiopathogenesis of idiopathic and syndromic clubfoot, which represents the most common musculoskeletal birth defect and a leading cause of childhood disability in the developing world.

In addition, a rigorous evaluation of treatment outcomes for both non-invasive and surgical procedures was addressed. There were discussions on public health issues with a goal of developing programs to prevent and eradicate neglected clubfoot. The timing of this last aspect was important since there is a need for information on clubfoot research to fulfill the Resolution of the 58th World Health Assembly of May 2005 on "Disability, including prevention, management and rehabilitation," and because 2008 will be the United Nations Year of the Disabled.

Finally, the symposium was an opportunity for professionals from different disciplines (including basic science, medicine, and public health) to interact. The meeting is expected to lead to more translational research and training such as risk factors related to countries, ethnicities, etc; data collection and surveillance leading to the development of prevention and eradication programs; creation of an International Clubfoot Research Network; development of foreign research capacity for this crippling deformity, and for other musculoskeletal birth defects. The *Iowa Clubfoot Declaration: "A Promise Made,"* to stimulate policy and funding agencies to address the problem of clubfoot was signed by all participants.

From the President

J. Edward Puzas, PhD,
USBJD President

Privilege and Responsibility: Two Cornerstones of Research

For many of us in the business of biomedical research we don't often take the time to reflect on two key aspects of our mission; the privilege of performing research and the responsibility that comes with it.

Privilege:

In the end, the goal of all biomedical research is to eliminate, or at least reduce, the burden of diseases in people. Human health is the most precious of gifts and the one thing we all strive to maintain. To be entrusted with the task of bettering health for all men and women defines a purpose that most other jobs can not match. But sometimes we lose site of the real goal.

We sometimes feel we are in competition with other scientists. We complain to the government that there is not enough money in the research coffers to support our efforts. We agonize over the grants and papers that we struggle to submit. We feel as if we are tugged in so many directions that we can't do what we were trained to do. We sometimes reach a point where the big picture has disappeared and we become stalled in microscopic concerns that stifle our labors. One escape from this trap is to stop, take a deep breath and appreciate that our job is really a great privilege. In what other profession will you find all people, collectively, wishing us to succeed?

Extending this thinking a bit farther, who really is invested in our advances? Journal editors and study section grant reviewers have a keen interest, but the most interested parties should be the public and patients. Maybe we should make a greater effort to get the public and patients on our side.

Responsibility:

Biomedical research has many layers of responsibility. One of these that the general public probably doesn't think much about is scientific integrity, the integrity to hold one's work up to detailed scrutiny. It doesn't take long for a young scientist to figure out that it is possible and actually quite easy to step off the path of scientific integrity.

Probably in few other professions can dishonesty be hidden for as long as it can in research. There are plenty of examples of careers being made, grants being funded and papers being published from scientists with a deceitful approach.

Eventually, with time these untrustworthy individuals are identified but in the interim much harm can be done. And so, the responsibility of being unconditionally honest must be at the top of a scientist's nature.

Privilege and responsibility, in many ways, define the traits that make for good research. As in any profession where the stakes are large, only those researchers that are guided by the highest of standards will truly make a contribution to the needs of us all. And these traits are critical to engaging the public and patients in supporting the need for more research to reduce, and eventually eliminate, the burden of disease.

Thanks!

The USBJD thanks the following sponsors for their generous support of the Decade:

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Bone and Joint DECADE 2002 - USA - 2011

U.S. Bone and Joint Decade

The USBJD Newsletter serves as a means of communication for participating organizations, their members, and other affiliated organizations. To submit a story idea or an article, please contact:

U.S. Bone and Joint Decade
6300 N. River Road
Rosemont, IL 60018
Ph 847-384-4010 • Fax 847-823-0536
usbjd@usbjd.org
www.usbjd.org

Web Committee Report (February 11, 2008)
Chair: Joseph Cheng, MD, MS
Members: Tom Yao, MD (Resident), Ben Rosenbaum (Medical Student)

Web Site Projects

1. Log-In Function Implementation
    a. Previously, the web site was an open and public page. Due to sensitive nature of some of our content, a log in function was requested to access privileged files and data.
    b. Executive committee log-ins implemented with security functions.
        i. Replaces prior log-in and password protected files.
    c. **Next Project**: Create log-ins for ***ALL*** Spine Section members.
        i. Access annual meeting content of recent meeting.
        ii. Access future content projects such as podcasts and case reports.
        iii. Will rely on Web Site fellow to implement.
        iv. Expected roll out in 2009.
2. Annual Meeting Content Project
    a. Audio and video of the scientific sessions will be captured at this years annual meeting.
        i. Content will be made available to members only for the first year, then opened to the public at the subsequent annual meeting.
        ii. Will implement making public a single audio and video file each month on the Education Page for a "Lecture of the Month" series.
3. Section Archive Project
    a. Past communications and documents from the previous officers and committee members have been scanned in and archived on the web site.
    b. Given the quality of the prior documents, text search will not be easily done.
    c. Database being developed to maintain the "history" and "section memory" of our Spine Section.
4. Meeting News Area Project
    a. Early plans for a web page that is "live" during the meetings to provide current news, notices, reports, and announcements.
    b. Tied into an informational board (large plasma TV monitor) that will cycle through the same information that the web page is linked to.
    c. Early development phase, not expected until 2009 Annual Meeting if launched.
5. Spine Journal Club Audio Podcast Project
    a. Editors/Speakers: Drs. J. Cheng, M. Wang, M. Schmidt, M. Steinmetz
    b. Article Reviews
        i. Summaries of 5-10 articles from spine journals each month.

ii. Expected roll out date of October 1, 2008.

Recent Web Page Updates

1. Home Web Page Updates
    a. Updated 2008 Annual Meeting Information links.
2. Newsletters Page
    a. **Need new Newsletters Quarterly Updates (Last one was Fall 2006).
3. Meetings Page Updates
    a. New 2008 Annual Meeting Information.
    b. Abstract submission link and Exhibitor prospectus on-line.
    c. Prior Annual Meeting abstracts, digital posters, and audio/video media are on-line.
4. Education Page
    a. AANS Online Case Studies link on-line.
    b. Spine Journal Club Audio Podcast Project pending.
    c. Case presentation project being considered.
5. Fellowships and Awards Page
    a. Clinical Trials Fellowship information now on-line.

Web Page Logistics

1. Budget: $15,000 requested annually
    a. Web Site Fellowship Stipend **($2,500)**
        i. Money for a medical student or resident to purchase hardware and software who wish to focus on advancing their web site skills in updating and creating new content for our web page.
    b. Computer Software updates for Web publishing and maintenance, audio and video manipulation and conversion programs will be the bulk of the software purchases in the coming year.
    c. Computer Supplies will need to be included as well such as DVD-R's, labels, memory, hard drives, video players, and other computer items related to the development of Web content.
    d. AV costs of recording the upcoming annual meeting will be from the Web budget at this time **($9,000)**.
    e. Plan to upgrade account for increased bandwidth and allow streaming video and audio.
    f. Approval for time and effort for web development of databases and secure areas.
2. Web Site Personnel
    a. Summer Stipend awarded to Ben Rosenbaum, a medical student at Vanderbilt to help with development and maintenance of the web page.
3. Consider asking for specific corporate sponsorship of this project (Web advertising space).

Archive Page

- No longer online. Access to Executive Committee content via log-in system.

As always, new content is always welcome and any suggestions for the website are appreciated. Please feel free to contact me at, or send website materials to: joseph.cheng@vanderbilt.edu.

Respectfully Submitted,

Joe Cheng, M.D.
Vanderbilt University

From: Anthony P. Macalindong [mailto:APM@aans.org]
Sent: Tue 2/19/2008 7:13 AM
To: Cheng, Joseph; Chris A. Philips
Cc: Ronald W. Engelbreit
Subject: RE: Joint Spine Section - Web Log In

Greetings Dr. Cheng:

Unfortunately, the AANS does not have in-house staff who programs in PHP so I'm afraid that we would not be able to offer you programming support.

As for the membership list, we recommend for us to remain with existing arrangements where Chris sends the Spine Section an excel file.

In regard to hosting the Spine Section's website back within AANS' network, we can certainly entertain that option. However, do please be informed that the AANS is in the process of evaluating a new Association Management System (AMS) so staff's time and attention will be focused until mid 2010 on the implementation of said new system.

If you have any questions or concerns, please feel free to give me a call.

Thank you and best regards,

Tony Macalindong
AANS Director of Information Systems
847-378-0523

From: Cheng, Joseph [mailto:joseph.cheng@Vanderbilt.Edu]
Sent: Monday, February 11, 2008 11:42 PM
To: Anthony P. Macalindong; Chris A. Philips
Cc: Ronald W. Engelbreit
Subject: RE: Joint Spine Section - Web Log In

Tony,

Thanks for your response. We host through Gate.com, which is just a generic Unix hosting site without any programmers or designers. We have done everything on the web page for the Spine Section ourselves and so do not have a company to fall back on for our PHP and SQL needs. For future reference, if we grow or if I need to hand off the job to someone without a lot of web experience, would you recommend that we consider moving the site to be hosted by AANS or is it better to budget for a consultant to help with the web site?

As for the membership list, if it is easier for Chris to send it to me in an Excel file, we can implement the log-in function for the members ourselves and I will most likely add a student fellowship stipend into our web budget to cover the costs for help doing this. Also, another option would be to create a login pass-through, which we can use for both the Spine Section and CSNS Web Sites, using a handshaking method based on an

encrypted string such as a concatenation of the user's ID and login timestamp and run through MD5, SHA1, SHA512, etc., based on a a field in our table that lists our users' AANS and CNS UserID's. Either way is fine with me, and it sounds like just getting the list may be easier but we may need occasional queries to Chris to verify an e-mail, which we use for our user names.

Thanks,

Joe

_____

Joseph S. Cheng, M.D., M.S.
Assistant Professor of Neurological Surgery
Director, Neurosurgery Spine Program
Vanderbilt University Medical Center
T-4224 Medical Center North
Nashville, TN 37232-2380
(615) 322-1883
(615) 343-8104 Fax

From: Anthony P. Macalindong [mailto:APM@aans.org]
Sent: Fri 2/8/2008 6:28 PM
To: Chris A. Philips; Cheng, Joseph
Cc: Ronald W. Engelbreit
Subject: RE: Joint Spine Section - Web Log In

Hello Dr. Cheng:

First of all, please allow me to introduce myself. I am Tony Macalindong, Director of Information Systems for the AANS.

Dr. Cheng, being that the your web site is not hosted at AANS, your best approach would be to read the file that is provided to you by Chris Philips. As for your programming needs, that would probably be best addressed by the company that currently hosts your website. That same company will most likely have a team of programmers and designer that could design and create the web program that would read and list your membership directory.

If you have other questions or concerns, please feel free to give me a call.

Best regards,

Tony Macalindong
AANS Director of Information Systems

From: Chris A. Philips
Sent: Thursday, January 31, 2008 11:04 PM
To: Cheng, Joseph

Cc: Anthony P. Macalindong
Subject: RE: Joint Spine Section - Web Log In

Dear Dr. Cheng,

Glad you have the files in hand and organizing them. I completely understand how difficult that can be. I have over 15000 entries in my Archives database.

Your questions about your website are not areas in my expertise. I am copying Tony Macalindong, our IS Director on this e-mail. I'm sure I'll be involved with pulling files for you, but that's minor compared to what you are asking.

Chris

From: Cheng, Joseph [mailto:joseph.cheng@Vanderbilt.Edu]
Sent: Thu 1/31/2008 4:26 PM
To: Chris A. Philips
Subject: Joint Spine Section - Web Log In

Chris,

Thanks for the scanning project, the files have been uploaded to the web site but now all we have to do is sort them out and put them in an organized menu structure…which is harder than it sounds…

But for the next project, we have created a log in system for the executive committee and now want to create one for the general membership in order to access content (such as this years meeting audio and video) that we do not want to be public. I would either need to access the membership list for the Spine Section from you (in an Excel format preferably) or have you allow us to query the AANS site to verify e-mail addresses of our members which we use as their log in name. Also, as we keep expanding the content and needs of the web site, what should we be able to expect from the AANS in terms of support (including site maintenance and content/programming help) and what do I need to present to the executive committee for funding?

Regards,

Joe

_____

Young Neurosurgeons Committee Liaison to the AANS/CNS Joint Section on the Disorders of the Spine and Peripheral Nerves

Goal: To formalize the liaison's position within the Joint Section and to integrate this person into the committee structure.

Proposal: There will be two liaisons Young Neurosurgeons Committee at a time serving staggered 3 year terms. Thus elections from the YNC will occur two out of every 3 years. In the first year, the liaison will not have any committee assignments. In years two and three the liaison will be place onto a standing committee: either the membership or scientific program.

Each liaison will be expected to participate in the executive committee meetings that occur at the CNS, AANS and Joint Section Meeting.

Hopefully, this structured pathway will allow young neurosurgeons another avenue to participate in the Joint Section Leadership and develop future leaders in the section.

Respectfully submitted,

Eric Potts

Joint Section on Disorders of Spine and Peripheral Nerves
October 18, 2007

Proposed changes to section's Rules and Regulations (changes from prior version are noted with additions underlined and removed parts with ~~strikethrough~~):

AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves

Rules and Regulations

ARTICLE I Name

This section shall be named, known and styled as:

The Joint Section on Disorders of the Spine and Peripheral Nerves of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons.

It is an affiliate Section of the parent organizations, the American Association of Neurological Surgeons and Congress of Neurological Surgeons, and as such, members are also bound by the Rules and Regulations of the parent organizations.

ARTICLE II Objectives & Functions

Section 2.01

The objectives of this Section shall be:

A. To foster the use of neurosurgical methods for the treatment of diseases of the spinal neural elements, the spine and peripheral nerves.

B. To advance spinal neurosurgery and related sciences, to improve patient care, to support meaningful basic and clinical research, to provide leadership in undergraduate and graduate continuing education, and to promote administrative facilities necessary to achieve these goals.

Section 2.02

The function of this Section shall be:

A. To provide a forum for education and research on basic form and function of the spinal neural elements and spine toward the improvement of spinal neurosurgical procedures that alleviate human disease and suffering through treatment of the spinal disorders. Within such consideration will be the

surgical procedures used in the treatment of congenital-developmental, traumatic, neoplastic, degenerative, vascular, infectious-inflammatory, and toxic metabolic diseases of the spinal neural elements, the spine and peripheral nerves.

B. To cultivate and provide leadership in promoting excellence in the quality of spinal and peripheral nerve neurosurgery.

C. To coordinate activities and programs relating to the spinal neural elements, the spine and peripheral nerves for the parent organizations and other societies, committees, and agencies.

D. To represent the parent organizations, at their discretion, at any organizations or group on matters relating to the spinal neural elements, the spine and peripheral nerves.

E. To advise the parent organizations of activities which relate to diseases and surgery of the spinal neural elements, the spine and peripheral nerves by other individuals, groups, and/or agencies.

ARTICLE III Membership

Section 3.01

There shall be seven classes of membership:

A. Active: Active members of the American Association of Neurological Surgeons or Congress of Neurological Surgeons who have a special interest in disorders of the spine and peripheral nerves.

B. Associate: Individuals who qualify as associate members of the American Association of Neurological Surgeons or Congress of Neurological Surgeons.

C. Honorary: The Executive Committee may grant honorary membership to such qualified physicians or scientists who in their opinion, merit such recognition. They shall not be required to pay dues and shall not have the privilege of voting or holding office or serving on committees.

D. Corresponding: Corresponding members shall reside beyond the limits of the United States of America and Canada, and they shall be chosen because of their devotion and contributions to spinal neurosurgery. They shall be required to pay dues. They shall not have the privilege of voting and holding elective office. However, they may serve as members of special committees. They need not be corresponding members or the equivalent of the American Association of Neurological Surgeons or the Congress of Neurological Surgeons.

E. Adjunct: Adjunct members shall be physicians or scientists of other collateral or related fields who are active in the area of spinal disorders but are not members of the American Association of Neurological Surgeons or Congress of Neurological Surgeons. Each adjunct member must be sponsored by two active members and must be approved by unanimous vote of the Joint Section on Disorders of the Spine and Peripheral Nerves Executive Committee. They shall be required to pay dues. They shall not have the privilege of voting or holding elective office.

F. Resident: Resident members of the American Association of Neurological Surgeons or Congress of Neurological Surgeons who have a special interest in disorders of the spine and peripheral nerves.

G. Senior: Senior membership may be granted to any Active member 60 years of age or older who applies to the Secretary in writing, or to any Active member who retires from active practice. Senior members shall be exempt from payment of annual dues. Senior members may be reinstated to Active membership on request, subject to approval of the Executive Committee.

Section 3.02 Responsibilities and Privileges

Only active members shall vote and hold elective office.

Section 3.03 Disclaimer

No form of membership in this section should be interpreted as endorsing the qualifications of the respective member to perform operations on human patients. Members who use their membership in the Joint Section for advertising purposes implying that they have special skills or training endorsed by the Joint Section shall forfeit this membership.

Section 3.04 Applications for Membership

Applications for membership should be made in writing to the Secretary of the Joint Section. Complete applications for each membership category shall be reviewed by the Executive Committee. Applications for Active membership will be presented to the membership for review in the ~~Joint Section Newsletter~~ section's newsletter, mailings, or other suitable electronic means. Ratification of Active membership applications will occur at the first Joint Section Annual meeting 60 or more days thereafter. The Executive Committee may confer all other membership status categories without vote of the Active membership of the Joint Section at the Annual meeting.

Section 3.05 Dues and Assessments

Dues and assessments shall be heard and reviewed by the Executive Committee of the Joint Section on Disorders of the Spine and Peripheral Nerves. Recommendations by the Executive Committee will be presented to the membership in the ~~Joint Section Newsletter~~ Joint Section's newsletter, mailings, or other suitable electronic means. Ratification of dues and assessments shall be determined by majority vote of the Active membership at the first Joint Section Annual meeting occurring 60 days or more thereafter.

Section 3.06 Termination of Membership:

A. Membership shall terminate if any member, (other than Honorary, Corresponding, Adjunct or Senior) ceases to maintain membership in either one or the other of the parent organizations (AANS or CNS).

B. Membership shall be terminated if dues or assessments be delinquent by one or more years and no response is received within 30 days following a reminder.

C. Membership shall terminate upon receipt by the Secretary of a letter of resignation.

D. Honorary, Corresponding, Adjunct or Senior membership may be terminated by a majority vote of the Joint Section Executive Committee, without vote of the Active membership.

ARTICLE IV Officers & Executive Committee

Section 4.01

~~The control of the Joint Section on Disorders of the Spine and Peripheral Nerves shall be vested in the Executive Committee, who shall manage the affairs of the Section in conformity with the Rules and Regulations of the American Association of Neurological Surgeons and Congress of Neurological Surgeons. Only active members who are active members of both the American Association of Neurological Surgeons and Congress of Neurological Surgeons shall be officers or members of the Executive Committee.~~

Authority and overall governance of the Joint Section on Disorders of the Spine and Peripheral Nerves is vested jointly in the American Association of Neurological Surgeons and the Congress of Neurological Surgeons. Subject to that authority and governance, management and administration of the Joint Section on Disorders of the Spine and Peripheral Nerves shall be vested in the Executive Committee, who shall manage the affairs of the Section in conformity with applicable law and with the Rules and Regulations of the American Association of Neurological Surgeons and Congress of Neurological Surgeons, including such other directives and policies as shall be jointly issued by

those organizations. Only active members who are active members of both the American Association of Neurological Surgeons and Congress of Neurological Surgeons shall be officers or members of the Executive Committee.

Section 4.02 Officers

The officers of this Section shall be the Chairperson, Chairperson-Elect, Immediate Past-Chairperson, Secretary, and Treasurer.

Section 4.03 Executive Committee

~~The Executive Committee shall consist of the five officers, three Members at large, the Newsletter Editor, the Exhibits Chairperson, the Annual Meeting Chairperson and the Scientific Program Chairperson. Ex-officio members may be appointed at the discretion of the Chairperson.~~

The Executive Committee of the AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves (Joint Section) shall consist of voting and non-voting members. The voting members of the Executive Committee shall include: the Joint Section Chairperson, the Joint Section Chairperson-Elect, the Joint Section Immediate-Past Chairperson, the Joint Section Treasurer, the Joint Section Secretary, the Joint Section three Members at Large, the Annual Meeting Committee Chairperson, the Scientific Program Committee Chairperson, the Exhibit Committee Chairperson, the Future Sites Committee Chairperson, the Education Committee Chairperson, the Rules and Regulations Committee Chairperson, the Nominating Committee Chairperson, the Research and Awards Committee Chairperson, the Publications Committee Chairperson, the Membership Committee Chairperson, and the Newsletter Committee Chairperson. The non-voting members of the Executive Committee shall include the Chairpersons of Ad Hoc Committees.

Section 4.04 Tenure of Office

The Chairperson shall serve a term of one year. The Secretary and Treasurer shall serve a term of three years and may not serve more than two consecutive terms. The Members at Large of the Executive Committee shall assume a term of three years and may not serve more than two consecutive terms. All officers and members of the Executive Committee shall assume office immediately following the Annual Joint Section Meeting.

Section 4.05 Duties:

A. Chairperson: The Chairperson shall preside at all meetings of the Section. The Chairperson shall appoint all committees not otherwise provided for, and shall perform all such other duties as appertain to the office of Chairperson. The Chairperson shall be an ex officio member of all committees with the right to

vote only in the case of a tie vote. The Chairperson shall supervise the execution of all rules.

B. Chairperson-Elect: The Chairperson-Elect shall be a voting member of the Executive Committee and shall assume the responsibility of the Chairperson in the case of absence, death, resignation or inability to act of the Chairperson.

C. Secretary: The Secretary shall keep an accurate record of the proceedings of meetings of the Section and the Executive Committee and shall conduct all correspondence for the Executive Committee. The Secretary shall issue printed or written notice of all meetings of the Section and The Executive Committee, and shall perform such other duties pertaining to this office, as may be required from time to time by the Executive Committee. The Secretary, in conjunction with the AANS-CNS office, shall be responsible for maintaining a current roster of the membership. It is the duty of the Secretary to bring forth membership applications for review. The Secretary will maintain a current complete copy of the Rules and Regulations of the Joint Section on Disorders of the Spine and Peripheral Nerves. The Secretary will maintain an active roster of the make-up of the Executive Committee of the Joint Section. The Secretary will serve as the liaison between ~~AANS National Office representatives~~ meeting services providers and the Executive Committee in assisting with the identification of future meeting sites.

D. Treasurer: The Treasurer shall keep an accurate record of the Collections and disbursements of funds, shall pay all financial obligations incurred by the Joint Section.

E. Executive Committee: The Executive Committee shall supervise and effect an efficient management of the Joint Section, review applications for membership, and recommend, challenge or reject the applications, and report annually, or when requested to the parent organizations on all activities of the Joint Section.

F. The officers and Executive Committee shall be held blameless for all activities of this Joint Section or for activities done in its name, except for any theft from the organization or for willful and malicious conduct.

G. Election of Officers and Executive Committee: It shall be the duty of the immediate past Chairperson of the Joint Section to convene the Nominating Committee each year prior to the AANS Annual Meeting. The slate of nominees for officers of the Joint Section will be presented to the Executive Committee in April when the Joint Section Executive Committee convenes at the AANS Annual Meeting. Following Executive Committee approval, the slate of candidates will be presented to the membership in the ~~Joint Section Newsletter~~ <u>Joint Section's newsletter, mailings, or other suitable electronic means</u>. The membership may nominate additional candidates and will vote on

the candidates at the next Joint Section Annual Meeting.

ARTICLE V Standing Committees

Section 5.01

Unless otherwise noted, each standing committee shall be composed of a Chairperson (or Co-Chairs) selected by the Chairperson of the Executive Committee. The size of the standing committees and member selection will be determined by the Chair of the Executive Committee in conjunction with the Chairperson of the standing committee.

Section ~~5.01~~ 5.02 Education Committee

The Education Committee shall serve to coordinate and assist the American Association of Neurological Surgeons and the Congress of Neurological Surgeons in selecting scientific papers and developing programs. Additional subcommittees may be formed as necessary to coordinate, and/or develop scientific and educational programs for other organizations. ~~The Chairperson of the Education Committee shall be appointed by the Chairperson of the Joint Section.~~

Section ~~5.02~~ 5.03 Nominating Committee

The Nominating Committee shall consist of three (3) members appointed by the Joint Section Executive Committee and the Committee Chairperson. The immediate past Joint Section Chairperson shall serve as Chairperson of the Nominating Committee. One member shall be appointed each year to replace the member rotating off of the committee. Each member's appointment shall last three years. This committee shall present candidates for the officer positions within the Joint Section to the Executive Committee at the time of the CNS Annual Meeting preceding the year of the election. In February of the year of the election, the slate is presented and nominations are taken from the floor. Fifteen days after presentation, the full ballot will be circulated to the full voting membership. The balloting shall be conducted by mail (paper or electronic) and only the ballots received on or before ~~March 15th of the year of the election~~ the day preceding the annual business meeting shall be counted. A simple majority of those voting shall be necessary to elect an officer.

Section ~~5.03~~ 5.04 Annual Meeting Committee

The Annual Meeting Committee shall consist of five members, two to be appointed each year by the Executive Committee. One experienced member shall be appointed to serve as the Annual Meeting Chairperson. One senior member will be the Exhibits Chairperson, who will serve a three year term. The other senior member shall be appointed to serve as the Scientific Program Chairperson.

The two newly appointed members shall be appointed to serve as Assistant Annual Meeting Chairperson, and Assistant Scientific Program Chairperson, and shall assume their respective responsibilities for the Annual Meeting the subsequent year. The Exhibits Chairperson will serve as the liaison between the Executive Committee and vendors who wish to exhibit at the Joint Section Annual meetings.

Section ~~5.04~~ 5.05 Newsletter Committee

~~The Newsletter Committee shall consist of two (2) members, one member appointed every two years. Their appointment shall last four (4) years. The senior member shall be Newsletter Editor for two (2) years. The junior member shall serve as Assistant Newsletter Editor.~~ The Newsletter Committee shall produce the section's newsletter at regular intervals.

Section ~~5.05~~ 5.06 Research and Awards Committee

The Research and Awards Committee shall consist of seven members, each serving a three year term. The Executive Committee shall appoint 2 new members each year. The current Chairpersons of the Awards Committee and the Research Committee will serve as Co-Chairpersons of this Committee until the next Annual Meeting of the Combined Section, at which time a new Chairperson or Co-Chairpersons will be appointed by the Chairperson of the Section. Every three years thereafter, the Section Chairperson shall appoint a new Committee Chairperson(s), subject to ratification by the Executive Committee, who shall serve an additional three year term. This Committee shall conduct and coordinate the scientific and research activities of the Joint Section, at the will of the Joint Section Executive Committee. The Committee shall be responsible for soliciting applications for and selecting finalists and awardees for the Research Awards, Fellowship Awards, the International Fellowship Awards, and the Mayfield Award(s). The nomination and selection of candidates for the Meritorious Service Medal will not be the responsibility of this Committee, but will be the responsibility of the Past-Chairperson, the current Chairperson, and the Chairperson-Elect of the Joint Section.

These Awards may be awarded each year at the Joint Section Annual Meeting and are intended to establish funding for clinically relevant research related to the spine and peripheral nerves, and to provide a means of peer review for clinical research projects to help improve the quality of the proposal and therefore enhance competitiveness for N.I.H. funding. A secondary goal of the Awards is to create an annual funding mechanism aimed at answering questions pertaining to the treatment of disorders of the spine and peripheral nerves.

Two Fellowship Awards may each be awarded annually at the Joint Section Annual Meeting, each to a U.S. or Canadian neurosurgical resident to provide supplemental funding for advanced education and research in disorders of the

spine or peripheral nerves. This funding is to be provided for post-graduate or residency fellowship training away from the parent institution.

Two International Fellowship Awards may each be awarded annually at the Joint Section Annual Meeting, each to a neurosurgical resident or a neurosurgeon from outside of the U.S. or Canada to provide supplemental funding for advanced education and research in disorders of the spine in the form of fellowship experience in the United States or Canada.

The Mayfield Award may be awarded annually at the Joint Section Annual Meeting to a neurosurgical resident or fellow who authors an outstanding manuscript detailing a laboratory or clinical investigation in the area of spinal or peripheral nerve disorders. The intent of the Award(s) is to recognize and promote research among residents and fellows in training in the surgical subspecialty of Neurological Surgery. Two Awards are available, one for clinical research and one for basic science research

Section ~~5.06~~ 5.07 Rules and Regulations Committee

~~The Rules and Regulations Committee shall consist of three (3) members, one member appointed by the Joint Section Executive Committee each year. Their appointment shall last three years with the senior member acting as Chairperson. This~~ The Rules and Regulations Committee shall review the Joint Section's Rules and Regulations and make written recommendations to the Executive Committee. Changes in the Rules and Regulations approved by the Executive Committee must be ratified by the AANS Board of Directors and the CNS Executive Committee. Approved changes or amendments must be presented and explained to the membership in the ~~Joint Section Newsletter~~ Joint Section's newsletter, mailings, or other suitable electronic means. Rules and Regulations thus presented will be voted upon by the membership at the next Joint Section Annual Meeting. A two-thirds majority is required for ratification.

Section 5.08 Publications Committee

The Publications Committee shall promote the educational goals of the section and provide educational information in written and/or electronic format for section members. The committee shall work closely with the Newsletter and Web Site Committees.

Section 5.09 Web Site Committee

The Web Site Committee shall manage the section's web site. The committee shall update the site as appropriate to reflect the section's activities.

Section 5.10 Membership Committee

The Membership committee shall assist the section in: maintaining the membership roster, managing new applications for membership, developing of ways to expand membership.

Section 5.11 Outcomes Committee

The Outcomes committee shall serve as a resource for the section's outcomes-related activities. The committee shall work closely with the Guidelines Committee. The Outcomes Committee selects the Annual Outcomes Award and also works with the Fellowships & Grants Committee to screen and select the Clinical Trials Fellowship Award.

Section 5.12 CPT Committee

The CPT Committee shall serve as a resource for the section's CPT-related activities.

Section 5.13 Peripheral Nerve Task Force

The Peripheral Nerve Task Force shall serve as a resource for the section's Peripheral nerve activities.

Section 5.14 Public Relations Committee

The Public Relations Committee shall serve as a resource for the section's public relations activities.

Section 5.15 Fellowships Committee

The Fellowships Committee shall assist the Executive Committee and overall section with respect to the various fellowships offered, the location of participating programs, length of commitment, as well as the clinical, research and educational content of such fellowships.

Section 5.16 Strategic Planning Committee

The Strategic Planning Committee shall make recommendations relative to the strategic planning of the section.

Section 5.17 Guidelines Committee

The Guidelines Committee shall assist the section in reviewing and developing relevant guidelines relating to section activities.

ARTICLE VI Meetings

Section 6.01 Schedule

The Joint Section shall meet with the American Association of Neurological Surgeons and the Congress of Neurological Surgeons at their respective annual meetings. At these meetings, the Joint Section's Executive Committee may call special Business Meetings when required to conduct the activities of the Section. The Joint Section shall hold an Annual Scientific and Educational Meeting at a time that does not conflict with the annual meetings of the American Association of Neurological Surgeons and Congress of Neurological Surgeons, and shall hold the Joint Section's Regular Annual Business Meeting at that time.

Section 6.02 Quorum

~~At all Business Meetings of the Joint Section called by the Executive Committee, both regular and special, the majority of Active members present and voting at the time of the meeting shall constitute a quorum for the purposes of transacting the business of the Joint Section.~~

A. Annual Business Meetings: At all Annual Business Meetings held in conjunction with the Joint Section Annual Meeting, the presence of 10 Active members at the time of the meeting shall constitute a quorum for the purposes of transacting the business of the Joint Section.

B. Executive Committee Meetings: At all Executive Committee Meetings, both regular and special, the presence of a majority of Executive Committee voting members at the time of the meeting shall constitute a quorum for the purposes of transacting the business of the Joint Section.

Section 6.03 Items Requiring Vote

Actions that require a vote of the Active membership of the Joint Section will be presented to the membership in the Joint Section Newsletter, or by separate mailing/emailing. Voting will occur at the next Joint Section Annual meeting.

In the event of an action that the Executive Committee believes requires membership consideration before and distinct from the Joint Section Annual meeting, the action may be presented to the Active membership by special mailing/emailing. Returned ballots will be counted by the Secretary no earlier than sixty (60) days after they are sent to the members. Unless otherwise specified in the Rules and Regulations, a mail/email vote shall be determined by a simple majority of those who cast votes.

Section 6.04 Rules of Order

Robert's Rules of Order shall govern the conduct of Executive Sessions of the

Joint Section unless otherwise specified.

Section 6.05 Order of Procedure

The order of the procedure of the Executive Session of the Joint Section shall be as follows:

A. The Call to Order
B. The Reading of the Minutes
C. Unfinished Business
D. Reports of the Executive Committee and Committees
E. Election of New Members
F. Appointment of Committees
G. New Business

ARTICLE VII Ammendments to Rules & Regulations

Section 7.01

A. New or revised Rules and Regulations may be proposed by any active member. The proposed change or addition shall be mailed (paper or electronic) to the Chairman of the Rules and Regulations Committee. Within 30 days of receipt of the proposed revision, the proposed change or addition and the recommendations of the Rules and Regulations Committee regarding such proposal shall be submitted to the Secretary for consideration at the next Joint Section Executive Committee meeting.

B. Upon approval by the Joint Section Executive Committee, the proposed changes will be presented to the AANS Board of Directors and the CNS Executive Committee for ratification.

C. Rules and Regulation changes or amendments thus approved will be presented to the membership in the ~~Joint Section Newsletter~~ Joint Section's newsletter, mailings, or other suitable electronic means.

D. Discussion and ratification of proposed Rules and Regulations changes shall occur at the next Joint Section Annual meeting, 60 days or more thereafter.

E. Any change in the Joint Section Rules and Regulations shall require a two-thirds majority of the Active members present at the annual Joint Section business meeting.

Lumbar Fusion Task Force meeting with CMS and NIAMS
December 4, 2007

Daniel Resnick, LFTF
Steve Glassman, LFTF
Mike Kaiser, LFTF
Steve Phurroughs, CMS
Madeline Turkeltaub, NIAMS
Jim Panagis, NIAMS

Background:

The CMS MCAC reviewed the evidence for and against the performance of lumbar fusion in the Medicare Population in the fall of 2006.

A technical report was created that the professional societies were invited to comment upon.

The combined societies presented significant objections to the methodology and conclusions of the technical report at the November, 2006 MCAC meeting.

It was acknowledged by all that there were significant limitations to the evidence available for the rational application of lumbar fusion, especially as it regards the medicare population.

European randomized studies regarding lumbar fusion published in the last five years are characterized by patient inclusion criteria, surgical treatments, and non-surgical treatments that are dissimilar to those employed in North America.

The SPORT studies have demonstrated that the performance of randomized controlled trials in the North American degenerative spine patient population is problematic due to the ability of patients to choose their preferred treatment modality. Crossover effects limit the conclusions that can be drawn from intent to treat analyses and "as treated" analyses mitigate the benefits of randomization.

In October, 2007, the MCAC set priorities for further research. Although lumbar fusion was not listed as a priority, the issues of ambulation, mobility, and quality of life in the medicare population were featured as priorities by the Institutes on Aging and by the NIAMS. The management of lumbar degenerative disease is a major contributor to these issues.

Purpose:

The combined societies' task force on lumbar fusion seeks to collaborate with the CMS and the NIAMS to develop a process by which the development of appropriate medical

evidence can be institutionalized with regard to the management of degenerative spinal disease, particularly in the medicare population.

Proposal:

The combined societies' task force on lumbar fusion proposes to submit an application for support of a consensus conference on the topic of levels of evidence for the evaluation of treatments for lumbar degenerative disease.

The purpose of this consensus conference is to gather important stakeholders including the CMS and the NIAMS in order to:

1) Define diagnostic criteria for consideration of various procedures (surgical, injection, or non-invasive):

2) Establish a common mechanism for patient enrollment in prospective datasets

3) Establish appropriate outcomes measures for the treatment of the individual disorders

4) Establish criteria for acceptable study design for the investigation of these disorders in this population.

5) Designate the priorities for research in the immediate future.

The importance of this exercise is as follows:

In order to obtain adequate patient numbers of representative patient populations in a reasonable time frame, a large number of treatment providers will need to enter patients into the proposed studies. The combined societies' have agreed to promote the participation in these types of studies by their members through multiple mechanisms, including potentially linking participation to membership privileges or board certification.

In order to get widespread participation from the societies' leadership and membership, there needs to be some assurance that the results of these prospective studies will be used to guide treatment and funding decisions. Therefore, at least tacit approval through participation by the CMS is vital to any possible success.

In order to avoid as much bias as possible, these studies will be performed without any industry support (i.e. no Advamed). The societies' have indicated a willingness to fund preliminary projects and the organizers have received some commitments from private philanthropic foundations. These funds will be adequate only for pilot studies. We will eventually need to submit applications for federal support for the performance of such studies. We seek the active participation of the NIAMS in the proceedings of the

conference and the input of the NIAMS on panel member selection so that our decisions regarding study design and outcomes measures are consistent with the highest possible standards.

Potential Results:

It is hoped that this process of collaboration between clinicians, researchers, and payors in establishing ground rules prior to the undertaking of difficult and expensive outcomes studies can achieve two goals. First, it is hoped that we can develop meaningful and useful information regarding the relative worth of lumbar fusion as performed in North America. Second, it is hoped that this process can serve as a template for the investigation of other issues of interest to the CMS and to professional societies.

Report:

Combined Societies Lumbar Fusion Task Force
Center for Medicare Services
Medical Coverage Advisory Committee Meeting
October, 22, 2007
Baltimore, MD

Dr. Steven Glassman and Dr. Daniel Resnick represented the LFTF at the October 22nd MCAC meeting on healthcare priorities. The purpose of the meeting was to establish areas of interest to the CMS where there were perceived gaps between practice and high quality evidence. The purpose of the LFTF involvement was to demonstrate our response to the charges discussed at the November, 2006 MCAC meeting which focused on lumbar fusion.

Overall, it became clear that expenditures for lumbar fusion represent a very small fraction of the overall CMS budget and that the CMS was unlikely to focus on lumbar fusion in the near future for purely fiscal reasons. It was notable that the LFTF was the only physician group to provide testimony.

The testimony offered was essentially a summary of the what the LFTF was and a proposal to work with the CMS to eliminate practice/knowledge gaps through cooperative research and ongoing communication.

While the immediate effect of the presentation was negligible, heart disease and cancer being the main topics discussed, several important positive events transpired. First of all, we were able to demonstrate to the director of the technology assessment branch of the CMS (Steve Phurrough) that spine surgeons are ready, willing, able, and organized to help answer key questions regarding lumbar fusion. We were able to secure an invitation for a private meeting with Dr. Phurrough in early December. Second, Madeline Turkeltaub expressed a desire to work with medical societies on the problem of low back pain in the elderly, a project that we may be ideally poised to pursue.

Follow-up from this leeting will include the interview with Dr. Phurrough and the initiation of communication with Dr. Turkeltaub in order to address the needs and wants of both the CMS and a potential funding agency with regard to research on lumbar fusion.

To: Professional Society Coalition Task Force on Lumbar Fusion Executive Board.

Topic: CMS Meeting

On December 4, 2007 Dr. Dan Resnick, Dr. Michael Keiser and I met, on behalf of the Lumbar Fusion Task Force, with Dr. Steve Phurrough and the CMS coverage analysis group in Baltimore, MD. Participating in the conference from CMS along with Dr. Phurrough were; Dr. Jyme Schafer (the author of the recent CMS editorial in SPINE), Deirdre O'Connor, Dr. Rosemary Hikeem, and Leslie Fitterman. Also participating by teleconference were Madeline Turkeltaub (Deputy Director NIH, Extramural Program, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)**)** and Dr. James Panagis (Medical Officer for NIAMS - Division of Musculoskeletal Diseases).

As an introduction, we reviewed the development and purpose of the Lumbar Fusion Task Force. The structure and purpose of the Task Force seemed to be, at this point, familiar to the CMS staff.

We then had an extensive discussion regarding existing hurdles to evidence development for lumbar fusion. There was agreement among all the participants that collection of outcomes data could only be a sustainable process if physicians believe that the data will be meaningful, and will be utilized. The Task Force members raised several specific concerns surrounding this challenge. In particular, we discussed the need for better diagnostic specificity such that pathologies other than spondylolisthesis could be effectively studied. We also raised a concern that methodologic reviews have often failed to include clinical relevance in their evaluation of data quality, creating a skepticism regarding the implementation of "evidence-based" guidelines.

Dr. Phurrough stressed his concern, both in regard to low back pain and in other non-spine examples, that CMS had encountered significant difficulty in studying what he described as "ingrained practice patterns". He contrasted this in to the general acceptance of RCT based studies regarding new technology. He also talked about the importance to CMS of data collection in a "post market" timeframe for newer technologies. In addition, he expressed an interest, at several points in our discussion, in obtaining data regarding treatment of low back problems over the time period leading up to surgical decision making.

We also had a lengthy discussion regarding mechanisms, on the part of both the Professional Societies and CMS which might promote better evidence development. The CMS staff indicated the need to obtain data reflecting experience in both academic and community practice settings. There was agreement regarding the need for methodologic alternatives or at least modifications to the standard RCT Paradigm.

We discussed options for collaboration between the task force, CMS and NIAMS. The CMS staff also felt AHRQ might be an important participant in this collaboration. We reviewed a prior suggestion from Dr. Panagis that a conference grant through NIAMS might be appropriately utilized to study this type of multidisciplinary challenge. It was felt that a meeting including representatives from the Task Force, CMS, NIAMS, AHRQ and additional external methodologic/epidemiologic support might help to bridge the gap between functional/realistic study design and adequate methodologic clarity to make the data useful. Dr. Phurrough then

suggested that CMS would contact AHRQ directly and ask them to do some preparatory work on this project.

We also discussed more short term Task Force physician panel goals. The CMS staff seemed to believe that an effort by the panel to review existing data, with a focus on clinical relevance and in particular for the Medicare population, might be beneficial. This effort might be helpful to better identify the gaps in evidence particularly with regard to diagnostic categorization. In another potential area for collaboration we discussed potential uses of the Medicare database for analysis by the Lumbar Task Force physician panel. There was discussion with regard to how effective an analysis of the Medicare database could be in this effort, but also a willingness on the part of the CMS staff to work with the physician panel in this effort.

Finally, the NIAMS staff intimated that a request for proposal might be forthcoming from NIAMS with the intent of initiating a project on outcomes development for low back disorders.

Action items from this meeting were:

1. CMS to contact AHRQ with regard to modeling potential approaches to evidence development for lumbar fusion and to explore potential alternatives to standard RCT protocols.

2. The Task Force will prepare a R-13 grant proposal for NIAMS to organize a multi-disciplinary conference addressing the challenges in evidence development surrounding lumbar fusion outcomes, and the need to develop a workable solution.

3. The CMS staff expressed the desire for continued interval meetings with the Task Force, and a desire to support the Task Force and the Professional Societies in their effort to promote improved evidence development for lumbar fusion.

Submitted by Dr. Steven Glassman

MedCAC Recommended
Top 100 Medicare Research Priorities

On October 22, 2007 CMS convened a public meeting of the Medicare Evidence Development & Coverage Advisory Committee (MedCAC) entitled *Evidentiary Priorities for the Medicare Program.* The purpose of this MedCAC was provide CMS with prioritized research topics that could best fill evidentiary gaps for issues of critical importance to the Medicare program and the Medicare population. These issues will provide a framework for the scientific community in developing evidence that will directly affect coverage and impact the health of Medicare beneficiaries.

During the meeting, scientists from the National Heart Lung, and Blood Institute, the National Cancer Institute, the National Institute on Aging, the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Institute of Diabetes, Digestive, and Kidney Diseases, the National Institute of Mental Health, and the National Institute of Neurological Disorders and Stroke provided the MedCAC panel with the most important evidence gaps from their Institute's perspective.

Based on this input, the MedCAC panel created a list of more than 100 research issues for the Medicare population and rated the importance of each topic on a scale of 1 (lowest priority) to 5 (highest priority). Scores were averaged. The table presents the research issues with averages of the panel members' scores. The top 20 issues are starred.

Group	Research Issue	Average score (* indicates top 20)
Cancer	Appropriate ESA use in cancer patients	4.4*
	Benefit of cancer prognostic markers: OncoDX, Her-2-Neu	4.0*
	Benefits of high cost cancer drugs	4.0*
	New radiation treatments for cancer: IMRT, proton beam	4.0*
	Late effects of cancer treatments	3.2
	Fecal DNA testing as screening	3.1
	CT lung cancer screening	3.1
	Benefits of CT colonography	2.9
CV	Treatment of atrial fibrillation	4.1*
	Does screening for atherosclerotic disease improve outcomes?	3.9*
	Effectives of CT angiography	3.8*
	CHF prevention	3.7*
	Vascular disease imaging. What does it add?	3.7
	Long term safety of drug eluting stents	3.6
	Use of drug eluting stents for severe vascular disease	3.6
	Long term use of antiplatelets following drug eluting stents	3.4
	Diastolic heart failure	3.4
	Cardiovascular treatment effects in women	3.3
	Control of blood pressure in specific subgroups	3.2
	Plavix for peripheral artery disease	3.1
	Does vascular disease imaging drive practice?	2.6

Diabetes	Benefit of early aggressive treatment for diabetes	4.0*
	Comparative effectiveness of all diabetes treatments using hard outcomes	3.9*
	Benefit of weight loss medication on diabetes	3.9*
	Optimal hemoglobin A1c goals in elderly	3.8*
	Impact/timing of bariatric surgery in diabetes	3.7
	Identifying diabetes at early stages	3.6
	Optimizing behavioral therapy for diabetes	3.5
	Benefits of self glucose monitoring in elderly	3.5
	Benefits of improving BP and lipid control on diabetes	3.4
Drug	Genetic testing to reduce adverse drug events	3.8
	New anticoagulants	3.5
	Are ESAs beneficial in the treatment of unexplained anemia in elderly?	3.1
	ESA use in all patient groups	2.9
	Enhancing adherence to polypharmacy	2.9
	Genetic testing for warfarin sensitivity	2.8
HEM	Home International Normalized Ratio monitoring for warfarin	3.1
	Storage time for blood	2.5
Mental	Improving depression care in primary office care	3.8*
	Benefits of antidepressants in elderly	3.6
	Improving screening for depression	3.4
	Appropriate sequence of psychotropics	3.4
	Does treating depression improve outcomes of other chronic illnesses?	3.3
	Impact of antipsychotic medications on physical/mental problems	3.2
	Paying for psychiatric care manager time	3.2
	Role of physician extenders	3.1
	Benefit of psychotherapy in elderly	3.0
	Financial model to optimize depression care	2.6
MISC	Appropriate use of hospice care	4.1*
	Appropriate end-of-life care	3.8*
	Enrollment in clinical trials	3.4
	Effect of smoking cessation counseling on Medicare population	3.2
	Total body cooling in sudden death	2.4
NEURO	Comparative effectiveness of treatment of carotid artery disease	4.2*
	Comparative effectiveness of treatment of acute stroke treatment: clot retrieval vs. reperfusion drugs	4.0*
	Comparative effectiveness of treatment of intracranial disease	3.8*
	Diagnosis and treatment of TIA	3.6
	Benefits of advanced imaging for acute stroke to identify who best benefits from intervention	3.5
	Does occupational, physical, and speech slow deterioration in neurodegenerative diseases?	3.4
	Does post acute stroke rehabilitation decrease falls, readmissions, and SNF placement?	3.2
	Does change in coverage of fall prevention services decrease falls?	3.1
	Does structured exercise program improve mobility-related ADLs?	3.1
	Treatment of patent foramen ovale post stroke	3.1
	Treatment of berry aneurysm	2.9
	Imaging in the diagnosis of Parkinson's disease	2.8

	Comparative effectiveness of treatment of early surgery vs. medical treatment for epilepsy	2.7
	Benefit of early positive pressure ventilation in amyotrophic lateral sclerosis	2.7
	Neuroimaging in headaches	2.6
	Discontinuing anticonvulsants in epilepsy	2.4
	Management of medication use/overuse in headaches	2.3
ORTHO	Treatment of back pain	3.6
	Optimize rehabilitation after treatment of hip fracture	3.4
	Treatment of osteoporosis	3.3
	Optimal screening time for osteoporosis with bone density testing	3.3
	Markers of fracture risk in osteoporosis	3.3
	Better specificity of diagnosis of back pain	3.3
	Comparative effectiveness of bone density testing	3.1
	Bone morphogenetic protein in fracture healing in osteoporosis	3.1
	Treatment of pain of osteoarthritis	3.1
	Better joint replacements	3.1
	Effective treatment of osteoporosis in subgroups	2.9
	Source of pain in osteoarthritis	2.9
	Benefit of intra-articular drugs in osteoarthritis	2.9
	Optimal vitamin D & calcium dosing	2.9
	Basic science of effect of various treatments on cartilage in osteoarthritis	2.9
	Effect of exercise and weight loss on osteoarthritis	2.9
	Benefit of oral glucosamine/chrondritin in osteoarthritis	2.7
	Best bone density testing for men	2.6
PREV	Increasing utilization of low cost effective treatments such as aspirin and flu shots	3.1
RA	Rheumatoid arthritis treatment	3.3
	Immunomodulating drugs	2.6
RESP	Benefits of pulmonary rehabilitation	2.7
	Long term oxygen use in COPD in patients with higher PaO_2	2.6
URO	Reducing cardiovascular disease in patients with ESRD	3.6
	Treatments to slow progression of chronic kidney disease	3.4
	Early placement of vascular access for dialysis	3.3
	Optimal timing for initiation of dialysis	3.1
	Surgery for female incontinence	3.1
	Urodynamics for incontinence	2.9
	Urological therapy in spinal cord patients: intermittent vs. indwelling catheters	2.9
	Medical vs. minimally invasive therapy for BPH	2.8
	Pre-transplant evaluation of cardiovascular disease	2.6
WOUND	Comparative effectiveness of treatment for ulcers: off-loading, debridement, biologics, revascularization	4.2*
	Identification of high risk for ulcers	3.1
	Prevention of foot ulcers with therapeutic shoes and socks	3.0

Gentlemen, Ladies, and Spine Surgeons:
It appears that we have reached a consensus that defining a “fellowship” based on arbitrary criteria such as the presence or absence of a residency program, the presence or absence of deformity (or MIS or Tumor) surgery, or the presence or absence of a research rotation is not feasible as different fellowships offer different opportunities for residents with different skill sets and needs. This is a natural condition resulting from the fact that residency experiences differ and resident interests differ. It also appears that we have reached a consensus that accreditation of fellowships is desirable in order to guarantee that fellowship directors pay close attention to the quality of the educational experience for the trainee. Accreditation is also desirable in order to preserve the fidelity of a “fellowship” as a post- residency year dedicated to the study of advanced spinal surgical concepts. Finally, we all seem to agree that CAST is the appropriate body to accredit fellowships, given the focus of that group on educational process and product and the willingness of CAST to incorporate input from the section in determining accreditation criteria. I would like to move that the Spine Section endorse the CAST fellowship accreditation process as a means to recognize those programs offering a quality educational post-graduate experience in spinal surgery and to recognize those trainees who have participated in such a process. If seconded, I propose we allow further electronic discussion until Monday, October 1st, at which time executans may vote via email. I apologize to those who are receiving multiple copies of this email. Those not on the spine executive committee are asked to hold comments for now.

Daniel K. Resnick, MD MS
Associate Professor
Department of Neurological Surgery
University of Wisconsin Medical School
K4/834 Clinical Science Center
600 Highland Ave
Madison, WI 53792

All:

I agree with Reg's comments and understand Joe's very good points. With these in mind, I think that the only way to define a fellowship is to define what is core residency neurosurgical spine that should be covered by all residency programs to meet RRC/ABNS standards. Once you have defined what residency training in spine is, you will have broadly defined the realm that fellowship can and should serve. We then can define the broad terms of what fellowship education should cover for CAST accreditation. This should be specific enough to ensure a meaningful high quality educational and training program beyond what residency should offer yet broad enough to allow the different types of fellowship emphasis that exist and Reg correctly points out. This would also allow for future development.

We edged away from this discussion at the Exec meeting in San Diego since our charge was fellowship and not residency. I think that it is a mistake to avoid this issue as the two are intimately related and one cannot be defined without the other. Clearly, we will not get a definition of core residency training is spine that makes everyone happy or is even completely fair. Still, I believe that we must do this to the best of our ability. Without doing this, we will fail to move this process and our area of, dare I say, sub-specialty forward. These are tough choices but they are the ones before us. I truly believe that it is time for bold action. The ABNS is asking for our guidance to better help them lead the specialty.

The good news here is that you now have all of the thoughts that my puny mind can muster on this. I will defer to our officers and leaderrship and will avoid future contributions to your in-box congestion on this matter.

Steve

Sent from my BlackBerry Wireless Handheld

-----Original Message-----
From: Joseph Alexander <jtalexan59@yahoo.com>
To: Regis Haid <rhaid@atlantabrainandspine.com>; Ondra, Stephen, M.D.; 'Resnick (Daniel)' <resnick@neurosurg.wisc.edu>; CIS8Z@hscmail.mcc.virginia.edu <CIS8Z@hscmail.mcc.virginia.edu>; Cbranch@wfubmc.edu <Cbranch@wfubmc.edu>; pcm6@columbia.edu <pcm6@columbia.edu>; vmum@aol.com <vmum@aol.com>
CC: Volker.Sonntag@bnaneuro.net <Volker.Sonntag@bnaneuro.net>; ewoodard@caregroup.harvard.edu <ewoodard@caregroup.harvard.edu>; cis8z@virginia.edu <cis8z@virginia.edu>; heary@umdnj.edu <heary@umdnj.edu>; weinsteinp@neurosurg.ucsf.edu <weinsteinp@neurosurg.ucsf.edu>; richard.winn@mountsinai.org <richard.winn@mountsinai.org>; piepgras.david@mayo.edu <piepgras.david@mayo.edu>; 'Gerald Rodts' <gerald.rodts@emoryhealthcare.org>; m.mclaughlin@princetonbrainandspine.com <m.mclaughlin@princetonbrainandspine.com>; 'Kaiser , Michael' <Mgk7@columbia.edu>; 'Dr. Robertson' <jrobertson@semmes-murphey.com>
Sent: Wed Sep 26 08:50:30 2007
Subject: RE: Fwd: Spine fellowships accreditation

Reg's comments bring out the impossibility of defining what a fellowship is, as well as defining what a spine specialist is. With due deference to Steve Ondra, likely the only way we can do this is to have each surgeon define his own practice through the credentialling process at his/her hospital. We as the Section, CAST, ABNS whatever cannot try to parse out what species of spine specialist one is and what degree of specialization meets criteria, however those are defined.

Regis Haid <rhaid@atlantabrainandspine.com> wrote:

To all,

I think the CAST should recognize there are many different types of Spinal Fellowships. As an example, our new partner, Vishal Gala, just completed a year long, post graduate Fellowship with Rick Fesslar.

Vishal was Number One in his medical school at Michigan, trained at U of Michigan, a prestigous program, and did a fellowship with one of the leaders of MIS. He was the Resident member of the RRC and is involved in the AANS Young Neurosurgeons program. His year training consisted of six months research and six months MIS surgery. I think we can all attest to the fact that Rick's fellowship is top notch, and produces some of the best MIS training in the nation. Vishal is a well trained "academic" neurosurgeon.

However, Vishal received no deformity training, no trauma nor tumor training. What he knows about this stems from his U of Michigan residency training.

Vishal has been scrubbing in with me to learn more about the latter type of cases. He has brought more expertise to our practice in terms of MIS surgery, in terms of endoscopic (as opposed to Microscopic MIS approaches). HIs Fellowship was outstanding, but not all inclusive. He is contributing to our field.

I think accordingly CAST should recognize the subspecialty training within our Fellowship programs. Some very good Fellowship programs will be Trauma focused, others Tumor, while others MIS or Deformity.

In fact, they may even exclude the others in their focus on Subspecialty training.

I would envision full year Fellowship programs that are NOT clinical but focus entirely on bench research. Again, these are all types of Fellowships, all needed if Neurosurgery is to maintain the lead in the

treatment of spinal pathologies.

When I did my full year combined ortho-neuro fellowship in 1988, there was no MIS, no neurosurgeons did deformity, and we were learning as well as developing the techniques of screw fixation, segmental fixation, plating, etc. Volker can attest to this.

The time is now very different. We need to focus on even more subspecialty training on Degenerative, Deformity, Tumor, Trauma, MIS and Basic Research.

I would implore CAST to recognize this fact.

I obviously have a "dog in the fight".

To some, I am no longer an "academic neurosurgeon."

Yet, we still teach at AANS and CNS meetings, direct courses for the AANS, publish peer reviewed papers, books, chapters, and are invited to lecture. We continue to be involved in the design of new implants and techniques, and lead IDE studies.

Although a Fellowship in our "private practice, non-residency setting" may not meet some arbitrary legislature, it would offer training in focused degenerative disease that few can exceed.

Now is the time for Fellowship recognition. Please do not short-change those individuals who committed themselves to a full year, post-graduate work in gaining added expertise. This is the way that Neurosurgery can continue to grow.

Respectfully submitted,

Reg
Regis Haid, M.D.
ATLANTA BRAIN AND SPINE CARE
2001 Peachtree St. Suite 645
Atlanta, Georgia 30309
Ph: 404-350-0106

From: Ondra, Stephen, M.D. [mailto:sondra@nmff.org]
Sent: Wednesday, September 26, 2007 9:02 AM
To: Resnick (Daniel); CIS8Z@hscmail.mcc.virginia.edu; jtalexan59@yahoo.com; Cbranch@wfubmc.edu; pcm6@columbia.edu; vmum@aol.com
Cc: Volker.Sonntag@bnaneuro.net; ewoodard@caregroup.harvard.edu; rhaid@atlantabrainandspine.com; cis8z@virginia.edu; heary@umdnj.edu; weinsteinp@neurosurg.ucsf.edu; richard.winn@mountsinai.org; piepgras.david@mayo.edu
Subject: RE: Fwd: Spine fellowships accreditation

All:

I have followed the E-mail discussion regarding Fellowships in Spinal Surgery and have refrained from comment as I have had little new to add. As things appear to be clarifying in terms of direction, I would like to weigh in with my thoughts. I fundamentally agree with the discussion and it's direction. In particular, I think that Chris has brought up important points that have moved the discussion forward. I agree that we need to work with CAST to define fellowship educational standards. These should be set

with a high bar. High enough one to ensure that our fellowships are programs that truly advanced training, rather than simply function as on the job training and manpower sources. These standards should be the same regardless of where the fellowship takes place. A standard is a standard. To have different standards for residency based programs and non residency based programs seems prejudicial and may not pass a challenge of inequity. Having said that, the level of scrutiny, reporting and other oversight functions for non residency based programs probably needs to be different than for residency based programs. This is due to the lack of educational infrastructure and at times, culture, that may exist at a non residency based program. This added oversight would address the justified concerns expressed by many without having two standards of education. Again, a standard is a standard that should apply universally. I also think that while the bar for this standard should be a high one, it should be broad enough to recognize that there are many types of spine fellowships and we should not paint anyone into a corner. It is the quality of the educational experience, in all facets, that is key here. Not the sub-sub-specialty training. That is an issue for another day.

I do think the Section should follow through with the CAST process and fully support sub-specialization recognition in some form. The Section fought with the AANS, CNS, ABNS and SNS for a decade to get to this point. These organizations have finally recognized the correctness of our request, agreed with us and given us much, if not all, that we have asked for. To back away from this not only makes us look foolish, it would be out of step with the reality of our specialty. Neurosurgery has become a very broad field. There is more depth and breadth than any program or individual can master. This is the reason that we are now struggling with defining what is core or general neurosurgery and what will be areas of special training and recognition. The idea that a surgeon can be a spine surgeon for 5 or 10 years and then choose a completely different area is absurd from an educational point of view. It is also unfair to patients. For a surgeon to have a focused area of surgical practice and then choose to change to a different area of concentrated practice outside of general neurosurgery without a defined period of retraining and review would not serve patients well. We all make choices of specialty and sub-specialty. After training as a neurosurgeon, one cannot simply decide to do a new specialty just because times have changed. Also, a general neurosurgeon can and should do a broad neurosurgical practice but is it really in the interest of the specialty and patient care to make that broad practice all encompassing. These will be issues for the ABNS to grapple with. Our charge is to define what constitutes specialized fellowship level spine care and then by exclusion, this will also define what is general neurosurgical spine care that is residency based and should be included in every residency program and then, by definition would be part of general neurosurgical practice. Issues of grandfathering in surgeons whose training pre-dates the institution of these standards should be relatively straight forward. As for concerns of trauma and other coverage, those are not our issues of concern. Again, our concern is defining what spine education should be for residents and fellows. What is sub-specialization and what is not. Manpower concerns are the realm of the ABNS, hospitals and society at large. If there is inadequate neurosurgical coverage at every community hospital, I am sure that creative people will arrive at a solution that will serve the public and the specialty. Several come to mind off the top of my head but again, that issue is not the purpose of this note.

These are my thoughts on the matter. I hope it helps rather than confuses. It may do a bit of both.

Steve Ondra

From: Resnick (Daniel) [mailto:resnick@neurosurg.wisc.edu]
Sent: Wednesday, September 26, 2007 7:05 AM
To: CIS8Z@hscmail.mcc.virginia.edu; jtalexan59@yahoo.com; Cbranch@wfubmc.edu; pcm6@columbia.edu; vmum@aol.com
Cc: Volker.Sonntag@bnaneuro.net; ewoodard@caregroup.harvard.edu; rhaid@atlantabrainandspine.com; cis8z@virginia.edu; heary@umdnj.edu; Ondra, Stephen, M.D.; weinsteinp@neurosurg.ucsf.edu; richard.winn@mountsinai.org; piepgras.david@mayo.edu
Subject: Re: Fwd: Spine fellowships accreditation

Agreed.

----- Original Message -----
From: Shaffrey, Chris I *HS <CIS8Z@hscmail.mcc.virginia.edu>
To: Joseph Alexander <jtalexan59@yahoo.com>; Charles Branch <cbranch@wfubmc.edu>; Paul C. McCormick <pcm6@columbia.edu>; vmum@aol.com <vmum@aol.com>
Cc: Volker.Sonntag@bnaneuro.net <Volker.Sonntag@bnaneuro.net>; ewoodard@caregroup.harvard.edu <ewoodard@caregroup.harvard.edu>; rhaid@atlantabrainandspine.com <rhaid@atlantabrainandspine.com>; Resnick (Daniel); cis8z@virginia.edu <cis8z@virginia.edu>; heary@umdnj.edu <heary@umdnj.edu>; sondra@nmff.org <sondra@nmff.org>; weinsteinp@neurosurg.ucsf.edu <weinsteinp@neurosurg.ucsf.edu>; H Richard Winn (E-mail) <richard.winn@mountsinai.org>; piepgras.david@mayo.edu <piepgras.david@mayo.edu>
Sent: Tue Sep 25 18:19:07 2007
Subject: RE: Fwd: Spine fellowships accreditation

I think it would be better to have CAST define the educational requirements and have them set a high bar for approved fellowships. Standards should be set regarding case volume, case mix, research capabilities, academic productivity of the fellows and a monitoring of 360 degree evaluations of the program. The evaluation should include periodic evaluations/reapplication for the programs and the ability to remove accreditation if a program is not providing an adequate educational experience. The shorter institutional memory of the Section makes it less suitable than CAST. I agree that an exceptional non-residency program affiliated fellowship could occur and meet all of the CAST requirements. By putting it in the hands of CAST, the best chance of achieving standardization at a high level would occur.

Christopher I. Shaffrey, MD
Professor of Neurological Surgery
University of Virginia
Box 800212
Charlottesville, VA 22908
Office Phone: 434-243-9714
Office Fax: 434-924-9656

-----Original Message-----
From: Joseph Alexander [mailto:jtalexan59@yahoo.com]
Sent: Tuesday, September 25, 2007 6:59 PM
To: Charles Branch; Shaffrey, Chris I *HS; Paul C. McCormick; vmum@aol.com
Cc: jtalexan59@yahoo.com; Volker.Sonntag@bnaneuro.net; ewoodard@caregroup.harvard.edu; rhaid@atlantabrainandspine.com; resnick@neurosurg.wisc.edu; cis8z@virginia.edu; heary@umdnj.edu; sondra@nmff.org; weinsteinp@neurosurg.ucsf.edu; H Richard Winn (E-mail); piepgras.david@mayo.edu
Subject: RE: Fwd: Spine fellowships accreditation

Generally agreed Charlie. The only remaining obstacle is the same one we keep bringing up, but I have had no response from anyone at CAST yet. If a program meets the requirements for a fellowship, does it matter if it is occuring at a residency training program or not? It appears to be the position of the section that we define the educational requirements for the fellowship, and then it is up to the the applicant to prove that they can meet them in their program.

Charles Branch <cbranch@wfubmc.edu> wrote:

> It would seem that the best approach now would be for the leadership of the Section to send a well constructed letter to the CAST of the SNS delineating our appreciation for the effort to this point and indicating

a strong desire to move forward. The criteria for an approved fellowship would not exclude a training program based fellowship, but would subject it to the same rigorous scrutiny by the CAST Spine Fellowship Committee. Sub par programs would be determined as such by the Committee, not in a preemptive way. We are confident that the Committee which will be composed primarily of current or former Spine Section leadership can and will be very discriminating to maintain the credibilty of quality fellowship recognition by the CAST.

I think that we can help this through the system, especially if there is a strong sense from all of us that with this consideration will come bundle of fellowship applications. If, on the other hand, we aren't ready to flood the system with Fellowship applications, we are making a mountain out of a molehill.
CB

-----Original Message-----
From: Shaffrey, Chris I *HS [mailto:CIS8Z@hscmail.mcc.virginia.edu]
Sent: Sunday, September 23, 2007 12:27 PM
To: Paul C. McCormick; vmum@aol.com
Cc: jtalexan59@yahoo.com; Volker.Sonntag@bnaneuro.net; Charles Branch; ewoodard@caregroup.harvard.edu; rhaid@atlantabrainandspine.com; resnick@neurosurg.wisc.edu; cis8z@virginia.edu; heary@umdnj.edu; sondra@nmff.org; weinsteinp@neurosurg.ucsf.edu; H Richard Winn (E-mail); piepgras.david@mayo.edu
Subject: RE: Fwd: Spine fellowships accreditation

The time is past due for spine fellowship accreditation to occur. CAST/SNS is the right organization to do it. Stringent criteria need to be set up for fellowship accreditation. Everyone wants to avoid the situation faced by our orthopaedic colleagues where every orthopaedic group with more than four members was trying to set up a "fellowship" of some type.

Almost everything the spine section has asked for has been agreed to by CAST/SNS. If the flexibility existed to consider accrediting a non-residency based fellowship(under exceptional circumstances) that met every academic, clinical exposure and research criterion the last impasse would be put behind us. I feel the bar should be set high for everyone applying for fellowship accreditation. I know the CAST/SNS subcommittee would ensure that only truly qualified fellowships were approved. Perhaps an initial probationary period with extra reporting requirements for non-residency based fellowships might satisfy everyone's concerns. I would suspect that the number of non-residency based programs applying would be very low.

The debate over this issue has gone on too long. Phil has worked tirelessly to ensure everything we have asked for has been included. With Phil, Paul, Charlie, Volker, Vince Trayneilis, Ed Benzel, Zia Gokaslan, Louis Harkey, Dan Kim, Bill Welsh and others as members of the SNS, I feel our interests would be totally covered. The time for an en bloc application of current fellowships has arrived.

Christopher I. Shaffrey, MD
Professor of Neurological Surgery
University of Virginia

Box 800212
Charlottesville, VA 22908
Office Phone: 434-243-9714
Office Fax: 434-924-9656

-----Original Message-----
From: Paul C. McCormick [mailto:pcm6@columbia.edu]
Sent: Saturday, September 22, 2007 5:23 PM
To: vmum@aol.com
Cc: jtalexan59@yahoo.com; Volker.Sonntag@bnaneuro.net; cbranch@wfubmc.edu; ewoodard@caregroup.harvard.edu; rhaid@atlantabrainandspine.com; resnick@neurosurg.wisc.edu; cis8z@virginia.edu; heary@umdnj.edu; sondra@nmff.org
Subject: Re: Fwd: Spine fellowships accreditation

Praveen
I personally am not in favor of statutory exclusion of CAST spine fellow accreditation solely on the basis of lack of ACGME residency affiliation, although there is some precedent concerns based on the attached paper. In this study orthodepic surgeons who performed ACGME accredited spine fellowships had an 8% failure rate in the part II oral boards while those surgeons who trained at a non-ACGME accredited spine fellowship had a 20% failure rate. Obviously, this is likely a biased comparison.
I have to think there is some common ground here either through probational accreditation, terms of renewal and/or assessment, etc.
Let me know if there is anything I can do to help.
Paul

Quoting vmum@aol.com:

> gentlemen,
> see message below from dr. piepgras re: fellows credentialing by CAST.
>
> here is a summary:
>
> they agree to:
> 1. 12 months post residency fellowship at one institution (no
> intraresidency fellowships, no six month stints) 2. fellows can be
> clin instructors and can be billed for, and can take attending?call
> (since it is not acgme certif).
> 3. fellowship directors can apply for senior society membership, but
> have to go through typical process of application and vetting to get
> in
>
> where we stand apart is the issue of fellowships in institutions that
> do not have residency affiliation, they are not agreeable to this. see

> below.
> they point out that brain tumor and peds and vasc fellowships are all
> in hospitals that have residency programs, and they want to make this
> uniform for all subspecialties including spine.
> they do not want spine section to vet nonresidency affiliated
> fellowships without them, they prefer to vet all fellowships

> themselves and point out that there are spine guys on their cast
> committee (sonntag) (and spine section could suggest others from our
> exec committee to include with them?).
>
> what is next?
>
> praveen
>
>
>
> Praveen V. Mummaneni, M.D.
> Associate Professor
> Neurosurgery
> Co-Director: UCSF Spine Center
> University of California, San Francisco
> email: vmum@aol.com
>
>
> -----Original Message-----
> From: Mummaneni, Praveen
> To: vmum@aol.com
> Sent: Thu, 20 Sep 2007 10:32 pm
> Subject: FW: Spine fellowships accreditation
>
>
>
>
>
> _____
>
> From: Piepgras, David G., M.D. [mailto:piepgras.david@mayo.edu]
> Sent: Wed 9/19/2007 5:59 AM
> To: Weinstein, Phil; Winn, Richard
> Cc: Mummaneni, Praveen
> Subject: FW: Spine fellowships accreditation
>
>
> Phil and Dick:
>
> Responding to Dr. Mummaneni's e-mail of September 12, I have a problem

> (as will the SNS Council I suspect) with CAST accreditation of
> non-ACGME (or the Canadian
> equivalent) fellowships. The previous views of the Council and CAST
> have been quite steadfast on this. In the case of Neuro-Oncology
> however, we accepted as a surrogate for ACGME accreditation an
> accreditation of a training center by a national cancer center
> designation as this insured a high level of clinical, academic, and
> research expertise. (The institution in question for this was M.
> D. Anderson which at the time was not part of an ACGME accredited
> residency as it is now -- Baylor.)
>
> I don't believe however that vetting by the Spine Section constitutes
> such an appropriate surrogate and I think the Spine Section should
> give this further thought as they go forward.
>

> Dave
>
> _____
>
> From: Mummaneni, Praveen [mailto:MummaneniP@neurosurg.ucsf.edu]
> Sent: Wednesday, September 12, 2007 5:17 PM
> To: Weinstein, Phil
> Cc: Winn, Richard; Piepgras, David G., M.D.
> Subject: Spine fellowships accreditation
>
>
>
> Gentlemen,
>
> I think we are much closer to the goal of accrediting spine
> fellowships through CAST.
>
> Per my conversation with Dr. Winn a few weeks ago, many issues have
> been resolved, but a few items remain.
>
> The main remaining issue is what to do with fellowships in
> non-residency programs. There are currently a few of these on the
> spine section website
> including: Eric Woodard, Reg Haid, and the ING group in Indianapolis.
>
> I sounded out some of the senior members of the section. They do want
> these types of programs allowed to be included after being vetted by
> the section.
> Several of them pointed out that spine fellows go to these
> institutions to learn to operate complex cases and see clinic to learn

> patient selection.
> Neuroradiology and pathology conferences, etc, though helpful are not
> what the fellows and the senior section members think of as critical
> learning tools (since the fellows just completed 7 years of residency
> with these conferences).
>
> I remain committed to working out some kind of solution to this issue.
>
> I look forward to your feedback and advice.
>
> Thank you in advance,
>
> Praveen
>
>
>
> From: Weinstein, Phil
> Sent: Wednesday, March 14, 2007 10:57 PM
> To: DAVID PIEPGRAS
> Cc: Richard Winn; Mummaneni, Praveen
> Subject: Re: Societyns.orgfellowships/index.html
>
>
> Dave,
> Thanks for your comments. As you know I have been working on this

> for years.
> We may now have a breakthrough.
>
> Praveen,
> Please review the response to your concerns below and forward to the
> Spine Sectiopn Exec Bd members if you feel they would like to see
> Dave's reply. He is secy of SNS-CAST. Would you be interested in
> gathering a batch of completed accreditation applications on behalf of

> the SSEB for submission to Dave? This would be a great service to
> both organizations and certainly would facilitate the process.
>
> Phil
>
>
>
>
> On 3/13/07 8:33 AM, "Piepgras, David G. M.D."
> wrote:
>
>
>
> Dear Phil:
>
> I have reviewed Dr. Mummaneni's e-mail to you and am pleased
> that the Spine Section is willing to encourage neurosurgical spine
> fellowship directors to apply for SNS/CAST accreditation of their
> fellowship programs.
> I would make
> the following comments:
>
>
> 1. We have already established in the preamble that
> fellowships are defined as post-residency training, not enfolded
> electives, and usually of 12 months duration. The Spine Section
> should not have a problem with this.
>
>
> 2. Each program will have to submit their own application
> unless somebody in the Spine Section takes the responsibility of
> obtaining a "batch of completed applications" such as Tom Luerssen did

> for pediatric neurosurgery.
> This was a great service to our process and we certainly continue to
> feel a debt of gratitude to Tom Luerssen for promoting this.
> Additionally, on those batch applications we reduced the fee of the
> application process somewhat and that is something that the Spine
> Section may want to consider.
>
>
> 3. I agree with you that membership in SNS is not automatic
> for fellowship directors anymore than it is program directors. Each
> individual has to be decided on their own merit and in keeping with
> membership guidelines.
>
>

> Finally, I would again encourage the Spine Section to review
> the training requirements and, if they think they need updating as
> well as development of a "specific curriculum", that should be
> encouraged.
>
>
> Thanks for encouraging the Spine Section leadership in this
> regard.
>
> Dave
>
> David G. Piepgras, M.D.
> Secretary/Treasurer of SNS/CAST
> Department of Neurologic Surgery
> Mayo Clinic, Gonda 8-209
> 200 First Street SW
> Rochester, MN 55905
> Tel: 507-284-2254 or 3331
> Fax: 507-284-5206
>
>
> _____
>
> From: Philip Weinstein
> [mailto:weinsteinp@neurosurg.ucsf.edu
>]
> Sent: Monday, March 12, 2007 2:09 AM
> To: Mummaneni, Praveen;
> mclaughlin@princetonbrainandspine.com;
> Charles Kuntz
> Cc: jtalexan59@yahoo.com; resnick@neurosurg.wisc.edu;
> cbranch@wfubmc.edu; rhaid@atlantabrainandspine.com;
> Gerald.Rodts@emoryhealthcare.org; CIS8Z@hscmail.mcc.virginia.edu;
> jhurlber@ucalgary.ca; mgroff@bidmc.harvard.edu; CWolfla@mcw.edu;
> cwolfla@neuroscience.mcw.edu; rheary@comcast.net;
> trost@neurosurg.wisc.edu
>
> Subject: Re: Societyns.orgfellowships/index.html
>
> Dear Praveen,
> Thanks very much for again taking this issue before the Spine
> Section Executive Committee. I am delighted to receive this very
> favorable response to the SNS long term efforts on this project.
>
> Here are the responses I would anticipate from the SNS Council

> and CAST to your proposals:
>
>
> 1. agreed from the very beginning.
> 2. also agreed and up to the Spine Section in case
> there
> are new techniques that arise in the future that would only require a

> 6mos.
> special post -fellowship additional training to learn. The

> "6-12 mos."
> duration stated in the CAST requirements was included at the request
> of the peripheral nerve fellowship directors who wanted that
>
> option
> 3. agreed. The term "fellowship" can be eliminated
> and
> replaced with "sub-specialty training" if necessary for clinical
> instructors.
> 4. Each program director on the list will need to
> submit a
> completed application (available on the SocietyNS.org/fellowships
> website) in order to be evaluated for certification. Now that a
> verified list is available, I will ask Dick Winn, who is chmn of
> CAST, to send a letter with a copy of the application to each
> fellowship director. A reminder email from you would also be
> helpful. Dave Piepgras, secy of CAST, should receive the applications

> and can keep you informed of submissions. At present the SNS CAST
> accreditation criteria require that each fellowship be affiliated
> with a University medical school based residency program in order to
> insure multi-disciplinary academically supported training including
> neurology, neuro-radiology, neuropathology and basic science. I doubt

> that this
>
> can or should be changed.
> 5. Each fellowship director will need to be
> individually
> proposed and evaluated for fulfillment of SNS membership criteria
> usually by their dept. chmn. or original residency program director
> or both. Having reviewed the list, I didn't see anyone who should
> not be
>
> qualified for membership.
> 6. Volker Sonntag is currently a member of the CAST.
> Each
> application is sent to an ad hoc sub-committee chosen from the Spine
> Section for additional review and that would certainly include past or

> present fellowship directors.
>
>
>
>
> Thanks for your interest and enthusiasm for seeing this
> through.
> Phil
>
>
>
> On 3/11/07 3:59 PM, "Mummaneni, Praveen"
> wrote:
>
>
>

> Dear Phil,
> I brought up this proposal for spine fellowship
> certification
> by the senior society at the spine section exec committee.
>
>
> the spine section is in favor of this proposal
> and wishes to
> remain within the auspices of organized neurosurgery. As you
> know, there are a
> lot of competing interests who want to certify spine
>
> fellowships: american board of spine surgery, nass, various
> orthopedic
> associations (SRS), etc. Rather than any of these, we felt the
> senior society
> was the best equipped to represent us.
>
>
> there are a few caveats:
>
> 1. infolded intraresidency "fellowships" will not
> be included,
> they will be officially known as a "complex spine elective"
>
> 2. spine fellowships will be 12 months long
> following
> completion of residency, and the fellow must be ABNS board
> eligible or
>
> FRCS(c) eligible.
> 3. each program director for the fellowship will
> be able to
> choose if the fellow will serve as a clinical instructor who
> takes faculty call
> or as a trainee without attending responsibilities - there are
> proponents of
> each in the spine exec committee.
>
> 4. the current list of fellowships I provided to
> you, and which
> is now online at
> http://www.spinesection.org/academic_fellowships.php
> should
> be included. It
> should be noted that most of these fellowships are affiliated
> with residency
> programs, but a few are affiliated with high volume private
> groups as well.
>
> 5. as we discussed, spine fellowship program
> directors who are
> ABNS board certified will be allowed to join the senior society
> as members.
>
> 6. the senior society committee that reviews

> fellowships for
> inclusion should include senior spine surgeons from the spine
> section who
> currently or previously ran spine fellowships
>
> themselves.
>
> I welcome your feedback. For the 2007-2008 year
> I am the
> fellowships liason for the spine section, and on behalf of the
> spine section I
> hope to move this initiative forward during my term in this
> position.
>
>
> with warm regards,
>
> Praveen
>
> Praveen V. Mummaneni, M.D.
> Associate Professor
> Dept. of Neurosurgery
> Co-director: UCSF Spine Center
> University of California, San Francisco
>
>
>
>
> _____
>
> From: Weinstein, Phil
> Sent: Tue 3/6/2007 2:56 PM
> To: Mummaneni, Praveen
> Subject: Societyns.orgfellowships/index.html
>
> Praveen,
> Here is the application from the SNS website.
> The point to
> bring up at the Spine Section Exec Bd where this has been
> presented and
> discussed many times before is that the SNS wants to certify all
> academically
> responsible complex spine fellowships and distinguish them from
> imposters to
> assist residents or practitioners with selection of training
> opportunities and
> provide verification and validation. The point to emphasize is
> that this is
> generically known as "Sub-specialty Training Certification" not
> "fellowship"
> and is meant to eliminate the need for ACGME approval so that
> trainees can be
> instructors and depts.
>
> can bill for their services if they are not still residents.
> The SNS is doing

> for specialty training what the RRC does for residency but
> without the ACGME
> involvement. So far spine is the only holdout sub-specialty.
> The criteria for
> approval were initially submitted by the Section Exec Bd. and can
> be modified
> in the future if appropriate.
>
> Volker is a member of the CAST.
>
> Thanks, PW <
> Surgeons.htm>>
>
>
>
>
>

> Email and AIM finally together. You've gotta check out free AOL
> Mail! - http://mail.aol.com <http://mail.aol.com/>
>

Paul C McCormick

Great news Chris,
The section executive committee has already voted in favor of this type of arrangement and it looks like the section and CAST are on the same page. The SNS is in Madison this May, and I would be happy to help coordinate a section/CAST exchange if it is felt necessary. It thus appears that this topic is a done deal, and we should encourage our fellowship directors to get on board. I will send a draft letter to Joe later today and then we can forward it to the exec committee and post it on the section website.
Thanks!
Dan

Daniel K. Resnick, MD MS
Associate Professor
Department of Neurological Surgery
University of Wisconsin Medical School
K4/834 Clinical Science Center
600 Highland Ave
Madison, WI 53792

-----Original Message-----
From: Shaffrey, Chris I *HS [mailto:CIS8Z@hscmail.mcc.virginia.edu]
Sent: Tuesday, November 20, 2007 4:33 AM
To: vmum@aol.com; cbranch@wfubmc.edu; Resnick (Daniel); jtalexan59@yahoo.com; cis8z@virginia.edu
Cc: pcm6@columbia.edu; heary@umdnj.edu; H Richard Winn; volker.sonntag@bnaneuro.net; piepgras.david@mayo.edu
Subject: AW: discussion with dr. piepgras at academy meeting

Gentlemen,

I had a very nice conversation with Dr. Piepgras on Saturday regarding CAST/SNS fellowship credentialing issues. I am convinced that there is near complete agreement on all issues (with any perceived differences being semantic ones). I am copying Drs. Piepgras, Winn and Sonntag for so they can clarify my conclusions or address any concerns.

CAST/SNS accredits fellowships from all neurosurgical subspecialities and there is a need to have uniformity in the credentialing process. The desire of CAST to have fellowships associated with ACGME residency program sites results from recognition that a documented level of educational, research and clinical competency is present at these programs due to the requirements of the residency credentialing process. The CAST group has no absolutely unchangeable rules but would like the initial fellowship application group to be from sites affiliated with residency programs in order to facilitate the accreditation process.

A non- residency affiliated fellowship program has been accredited in the past by CAST (MD Anderson oncology fellowship prior to being to their being incorporated as part of the Baylor program) because of recommendations from the Tumor Section. Opportunity for other exceptions could be made but the bar would be high for demonstrating clinical, research and academic accomplishment. CAST would like to encourage the development of relationships between residency programs and nonaffiliated fellowships to benefit both groups, and would potentially look favorably upon such relationships.

The second issue discussed was the "combined" fellowship program issue. CAST wishes to credential only neurosurgery programs and does not desire to either accredit either the orthopaedic component of combined programs or orthopaedic programs that routinely take neurosurgeons. There is no prohibition on having rotations with orthopaedic surgeons or having orthopeadic fellows rotate onto a neurosurgery spine service as part of the accredited fellowship (and the value of these rotations is recognized). The application for accreditation would need to be come from the neurosurgery component of the combined program and the accreditation would go to this component.

The CAST accreditation process is a dynamic one and there is nothing permanently "locked in stone". Considering the substantial participation by a number of spine oriented neurosurgeons in CAST/SNS much of the decision making in accrediting worthy fellowships will be substantially made by "us". Dr. Piepgras has kindly offered to have representatives of the Joint Section members meet with CAST during the next SNS meeting in the spring to address any concerns. I feel it is important that this process move forward and a decision needed whether all areas of concern have been adequately addressed or whether a meeting between CAST and the Joint Section is required.

_____

AANS/CNS SECTION ON DISORDERS OF THE SPINE AND PERIPHERAL NERVES

American Association of Neurological Surgeons

A Section of the
American Association of Neurological Surgeons
and
Congress of Neurological Surgeons

Education and Innovation

Dr. David Piepgras
SNS CAST Committee Chair

November 20, 2007

RE: CAST Accreditation of Neurosurgical Spine Fellowships

Dear Dr. Piepgras:

The Executive Committee of the American Association of Neurological Surgeons and Congress of Neurological Surgeons Joint Section on Disorders of the Spine and Peripheral Nerves has voted to approve the process for CAST accreditation of neurosurgical spine fellowships. This approval is based upon the understanding that approved fellowships will be post-residency, and at least 12 months in length. It is also understood that the primary criteria for accreditation of a fellowship is the educational value to the fellow. Institutional affiliation and breadth of curriculum will also be considered as secondary qualifications.

Daniel K. Resnick, MD
Secretary
AANS/CNS Joint Section on Spine

Joseph T. Alexander
Chairperson
AANS/CNS Joint Section on Spine

Gentlemen (and Ladies)

Thanks to Joe Cheng for a thoughtful and thorough summary of upcoming CPT issues in February that must be submitted by 11/7 to make the CPT deadline for 2009.

The Coding and Reimbursement Committee met at CNS last month, recommending Option 3 for cervical TDA. This will follow the same pattern as the lumbar TDA code has as an all-inclusive code. I assume from Dan, Joe and Joe that the Spine Section supports the proposal for an all-inclusive Category I code for the November Panel meeting unless an electronic vote on 10/22 reverses the opinion.

The Coding and Reimbursement Committee likewise supported Category III for AxiaLIF. I likewise assume that the Spine Section supports this recommendation as well unless an electronic vote on 10/22 reverses the opinion.

The issue regarding 63020 is a bit more complicated and requires a historical perspective. There was a CPT editorial change submitted in 1998 by myself, Sam, and Dick Roski requesting an editorial change to 63020 and 63030 to allow for an open or endoscopic approach for posterior cervical and lumbar discectomy. Dan is accurate in his assessment that an open microscopic or MERTx with endoscopic discectomy are identical procedures with different tools, which was the rationale for an editorial change. The term "endoscopic" at CPT implies percutaneous and historically precludes using an "open" code for the same procedure (eg. Transpheniodal done "open" vs endoscopically). Since the procedure was the same, we asked CPT to acknowledge using either approach as valid for the same code and presented the similarities of the procedures, other than different retractors. The coding change was for 63020 as the primary parent code to 63030 (a subsidiary to 63020 in CPT speak because it follows a semicolon). Somehow, behind closed doors presumably as a closed session Editorial Panel Action, the change was made ONLY to 63030, using the rationale that the procedure was uncommon in the cervical spine (mind you, no data was presented to that effect). Unfortunately, the closed session Editorial panel makes decisions in the absence of observers who can point out discrepancies in the logic. This editorial change request simply corrects this nearly decade old mistake to ensure that surgeons are paid appropriately for performing a posterior cervical discectomy, irrespective of the technique that is chosen. This would NOT be a new code or result in any change in payment, but rather would confirm that either technique is identical and coded the same.

I feel it important to inform the group about a misconception that I see frequently about "revaluation" of existing codes. The RUC has NO authority NOR mechanism to revalue existing codes based on a new code being brought forth. The RUC only revalues codes once every five years at the request of CMS. For example, 60375 (ACD) and 22554 (ACF) were just revalued in the five year review of 2005. These are not supposed to be vulnerable to reexamination until 2010 and only if CMS feels that these remain overvalued. Their values were lowered, solely on the basis of a change of length of stay (no or 1 postoperative hospital visits), and not on the basis of intraoperative or office work. While cervical TDA will NOT effect the value of ACDF, the value of cervical TDA determined by the RUC will be determined by comparison with ACDF in terms of time and RVU estimate. Since the time for TDA is potentially less that that of ACDF (when both procedures are combined along with plate fixation and interbody device), the value of cervical TDA will almost certainly be lower than that of an ACDF with plate and interbody. The real risk of ACDF valuation comes from a new RUC initiative to identify potentially misvalued codes outside of the 5 year review (though no mechanism exists other than alerting CMS that codes are misvalued and seeing if CMS requests their re-examination). By the way, significant concerns with prominent opposition were raised about this process. A RUC subcommittee that met in September identified codes that are coded together more than 90% of the time by the same surgeon (surprise, surprise, ACD and ACF fell into that computer search). The issue was not addressed at the Sept RUC meeting, but is likely to come up again in February or April. Fortunately, this was the only code pair in which the -51 modifier was applicable, so we may be able to exclude this pair from re-examination based on recent 5 year review examination and the

CPT rule of -51 that reduces payment of the second code by 50%. With respect to 63020, CPT can recommend that a change is not editorial and recommend that an editorial change go to the RUC. This depends on the persuasiveness of our CPT advisors (as we were successful in 1998) of convincing the panel that the surgery is the same (which it is), but only with a different retractor system. By having persuasive CPT advisors and Jeff on the panel for the next meeting, we should have comfort that an editorial change without forwarding the proposal to the RUC would occur.

Thanks to everyone for taking the time to provide input into these important coding and reimbursement issues.

Greg

We have heard from the majority of the exec committee and we appreciate the updates from Greg P and Joe. The following summarizes the feedback from the executans. Unless there is stringent opposition, I suggest that the official "spine section position" be communicated to Joe as follows:

1) Arthroplasty- support level 1 code
2) Wazoo- support level 3 code
3) PCF- We generally prefer not to change the code but will defer to the judgment of the CPT committee after they complete their investigation. If in fact there is a clear reason to put this change forward in order to address a historical mistake, then we would support doing so.

Daniel K. Resnick, MD MS
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University of Wisconsin Medical School
K4/834 Clinical Science Center
600 Highland Ave
Madison, WI 53792

From: Cheng, Joseph [mailto:joseph.cheng@Vanderbilt.Edu]
Sent: Wednesday, October 17, 2007 7:37 AM
To: Charles Branch; Resnick (Daniel); michael.rosner@na.amedd.army.mil; c. kuntz; c. shaffrey; c. wolfla; e. mendal; e. woodard; e. zager; g. rodts; Trost (Gregory); h. aryan; i. kalfas; j. alexander; j. hurlber; j. pat johnson; Buisse (Jamie); k. foley; kfoley@usit.net; m. groff; m. Kaiser; m. steinmetz; m. wang; m.mclaughlin@princetonbrainandspine.com; marjorie wang; p. gerszten; p. Matz; p. mummaneni; r. haid; r. heary; r. johnson; s. ondra; t. choudhri; z. ghogawala; z. gokaslan; Buisse (Jamie); d. kim; j. Knightly; m. groff; m. mclaughlin; Trost (Gregory)
Subject: RE: Arthroplasty

Thanks for all the responses so far.

To clarify the request for the 63020 edit (endoscopic posterior laminotomy/foraminotomy), it started with surgeons NOT being paid for their "true" percutaneous endoscopic discectomies when using the code. Greg Przybylski explains that the term "endoscopic" at CPT implies percutaneous and historically precludes using an "open" code for the same procedure (eg. Transpheniodal done "open" vs endoscopically). Basically, the AMA and payors consider percutaneous endoscopic discectomies an unlisted procedure and not considered the same as using an endoscope instead of a microscope in an "open" surgery with fancy retractors (Metrx). The request was to ask the CPT to acknowledge using either approach as valid for the same code (given the similarities of the procedure) other than different retractors.

However, the CPT can decide that adding the term "open or endoscopic approach" to 63020 is not just an editorial change and recommend it go to the RUC. They may change the RVU's and potentially lower the value overall, as in general for the CPT, endoscopic surgery is considered "less" work than open surgery (eg. such as in general surgery with cholecystectomies). Although we may be proud of ourselves given how fast and efficient we are getting with our spine surgeries, I have attached a Dilbert cartoon as am example of how CMS and CPT views it. It will be up to our CPT advisors (including me) to convince the panel that the surgery is the same with only a different retractor system. Although the risk of going to the RUC is low, it is still a risk.

My recommendation is to ask NASS, who brought this forth, to see if the denial of payment for endoscopic 63020 is a real problem (which would warrant support and justify the edit request) or just an isolated incidence (which would not).

Regards,

Joe

Joseph S. Cheng, M.D., M.S.
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(615) 343-8104 Fax

From: Charles Branch [mailto:cbranch@wfubmc.edu]
Sent: Wed 10/17/2007 6:50 AM
To: Resnick (Daniel); michael.rosner@na.amedd.army.mil; c. kuntz; c. shaffrey; c. wolfla; e. mendal; e. woodard; e. zager; g. rodts; g. trost; h. aryan; i. kalfas; j. alexander; Cheng, Joseph; j. hurlber; j. pat johnson; j.buisse; k. foley; kfoley@usit.net; m. groff; m. Kaiser; m. steinmetz; m. wang; m.mclaughlin@princetonbrainandspine.com; marjorie wang; p. gerszten; p. Matz; p. mummaneni; r. haid; r. heary; r. johnson; s. ondra; t. choudhri; z. ghogawala; z. gokaslan; Buisse (Jamie); d. kim; j. Knightly; m. groff; m. mclaughlin; Trost (Gregory)
Subject: RE: Arthroplasty

Dan
I support all three of the reponses that you have proposed to these issues. The third issues is interesting. What we really want is better reimbursement for posterior cervical foraminotomy so that we can do minimally invasive posterior cervical surgery without a financial penalty. The endoscopic term just doesn't get it unless that is the code for minimally invasive. I would welcome a reevaluation of the post foraminotomy code in genereal as I think it it undervalued.
Chalie Branch

From: Resnick (Daniel) [mailto:resnick@neurosurg.wisc.edu]
Sent: Tue 10/16/2007 1:37 PM
To: michael.rosner@na.amedd.army.mil; Charles Branch; c. kuntz; c. shaffrey; c. wolfla; d. resnick; e. mendal; e. woodard; e. zager; g. rodts; g. trost; h. aryan; i. kalfas; j. alexander; j. cheng; j. hurlber; j. pat johnson; j.buisse; k. foley; kfoley@usit.net; m. groff; m. Kaiser; m. steinmetz; m. wang; m.mclaughlin@princetonbrainandspine.com; marjorie wang; p. gerszten; p. Matz; p. mummaneni; r. haid; r. heary; r. johnson; s. ondra; t. choudhri; z. ghogawala; z. gokaslan; Buisse (Jamie); d. kim; j. Knightly; m. groff; m. mclaughlin; Resnick (Daniel); Trost (Gregory)
Subject: FW: Arthroplasty

Dear Executans,

Another leftover issue from September. Here is Joe's report from the CPT committee regarding Arthroplasty codes. Please read and feel free to comment. Joe needs feedback by the 25th, so I will ask for a vote on the suggestions by the 22nd. Here are my personal comments:

I am OK with option 3 for the Arthroplasty code. I still feel that we are risking a re-evaluation of ACDF which is a significant risk, but the Arthroplasty procedures are being performed and will need some sort of code.

I am OK with a category III code for the wazoo screw- it is certainly a unique approach.

I do not understand why we need a new code for endoscopic work for posterior cervical foraminotomy- are surgeons asking to be paid more for using an endoscope? That seems inappropriate as the procedure is the same whether or not you use a microscope or endoscope. I would not recommend supporting that measure unless I am mistaken in my interpretation of the request.

I am sure all of you are enjoying these emails as much as I am, thanks for your patience and perserverance.

Dan

Daniel K. Resnick, MD MS

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600 Highland Ave

Madison, WI 53792

From: Cheng, Joseph [mailto:joseph.cheng@Vanderbilt.Edu]
Sent: Monday, October 15, 2007 8:39 PM
To: Joseph Alexander; Cathy Hill; Resnick (Daniel); Katie O. Orrico; CWolfla@mcw.edu; gprzybyl@optonline.net
Cc: Dr. Jacob; cozzens@northwestern.edu
Subject: RE: Arthroplasty

Joe,

Here is my interim CPT report regarding the issues such as cervical arthroplasty that were previously discussed. My recommendations are in the report and I look forward to your comments..

Regards,

Joe

Joseph S. Cheng, M.D., M.S.

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Director of the Neurosurgery Spine Program

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(615) 343-8104 Fax

From: Joseph Alexander [mailto:jtalexan59@yahoo.com]
Sent: Tue 9/25/2007 6:38 AM
To: Cheng, Joseph; Cathy Hill; Resnick (Daniel); Katie O. Orrico; CWolfla@mcw.edu
Cc: Dr. Jacob
Subject: RE: Arthroplasty

Perfect--although I would suggest sending it directly to myself, Dan and Chris as well.

"Cheng, Joseph" <joseph.cheng@Vanderbilt.Edu> wrote:

Joe,

I will be happy to help Cathy develop a summary of this, which we should get to you and the Spine Section EC after the CPT meeting on October 12-13. At that time I will also prepare a summary of the CPT meeting as related to spine, and work on getting us back on track regarding the CRC issues. I plan on adding another secure "Members Only" page to the Spine Section web site to post these documents for the EC to review.

Regards,

Joe

Joseph S. Cheng, M.D., M.S.

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From: Cathy Hill [mailto:chill@neurosurgery.org]
Sent: Mon 9/24/2007 1:53 PM
To: Dr. Alexander; Resnick (Daniel); Katie O. Orrico; CWolfla@mcw.edu
Cc: Cheng, Joseph; Dr. Jacob
Subject: RE: Arthroplasty

Sounds perfect! I'll follow up with Drs. Jacob and Cheng and we'll check on the need for a call in mid-October!

From: Joseph Alexander [mailto:jtalexan59@yahoo.com]
Sent: Monday, September 24, 2007 2:50 PM
To: Cathy Hill; Resnick (Daniel); Katie O. Orrico; CWolfla@mcw.edu
Cc: joseph.cheng@vanderbilt.edu; Dr. Jacob
Subject: RE: Arthroplasty

With all due respect, we are a bit overwhelmed right now with things needing earlier responses-including a request today to review the NQF findings by the end of this week, so I will have no time to address this or participate in a conference call this week. Cathy, perhaps if you and Joe Cheng can analyze this and prepare a summary for our review by the middle of October, then we can see if we need to get a conference call together.

Cathy Hill <chill@neurosurgery.org> wrote:

The date for submission for the next CPT meeting (February 2008) is November 7, 2007. Should we schedule a conference call to discuss Dr. Jacob's proposal? The February meeting is the last CPT meeting for which code can be included in the 2009 CPT Book.

Thank you!

Cathy

From: Resnick (Daniel) [mailto:resnick@neurosurg.wisc.edu]
Sent: Monday, September 24, 2007 2:28 PM
To: Katie O. Orrico; CWolfla@mcw.edu; Dr. Alexander
Cc: joseph.cheng@vanderbilt.edu; Cathy Hill
Subject: Re: Arthroplasty

If there is no hurry to get this done, I'd prefer to talk it over, as I for one am not sure we want to go this route. I definitely am more positive regarding the cervical disc than the lumbar.

----- Original Message -----
From: Katie O. Orrico <korrico@neurosurgery.org>
To: Resnick (Daniel); CWolfla@mcw.edu <CWolfla@mcw.edu>; Dr. Alexander <jtalexan59@yahoo.com>
Cc: joseph.cheng@vanderbilt.edu <joseph.cheng@vanderbilt.edu>; Cathy Hill <chill@neurosurgery.org>
Sent: Mon Sep 24 08:58:56 2007
Subject: RE: Arthroplasty

Cathy Hill will fill you in on the background. I believe that the Coding and Reimbursement Committee just recently discussed this following the FDA Approval of the device. We have not actually submitted this code proposal, so if the Section's executive committee wants to consider this, and recommend that we wait or tweak it in any way, please let us know. The normal process for this kind of action is to always seek the section's input/approval, before we move forward. I think that Pat was simply putting something on paper to get circulated.

Katie O. Orrico, Director

Washington Office

American Association of Neurological Surgeons/

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Washington, DC 20005

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From: Resnick (Daniel) [mailto:resnick@neurosurg.wisc.edu]
Sent: Monday, September 24, 2007 9:48 AM
To: CWolfla@mcw.edu; Katie O. Orrico; Dr. Alexander
Cc: joseph.cheng@vanderbilt.edu; Cathy Hill
Subject: Re: Arthroplasty

The application is fine in terms of the content, I personally challenge the wisdom of pushing for arthroplasty codes with a single device and few implanted. We are taking a substantial risk that the CMS will decide to take a closer look at ACDF codes. I personally would have welcomed the opportunity to discuss these issues before submission of the code request. I am disturbed that none of the spine exec committee had heard of this prior to Katie's announcement. Who was consulted from the AANS and CNS who approved this? If it wasn't us, then who?

----- Original Message -----
From: Wolfla, Christopher <CWolfla@mcw.edu>
To: Katie O. Orrico <korrico@neurosurgery.org>; Dr. Alexander <jtalexan59@yahoo.com>; Resnick (Daniel)
Cc: Cheng, Joseph <joseph.cheng@Vanderbilt.Edu>; Cathy Hill <chill@neurosurgery.org>
Sent: Mon Sep 24 08:43:03 2007
Subject: RE: Arthroplasty

Dear Katie:

I think this looks good. I noticed that there is no response to questions #19 and #20. Was this intentional?

Sincerely

Chris

Christopher E. Wolfla, MD

Associate Professor of Neurosurgery

The Medical College of Wisconsin

Secretary, The Congress of Neurological Surgeons

Secretary, The Congress of American Neurosurgical Education

Treasurer, AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves

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cwolfla@mcw.edu

-----Original Message-----
From: Katie O. Orrico [mailto:korrico@neurosurgery.org]
Sent: Monday, September 24, 2007 8:36 AM
To: Dr. Alexander; Daniel Resnick; Wolfla, Christopher
Cc: Cheng, Joseph; Cathy Hill
Subject: FW: Arthroplasty

Joe, et al,

Attached are the proposed codes that Pat Jacob developed for cervical arthroplasty. Please look these over and let us know if the Section is okay to have these presented to the CPT folks. Cathy Hill in my office will coordinate this and is able to answer any of your questions. Her email is chill@neurosurgery.org

Thanks.

Katie

Katie O. Orrico, Director
Washington Office
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Fax: 202-628-5264
Cell: 703-362-4637

-----Original Message-----
From: Dr. Jacob
Sent: Tuesday, September 18, 2007 6:43 AM
To: Cathy Hill
Subject: Arthroplasty

An you send this out to the interested parties.
Thanks

Pat

R. Patrick Jacob, M.D.
Associate Professor of Neurosurgery
Dunspaugh-Dalton Professor of Spinal Surgery
University of Florida
Box 100265
Gainesville, FL 32610
352-273-9000

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Spine Section CPT Interim Report
October 15, 2007 - J.S. Cheng

The CPT Meeting in Philadelphia from October 11-13th had representation from our Section. Radiosurgery code 61793 was the main neurosurgery topic; no spine related CPT codes were action items on the agenda. The meeting with NASS representatives at the meeting was productive, and they wish to propose two code changes. Because of the 2009 CPT submission deadline of November 7, 2007, I respectfully request comments to all the issues noted below before October 25th in order to have time for our CPT group to work on the submission. The summary of our active CPT issues related to spine are as noted:

1. Cervical Arthroplasty
    a. The Medtronics Prestige disc is the only currently FDA approved device, and is currently a Category III code (0090T). Due to the lack of reimbursement for this Category III code, Medtronics has been recommending it be billed with 63075 for the surgeon to capture the decompression and discectomy work.
    b. The rationale to move arthroplasty to a Category I code at this time is:
        i. Payor scrutiny of the Category III code after the device becomes FDA approved which will erode overall payments.
        ii. Current non-payment for arthroplasty services due to T code.
        iii. Schedule of the CPT process for submission.
    c. We have a deadline of ***November 7, 2007*** to submit our proposal in order to be included in the 2009 book.
    d. Dr. Jacob had spoken with Dr. Branch about 8 months ago on the Category I issue, and the decision was made to pursue Category I status in order to address this.
    e. Dr. Jacob has since prepared three (3) options for cervical arthroplasty coding:
        i. Option 1: Propose the procedure as how the Category III code is written, which requires a complete discectomy and foraminal decompression.
            1. Discussion notes that this will not be perceived as an editorial edit and may trigger a re-evaluation of 63075 when the code is discussed at RUC.
        ii. Option 2: Propose the new Category I arthroplasty code as an add-on code to the current decompression codes.
            1. Add-on codes may risk the parent code in the RUC process, which would be 63075.
            2. Reported intraoperative service time and work for placement of an artificial cervical disc is currently noted to be **half** that previously reported for ACDF, and so arthroplasty will have to be of **less** value than the current ACDF.

iii. Option 3: Propose a new Category I stand alone code that encompasses all the components of cervical disc arthroplasty, which would include the discectomy and decompression.
    1. This appears to be the best option to preserve overall reimbursement for this procedure, but our members will need to be educated as some may think we are inherently being paid less by the lack of multiple codes.

f. I would recommend **Option 3** as the best available choice in this issue and that we support submission of the Category I code request by the deadline of November 7, 2007. Of note is that we are not making any statement about the scientific or evidence based merits about the arthroplasty, only that it is currently being done and taught in our courses and that our members should be reimbursed for their work and effort.

2. AxiaLIF
    a. NASS is proposing a Category III code proposal for the technique of lumbar interbody fusion and arthrodesis from a pre-sacral lumbar approach. They are clear that this is a general code and not related to a single vendors product such as TranS1.
    b. My recommendation is to support NASS in this proposal for a Category III code. This technique does not meet the criteria for a Category I status, and is unique enough to warrant a Category III valuation.
3. Editorial Change to 63020 (posterior cervical laminotomy and foraminotomy)
    a. NASS is proposing an editorial change to include the use of endoscopes to this procedure due to reported non-payment for some of their members. Although the risk is low, it has the chance of being rejected as an editorial change and triggers a revaluation of this code.
    b. My recommendation is to support NASS for this proposal if non-payment is an issue, and Bill Mitchell has agreed to discuss this at their upcoming meeting. It is the same language as the use of endoscopes for 63030 (posterior lumbar laminotomy and foraminotomy), which we supported in the past. This may trigger a RUC revaluation of this code, which is infrequently used, and in general the AMA considers endoscopic procedures “easier” and less work intensive that their open counterparts. Although, the chance of that appears fairly low it still represents a notable risk.

Respectfully Submitted,

Joseph Cheng, MD, MS

GUIDELINES ON NEUROSURGERY-INDUSTRY CONFLICTS OF INTEREST

Overview of Purpose

The American Association of Neurological Surgeons Code of Ethics establishes the guidelines by which AANS members are expected to abide within the various medical, social, and professional relationships which occur during the practice of neurosurgery.

The neurosurgeon's relationship with industry, while generally an appropriate, beneficial, and collaborative partnership that can improve patient care, is nevertheless under increasing scrutiny from lawmakers, regulators, and the public as a source of potential conflict of interest. Cooperative and ethically appropriate relationships between neurosurgeons and industry generally benefit patients. Neurosurgeons are necessary for technical innovation by providing ideas and feedback, conducting research trials, serving on scientific advisory boards, and serving as faculty to teach the use of new technology related to neurosurgical practice. Neurosurgeons with innovative ideas, in an effort to improve patient care, rely on industry to bring their creative ideas to practical application in the health care market. A collaborative relationship between neurosurgeons and industry is necessary to improve patient care, but it must be structured and restricted to avoid pitfalls of improper inducements, whether real or perceived. It is vital that this relationship be free of improper incentives or even the perception of improper incentives.

Therefore, in accordance with the AANS Code of Ethics and in order to further clarify the proper relationships between AANS members and industry, the following guidelines shall be considered as an additional measure used to ensure understanding of proper professional-industry relationships, to evaluate an AANS member's maintenance of good professional standing and to evaluate qualifications of membership applicants.

Guidelines

The American Association of Neurological Surgeons (AANS) believes that the ethical care of patients is the highest priority for neurosurgeons and embraces this philosophy through its leadership and its public and professional programs. As part of their professional commitment to excellence in patient care, neurosurgeons must maintain specialized knowledge and skills through continuing medical education programs, seminars, and professional meetings. Often, these professional functions are sponsored by medical device manufacturers, pharmaceutical companies, and other businesses, which serve an important role supporting continuing medical education (CME) activities and the development of new technologies that contribute to improved patient care. A collaborative effort between neurosurgeons and industry ensures that patients have optimal surgical outcomes through the invention and testing of new technology, research and evaluation of existing technology, as well as continued education of neurosurgeons in applications of technology in surgical care.

Neurosurgeons must be aware of potential conflicts of interest with patient care when pursuing academic or commercial ventures. There may be contractual or other remunerative relationships between physicians and industry, and these relationships have a potential for creating bias. A potential conflict of interest exists whenever professional judgment concerning choices in patient care has a reasonable chance of being influenced by self-interest of the neurosurgeon.

The self-interest is often financial in nature. Financial relationships are those in which the neurosurgeon benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (i.e., stocks, stock options or other ownership interest excluding diversified mutual funds) or other financial benefits. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research) consulting, research or education support, fellowship funding, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received or expected.

When such conflicts exist, medical or surgical care decisions may be distorted by personal interests. Disclosure of any potential conflict of interest is required in communications to patients, the public and colleagues. The primary goal of surgical care must be benefit to the patient and must not be compromised by neurosurgeons' personal interests. Neurosurgeons, like all physicians, have an ethical obligation to present themselves and the services they provide to patients, as well as any potential conflicts of interests, in a clear, understandable, and accurate manner.

Those who have payment or contractual relationships with industry are required to disclose them prior to any educational presentation (or other related activity.) According to the ACCME (Accreditation Council for Continuing Medical Education), circumstances create a conflict of interest when an individual has an opportunity to affect CME content about products or services of a commercial interest with which he/she has a financial relationship**.** In accordance with ACCME Standards for Commercial Support and the AANS Conflict of Interest policy, all disclosure information must be provided to AANS CME activity participants prior to the beginning of the CME activity.

Not only does the AANS require speakers, authors, committee members or others in the planning process who have the ability to influence and/or control the educational content to disclose their financial relationships, but AANS governance policy also requires that volunteer leaders and management staff submit conflict of interest disclosure and declaration forms annually.

When faced with a potential conflict of interest that cannot be resolved, a neurosurgeon should consult with an institutional ethics committee to determine whether a conflict of interest exists and how to address it. With respect to CME, the AANS has created a mechanism to identify and resolve potential conflicts of interest with any individual in a position to influence and/or control the content of CME activities. This peer-reviewed process allows for the determination of the appropriate action to take place should a true

conflict be identified.
(http://www.aans.org/shared_pdfs/managing_conflict_of_interest.pdf)

It is important that deliberate steps be taken to prevent industry from unethical influence in organizations, sponsored educational meetings, research patient and public education initiatives, and interactions with patients in order to preclude biased promotion or support of medical devices, procedures or practice recommendations.

These guidelines have been formulated as a guide to the relationship between the specialty, neurosurgeons and the medical industry.

Ethical Guidelines which form the foundation to the guideline on neurosurgeon-industry conflict of interest:

The physician-patient relationship is the central focus of all ethical concerns.

A neurosurgeon shall, while caring for and treating a patient, regard his or her responsibility to the patient as paramount.

A neurosurgeon shall prescribe drugs, devices, and other treatments on the basis of medical considerations and patient needs, regardless of any direct or indirect interests in or benefit from industry.

The practice of medicine inherently presents potential conflicts of interest. When a conflict of interest arises, it must be resolved in the best interest of the patient. The neurosurgeon should exercise all reasonable alternatives to ensure that the most appropriate care is provided to the patient. If the conflict of interest cannot be resolved, the neurosurgeon should notify the patient of his or her intention to withdraw from the relationship.

A neurosurgeon shall, when treating a patient, resolve conflicts of interest in accordance with the best interest of the patient, respecting a patient's autonomy to make health care decisions.

When a neurosurgeon has a financial interest (as defined in Appendix A), receiving anything of value from industry, a potential conflict exists which should be disclosed to the patient. It is unethical for a neurosurgeon to receive compensation of any kind from industry in exchange for using a particular device or medication in clinical practice. Reimbursement at fair market value for documented administrative costs in conducting or participating in a scientifically sound research clinical trial is acceptable.

A neurosurgeon who has influence in selecting a particular product or service for an entity (organization, institution) shall disclose any relationship with industry to colleagues, the institution and other affected entities.

A neurosurgeon shall enter into consulting agreements with industry only when such arrangements are established in advance and in writing to include evidence of the following:

- Documentation of an actual need for the service;
- Proof that the service was provided;
- Evidence that physician reimbursement for consulting services is consistent with fair market value; and
- Not based on the volume or value of business he or she generates for the corporate industrial entity.

A neurosurgeon shall participate in or consult at only those meetings at which CME is awarded when they are conducted in clinical, educational, or conference settings conducive to fair, balanced, and accurate exchange of information.

A neurosurgeon shall accept no financial support from industry to attend industry-related social functions where there is no educational element.

A neurosurgeon who is attending a CME activity shall accept no industry financial support for attendance at a CME activity. Residents and neurosurgeons-in-training may accept an industry grant to attend a CME activity if they are selected by their training institution or CME sponsor and the payment is made by the training program or CME sponsor. *Bona fide* faculty members at a CME activity may accept industry-supported reasonable honoraria, travel expenses, lodging and meals from the conference sponsors. Industry has no involvement in the selection of faculty, topics, location, or venues for CME events; that is the sole responsibility of the sponsoring organization.

A neurosurgeon, when attending an industry-sponsored non-CME educational activity, shall accept only tuition, travel and modest hospitality, including meals and receptions; the time and focus of the activity must be for education or training. When appropriate, faculty may receive a reasonable honorarium, which may include reasonable travel expenses.

A neurosurgeon, when attending an industry-sponsored non-CME educational activity, shall accept no financial support for meals, hospitality, travel, or other expenses for his or her guests or for any other person who does not have a *bona fide* professional interest in the information being shared at the meeting.

A neurosurgeon, when reporting on clinical research or experience with a given procedure or device, shall disclose any financial interest in that procedure or device if he or she or any institution with which he or she is connected has received anything of value from its inventor or manufacturer.

A neurosurgeon who is the principal investigator shall make his or her best efforts to ensure at the completion of the study that relevant research results are reported and reported truthfully and honestly with no bias or influence from funding sources, regardless of positive or negative finding.

Appendix A
For purposes of these guidelines:

1) “Industry” includes pharmaceutical, biomaterial, and device manufacturers.

2) “CME activities” refer to educational activities that meet the requirements of and have been approved by the Accreditation Council for Continuing Medical Education (ACCME).

3) A “conflict of interest” occurs when a neurosurgeon or an immediate family member has, directly or indirectly, a financial interest or positional interest or other relationship with industry that could be perceived as influencing the neurosurgeon’s obligation to act in the best interest of the patient.

A “financial interest,” “financial arrangement,” “financial inducement” or “financial support” includes, but is not limited to:
• Compensation from employment;
• Paid consultancy, advisory board service, etc.;
• Stock ownership or options;
• Intellectual property rights (patents, copyrights, trademarks, licensing agreements, and royalty arrangements);
• Contracted research, general research support, fellowship funding;
• Paid expert testimony;
• Honoraria, speakers’ fees;
• Gifts;
• Travel
• Meals and hospitality

A “positional interest” occurs when a neurosurgeon or family member is an officer, director, trustee, editorial board member, consultant, or employee of a company with which the neurosurgeon has or is considering a transaction or financial arrangement.

Appendix B

Relevant provisions from the AANS Code of Ethics:

b)(1) The neurological surgeon shall be dedicated to the principle, first and foremost, of providing the best patient care that available resources and circumstances can provide.

b)(2) The neurological surgeon shall not participate in any activity which is not in the best interest of the patient.

b)(4) The neurological surgeon shall be actively involved in continuing medical education in order to keep current on new medical technology and information in neuroscience.

h)(1) All members of the AANS who engage in scientific research and clinical investigation shall conform to the highest standards of academic, scientific and ethical integrity.

h)(3) The purposes and endpoints of laboratory research vary widely. Investigators must disclose candidly the purposes, applications, consequences and sponsorship of research projects with all parties who may be materially affected, including collaborators, patients, subjects, and funders.

h)(11) Clinical investigation often results in conflicts of interest. Direct and indirect industry sponsorship often leads to the appearance of material conflict of interest, whether or not any exists. To acknowledge the potential for[1] conflict of interest, it is prudent to disclose all sources of sponsorship and funding in conjunction with publication or presentation. The disclosure should include non-monetary resources contributed to research, analysis, presentation or publication. All analysis of data, manuscript preparation or presentation should be free of commercial input, influence or bias. The investigator should protect equally against all other sources of bias.

[1] Cited phrase from Code reads "…to avoid the appearance of…"