PLEASE SIGN IN
(NAME AND EMAIL)

CNS Annual Meeting
2012

Executive Council Meeting, CNS 2012
Sunday, October 7, 2012
4:00 PM  6:00 PM
McCormick Lakeside Center
Room E353A
Call to Order (Dr. Amin-Hanjani)

Approval of Minutes from CV Sect 2012 (Dr. Lavine)

CNS Guidelines Committee (Drs Wolfla, CNS President; Dr. Kalkanis)

Treasurer's Report (Dr. Hoh)

Annual Meeting Updates
- 2012 CNS Meeting (Drs Bambakidis and Mocco)
- 2013 CV Sect Annual Meeting (Drs Bulsara and Bambakidis)
- 2013 ISC Meeting (Drs Albuquerque, Carter, Patel)
- 2013 AANS Meeting (Drs Bambakidis and Mocco)

Standing Committee/Project Updates
- Washington Committee Update (Katie Orrico)
- Coding & Reimbursement (Dr Vates)
- Joint Guidelines Committee/CV Section Guidelines Committee (Dr. Amin-Hanjani)
- National Quality Forum (Dr Cockroft)
- Neurovascular Coalition (Drs. Wilson and Cockroft)
- SNIS update (Dr. Alexander)
- SVIN Liasion (Dr. Mocco)
- Neurocritical Care Society Update (Dr. Sung)
- Brain Attack Coalition (Dr.Huang)
- Membership Update (Dr. Zipfel)
- Fundraising Committee (Drs. Hoh and Rasmussen)
- Research Fellowship (Drs. Dempsey and Rasmussen)

Meeting Agenda

- Newsletter Committee (Drs. David and Bulsara)
- Website Committee (Drs Zipfel and Carter)
- Curriculum Development and Education Committee (Dr. Bendok)
- Bylaws/Rules & Regulations Committee (Dr. Prestigiacomo)

Old Business Updates
- N2QOD (Drs Connolly, Mocco, Wilson)
- Junior Resident Endovascular Course (Drs Mocco, Bendok)
- Neurapoint Alliance (Dr Cockroft)
- IAC carotid stent facility accreditation standards (Dr. Cockroft)
- 3C meeting (Drs Levy, Siddiqui)
- Brain Aneurysm Foundation (Dr David)
- Senior Society Matrix/Milestones and Modules (Dr. Connolly)
- Meri Institute/CV Sect Resident & Fellows Courses (Drs Mocco, Ho, Veznedaroglu, Arthur)

New Business
- Response to Mechanical Thrombectomy Policy– Wellpoint (Drs. Khalessi, Mocco)
- Joint Commission Stroke Cert (Dr. Amin-Hanjani)
- MOC Vascular Module (Drs. Bendok and Siddiqui)
- CAS Response to Industry Letter (Dr. Wilson)
- Vasospasm Survey Update (Dr. Bulsara)
Approval of Minutes
Dr. Sean D. Lavine
CNS Guidelines Committee
Drs Wolfla, CNS President; Kalkanis
Treasurer’s Report
Dr. Brian Hoh
### AANS/CNS Section on Cerebrovascular Surgery
**Statement of Financial Position**  
As of June 30, 2012 and 2011

<table>
<thead>
<tr>
<th></th>
<th>Current Year 06/30/12</th>
<th>Prior Year 06/30/11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checking &amp; Short Term Investments</td>
<td>$149,113</td>
<td>$133,936</td>
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<tr>
<td>Accounts Receivable, net of Allowance for Uncollectible Accounts</td>
<td>7,095</td>
<td>700</td>
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<tr>
<td>Prepaid Expenses</td>
<td>30,575</td>
<td>30,000</td>
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<td>Long-Term Investment Pool, at Market</td>
<td>601,163</td>
<td>594,263</td>
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<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>$787,946</strong></td>
<td><strong>$758,899</strong></td>
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<table>
<thead>
<tr>
<th><strong>LIABILITIES AND NET ASSETS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
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<tr>
<td>Accounts Payable and Current Liabilities</td>
<td>$500</td>
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<tr>
<td>Deferred Dues</td>
<td>33,639</td>
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<td><strong>Total Liabilities</strong></td>
<td><strong>$34,139</strong></td>
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| **Net Assets**                |                     |
| Unrestricted                  | $585,352           | $384,746            |
| Unrestricted - Donaghy        | $48,359            | $48,084             |
| Unrestricted - Galbraith      | $26,710            | $26,762             |
| Unrestricted - Resident       | ($12,805)          | $17,033             |
| Unrestricted - Leusshenhop    | $19,215            | $19,924             |
| Unrestricted - Drake          | $10,423            | $10,415             |
| Unrestricted - Yasargil Lectureship | $53,228      | $52,727             |
| **Net Revenue (Expense)**     | 23,324             | 170,191             |
| **Total Net Assets**          | **$753,807**       | **$730,483**        |

**TOTAL LIABILITIES AND NET ASSETS**  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL LIABILITIES AND NET ASSETS</strong></td>
<td><strong>$787,946</strong></td>
</tr>
</tbody>
</table>
### AANS/CNS Section on Cerebrovascular Surgery

#### Statement of Activities

For the Twelve Months Ending June 30, 2012

<table>
<thead>
<tr>
<th></th>
<th>FY '10 Final</th>
<th>FY '11 Final</th>
<th>YTD FY '12</th>
<th>FY '12 Budget</th>
<th>FY '13 Budget</th>
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<tr>
<td><strong>REVENUES</strong></td>
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<td>Membership Dues</td>
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<td>255,771</td>
<td>324,392</td>
<td>235,078</td>
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<td><strong>TOTAL REVENUES &amp; SUPPORT</strong></td>
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<td></td>
<td>FY '10 Final</td>
<td>FY '11 Final</td>
<td>YTD FY '12</td>
<td>FY '12 Budget</td>
<td>FY '13 Budget</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------</td>
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<td><strong>Revenues</strong></td>
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<td>Registration Fees</td>
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<tr>
<td><strong>Total Revenues</strong></td>
<td>167,709</td>
<td>255,771</td>
<td>324,392</td>
<td>235,078</td>
<td>0</td>
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<tr>
<td><strong>Expenses</strong></td>
<td></td>
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<td>Scientific Program</td>
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<td>Poster Session</td>
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<td>Committee Dinners/Events</td>
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<tr>
<td>Resident Hands-on Course Expenses</td>
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<td>68,463</td>
<td>121,952</td>
<td>81,452</td>
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<tr>
<td><strong>Total Expenses</strong></td>
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<td>239,529</td>
<td>293,441</td>
<td>256,556</td>
<td>0</td>
</tr>
<tr>
<td><strong>Net Excess (Loss)</strong></td>
<td>(30,854)</td>
<td>16,242</td>
<td>30,951</td>
<td>(21,478)</td>
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AANS/CNS SECTION ON CEREBROVASCULAR SURGERY
NOTES TO FINANCIAL STATEMENTS
June 30, 2012

General and Administrative

Revenue

Contributions/Sponsorships – Budget $37,580, Actual $7,773
The two expected $15,000 contributions for sponsorship of the Resident Research Awards were not received.

Expenses

Contributions & Affiliations – Budget $10,000, Actual $36,000
The Section elected to make $26,000 in donations to memorial funds for Dr. Christopher Getch and Ronald Egelbrecht.

Postage – Budget $825, Actual $1,400
1,004 certificates were mailed to CV Resident members in July 2011 at a cost of $1.88 each per Dr. Zipfel.

Newsletter Postage – Budget $1,025, Actual $0
The Section did an electronic newsletter this year.

Newsletter Printing – Budget $2,025, Actual $0
The Section did an electronic newsletter this year.

Newsletter Professional Fees – Budget $200, Actual $0
No expenses were submitted for design of the electronic newsletter.

Annual Meeting

Revenue

Registration Fees – Budget $88,590, Actual $98,625
The registration rate was increased for the 2012 Annual Meeting.

Exhibitor Fees – Budget $40,200, Actual $57,100
The budget was based on selling 18 booth spaces. 21 booth spaces were sold.

Exhibitor Sponsorship Revenue – Budget $26,000, Actual $36,000
More sponsorships were received than originally anticipated.

Resident Hands-on Course Revenue – Budget $70,000 Actual $123,500
More sponsorships were received than originally anticipated.

Expenses

Exhibit Program – Budget $6,060, Actual $9,034
Expenses were higher because more booth space was sold than was originally budgeted.

Staff Coordination – Budget $41,550, Actual $49,565
More staff time was spent than originally budgeted because the meeting coordinator, Rhonda Foss, traveled onsite for the meeting. In the past, the meeting coordinator did not travel to the meeting.

Resident Hands-on Course Expenses – Budget $81,452 Actual $121,662
A Fellows course was held in conjunction with the Resident course. This resulted in a higher number of attendees, and higher expenses than expected.
2012 CNS Conference
Chicago, Il

Dr. Nicholas Bambakidis
Dr. J Mocco
Program: The Future is Now...
Oral Presentations (2:00 – 3:30)

- Moderators: NCB and JM
- Drake Lecturer: Chris Wallace
- (“Treatment of Cerebrovascular Disorders: If and Why, Not How”)
- Presentation of 2012 Massimo Collice Prize (Jorn Fiestra, Netherlands)
- Presentation of CNS CV Section Fellowship (Dr. Gallati, Rochester NY)
CNS 2012

- “Simulators and their Potential Role in Cerebrovascular Training” (Bernard Bendok)
- “Aneurysm Treatment – the New Generation of Tools and How They’re Changing the Game” (Guiseppe Lanzino)
- “The Cerebrovascular Surgeon of the Future – Is Neurosurgery Leading the Way or Have We Lost Our Way?” (David Langer)
2013 CV Section
Honolulu, HI

Dr. Nicholas Bambakidis
Dr. Ketan Bulsara
2013 CV Section

- **Program Planning Committee Members**
  - Ketan R. Bulsara (CV section) and Don Heck (SNIS) co-chairs

- **CV section Committee**
  - Nicholas Bambakidis
  - J Mocco
  - Peter Nakaji

- **SNIS Committee**
  - Adnan Siddiqui
  - Kristine Blackham
  - Mike Hill
  - Blaise Baxter
  - Shazam Hussein
2013 Joint SNIS/Joint AANS/CNS Cerebrovascular Program (also in collaboration with Mt. Bandai Symposium Neuroscience/Pan-Pacific Neurosurgery Conference)

- February 2nd-3rd: Fellows Neuroendovascular Course  (J. Mocco coordinating with Richard Kluczniz)

- February 3rd
  - 9:00-12:00 Socioeconomics of Neurovascular care
    - Moderators: Alex Khalessi (confirmed); Bernard Bendok
  - 9:00-9:20am What does the new Health Care law mean to you? (Bambakidis (confirmed))
    - 9:20-9:30 am Coding tips for open cases (John Wilson)
    - 9:30-9:50 am Coding tips for endovascular cases (Henry Woo) (confirmed)
  - 9:50-10:00 am break
  - 10:00 – 10:20 Medico-legal issues  (DH on working on this)
  - 10:20 – 10:40 Setting up a Full Service Stroke Center at Academic Center  (Cockroft (confirmed))
  - 10:40 – 11:00 Setting up a Neurovascular Center in a non-university setting (Erol Vez (confirmed))
  - 11:00 pm-12:30 pm Lunch
1:00pm-5pm  Nuances in the management of complex vascular lesions: Tricks and pitfalls

Moderators: Daniel Hanggi (confirmed), Judy Huang (confirmed), Ricardo Hanel

Aneurysms:

- 12:30-12:45pm  Wide-necked anterior circulation
  Microsurgical (Sander Connolly)

- 12:45-1:00pm  Endovascular (Felipe Albuquerque (confirmed)

- 1:00-1:15pm  Combined open and endovascular treatment of aneurysms
  (Elad Levy (confirmed)

- 1:15-1:30pm  Microsurgical treatment of previously coiled aneurysms
  (Rossana Romani) (confirmed)

- 1:30-1:45pm  Management of giant aneurysms (Lalligan Sekhar
  ( confirmed))

- 1:45-2:00pm  Role of microsurgery in posterior circulation aneurysms
  (Neil Martin (confirmed)

- 2:00-2:15pm  Full Exposure of Ruptured Cerebral Aneurysm
  (Naoki Nakayama, Hokkaido Univ. ) (confirmed)

- 2:15-2:30pm  Management of aneurysms not amenable to endovascular
  treatment (Takanori Fukushima (confirmed)

- 2:30-2:45pm  Break
Moderators: Adam Arthur (confirmed), Ricardo Hanel (confirmed), Judy Huang (confirmed)

AVMS/Cavernomas:
2:45-3:00pm  Nuances of radiosurgery for AVM treatment (William Friedman) (confirmed)
3:00-3:15pm  Embolization for AVM cure (Berenstein)(confirmed)
3:15-3:30pm  Goals of preoperative embolization (Fernando Vinuela)(confirmed)
3:30-3:45pm  Microsurgery for AVMs: technical pearls (Mike Lawton)(confirmed)
3:45-4:00pm  Multimodality AVM therapy: The Karolinska Institute Experience:
4:00-4:15pm  Fiber tracking and brainstem cavernous malformations: Robert Friedlander (confirmed)
4:15-4:30pm  Break

Moderators: Jon White (confirmed); Chris Ogilvy (confirmed), Complex unconventional bypass surgery
4:30-4:45pm  (Hiroyasu Kamiyama (confirmed)
4:45-5:00   Rokuya Tanikawa (confirmed)
5:00-5:15pm  Luca Regli (confirmed)
5:15-5:30pm  (Hiroyuki Kinouchi (confirmed Treatment of aneurysms with and without bypass)
February 4th:

7:00-7:50 am  Breakfast in exhibit hall

7:50-8:00 am  Opening remarks

8:00-10:00 am  Combined Session-Cerebrovascular Disease Controversies

Moderator(s): Jacques Morcos confirmed, Michael Alexander confirmed

(each speaker 10 minutes each and 4 minute for questions)

8:00-8:24 am  Ruptured/unruptured MCA aneurysm: Ali Krisht confirmed and Jacques Moret confirmed

8:24-8:48 am  Unruptured aneurysm (treat or not): Akio Morita confirmed and Robert Brown confirmed

8:48-9:12 am  Giant aneurysms: Lalligam Sekhar confirmed and Pedro Lylyk confirmed

9:12-9:36 am  Dural fistulae with cortical venous drainage and no hemorrhage: Toronto group Karl TerBrugge confirmed and Colin Derdeyn confirmed

9:36-10:00 am  Brainstem cavernous malformations; Helmut Bertalanffy and William Friedman confirmed

10:00 – 10:45 am  Abstracts (combined session)

Moderator: Phil Myers (confirmed), Shazam Hussein (confirmed)

10:45-11:15 am  Break in exhibit hall
11:15-12:00 am

**Session 1** (ICH Management the Evidence)
Moderator: Aman Patel confirmed, Louis Kim confirmed

11:15 am – 11:30 pm Aneurysms
Speaker: Greg Thompson confirmed

11:30 – 11:45 pm Dural Fistulae
Speaker: Greg Zipfel confirmed

11:45 pm – 12:00 pm Brainstem Cavernomas
Speaker: Joseph Zabramski confirmed

**Session 2** (Iatrogenic Stroke, What is the Real Risk)
Moderator: Arun Amar confirmed, DH to Pick

11:15-11:30 am Aneurysm coiling John Wong confirmed
11:30-11:45 am  Flow Diversion Adnan Siddiqui confirmed

11:45-12:00 am  Carotid stenting Martin Brown (confirmed)

12:00-12:30 pm  Abstracts (Parallel sessions)

Moderators Session I hemorrhagic stroke (Siverio Agazzi confirmed, David Hassan confirmed)

Moderator Session II ischemic stroke (Arun Amar confirmed, DH to Pick)

12:30-1:30 pm  Sponsored Lunch Symposium

1:30-2:00 pm  Break in exhibit hall

2:00-3:00 pm  Luessenhop Lecture

Moderators: Brian Hoh and Peter Nakaji both confirmed 2:00 – 2:15 PM

CV section Chair’s Address Sepideh Amin-Hanjani

2:15-2:20 PM

CV Section Resident Research Award

Presentation of Award

2:20-2:25 PM

Introduction of Luessenhop Lecture Sepideh Amin-Hanjani

2:25 – 2:55 PM

Luessenhop Lecture

2:55 – 3:00 PM

Questions & Answers
3:00-3:45 pm    Abstracts
Moderator: (Roc Chen confirmed, Kristine Blackham confirmed)

3:45-4:30 pm    Sponsored Afternoon symposium

4:30-4:45 pm    Break in exhibit hall

4:45-6:30 pm

Session 1 (Moya Moya)
Moderator: Gary Steinberg confirmed, Chang Wan On confirmed,

4:45-5:00pm    Diagnostic imaging of Moya Moya Ken Kazumata confirmed
5:00-5:15pm    How to select patients for surgery Kenichiro Kikuta confirmed
5:15-5:30pm    Management of Childhood Moya Moya: Edward Smith confirmed
5:30-5:45pm    Management of Adult Moya Moya: Satoshi Kuroda confirmed
5:45-6:00pm    Pearls for indirect bypasses Nester Gonzalez confirmed
6:00-6:15pm    Pearls for direct bypasses Yoshikazu Okada confirmed
6:15-6:30pm    Basic science revelations about Moya Moya Houkin confirmed
Session 2  Ischemic Stroke Topics
Moderator: Ray Turner (confirmed), Italo L’Infante (confirmed)

- 4:45-5:05 pm  Spinal cord stroke *(Philippe Gailloud confirmed)*
- 5:05-5:25 pm  Is there a future for ICAD intervention? *(Marc Chimowitz confirmed)*
- 5:25-5:45 pm  Predictors of bad outcome in stroke intervention-what you might not have thought of *(Joe Broderick confirmed)*
- 5:45-6:00 pm  Discussion

- 7:00 pm Reception/Dinner
February 5th:
- 7:00-7:45 am Breakfast
- 7:45-9:45 am Stroke Debates

Moderator: Bill Mack confirmed, Mike Hill confirmed

7:45-8:00 am Endovascular Stroke Intervention: a clinically effective treatment for acute ischemic stroke: (Raul Nogueira-confirmed)
- 8:00-8:15 am There is no role for endovascular stroke intervention outside of randomized trials: (William Powers-confirmed)
- 8:15-8:30 am Endovascular stroke treatment must be allowed and reimbursed outside of randomized trials: (J Mocco-confirmed)
- 8:30-8:40 am Discussion

8:40-8:55 am Advanced imaging identifies patients with delayed presentation who can still be salvaged: (Quil Turk confirmed)
- 8:55-9:10 am Angiographic collaterals predict the outcome: (David Liebeskind, UCLA —confirmed)
- 9:10-9:15 am Discussion

9:15-9:30 am Asymptomatic carotid stenosis is a medical disease: Anne Abbott (confirmed)
- 9:30-9:45 am Asymptomatic carotid stenosis requires aggressive treatment: Tom Brott (confirmed)
- 9:45-9:50 am Discussion
9:50-10:00 am  SNIS president’s update Michael Alexander
10:00-10:45  Sponsored Morning Symposium
10:45-11:15 am  Break in exhibit hall
11:15-12:30 am  
Session 1 (Stroke Research Updates)
  Moderator: Peter Rasmussen confirmed, Brian Fitzimmons confirmed
  
11:15-11:30 am  Update on the Japanese Stroke Registry, Dr. Yoshimura-confirmed.
11:30-11:45 am  IMS III, Tom Tomsick—confirmed
11:45-12:00 am  PREMISE, a blinded, sham controlled trial for CCSVI: Adnan Siddiqui confirmed
12:00-12:30 am  Panel Discussion: When is a surgical treatment mature enough for a randomized trial? (David Fiorella, Marc Chimowitz, Tom Brott, Kevin Cockroft)
Ongoing Stroke Trials?: DH to invite speaker
- **Session 2** (Session 2 Microsurgical Revascularization, and Post Stroke Care)
  - Moderator: Carlos David confirmed, Bob Carter invited

- 11:15-11:30pm  The role for microsurgical revascularization for cerebral ischemia Fady Charbel confirmed
- 11:30-11:45  What we have learnt about patient selection for microsurgical revascularization Jacques Morcos confirmed
- 11:45-12:00  Neurocritical care management of acute stroke: David Greer confirmed
- 12:00-12:15pm  Advances in Neuroprotective therapies: Mike Tymianski confirmed
- 12:15-12:30pm  Regenerative strategies after stroke: Robert Friedlander confirmed

- 12:30-1:30 pm  Lunch and Sponsored Afternoon Symposium
- 1:30-2:00 pm  Dessert break in exhibit hall
2:00-3:30 pm

**Session 1 (Session 1 Practical Stroke Intervention)**
Moderator: Joey English invited, DH to invite

- 2:00-2:15 pm  Access for stroke intervention: how I do it and why *(Sam Zaidat invited)*
- 2:00-2:30 pm  Technical aspects of using stent retrievers: what I’ve learned *(Tommy Anderson, Blaise to invite)*
- 2:30-2:45 pm  Technical aspects of using aspiration: what I’ve learned *(Aman Patel confirmed)*
- 2:45-3:00 pm  Stroke intervention in the posterior circulation *(Blaise Baxter confirmed)*
- 3:00-3:15 pm  Venous sinus thrombosis: is there an interventional option? *(Don Frei-confirmed)*
- 3:15-3:30 pm  European experience with new thrombectomy devices *(Peter Schramm-invited)*

**Session 2 (Session 2 Lessons Learned)**

Moderator: Sean Lavine confirmed, Yoshiaki Shiokawa confirmed, Tooru Inoue invited

What the case I will never forget taught me

- 2:00-2:15pm  Bypass surgery: Amir **Dehdasti confirmed**
- 2:15-2:30pm  Aneurysm  : **Gavin Britz confirmed**
- 2:30-2:45pm  AVM: Peter **Nakaji confirmed**
- 2:45-3:00pm  Cavernoma: Murat **Gunel confirmed**
- 3:00-3:15pm  Dural fistula: Pascal **Jabbour confirmed**
3:30-4:15 pm  Sponsored Afternoon Symposium
4:15-4:45 pm  Break in Exhibit Hall
4:45-5:15
Moderator: Blaise Baxter confirmed, Cameron MacDougall invited
Combined Session- Ischemic Stroke and Hemorrhagic Cases with Audience Polling

5:15-6:15 pm  Combined Session-Vasospasm
Moderator: Charlie Prestigiacamo invited, Mark Harrigan confirmed, Aaron Dumont confirmed
5:15-5:30 pm  Pathophysiology of cerebral vasospasm Loch MacDonald confirmed
5:30-5:45 pm  Optimizing detection of cerebral vasospasm (Rocco Armando confirmed)
5:45-6:00 pm  Advancements in ICU management of cerebral vasospasm Daniel Hangii (confirmed)
6:00-6:15 pm  Treatment of cerebral vasospasm (Todd Abruzzo confirmed)

6:15 pm  Closing Remarks
2013 ISC Meeting
Honolulu, HI

Drs. Albuquerque, Carter, Patel
ISC Meeting 2013

- Acute Endovascular Treatment of Stroke
Invited Symposium

- Building Definitive Evidence for Acute Endovascular Stroke Therapies
Talks: February 6, 2013; 7:40-9:10 am

- Completed and Ongoing Trials of Acute Endovascular Therapies: An Overview
- Trials Comparing Devices: SWIFT and Others
- Comparing IV to IA Therapy: Synthesis and BASICS Trials
- Novel Selection Paradigms: The Penumbra THERAPY Trial, etc.
- Discussion
Abstract Sessions: February 6 and 7

- Oral Abstract I: 7 talks
- Oral Abstract II: 7 talks
- Moderated Poster Tour IA: 6
- Moderated Poster Tour IB: 6
- Moderated Poster Tour II: 6
- Poster Session I: 30
- Poster Session II: 30
Meeting Theme – “Changing our culture to advance patient safety”

- Donaghy Lecture – Fady Charbel MD
- Symposium - TBD
Standing Committees/Project updates
Washington Committee Update

Katie Orrico
Coding and Reimbursement Subcommittee

Dr. Edward Vates
Dr. John Wilson
Joint Guidelines Committee & CV Section Guidelines Committee

Dr. Sepideh Amin-Hanjani
Guidelines and CV Section

- AANS/CNS Joint Guidelines Committee
  - CV representation: Amin-Hanjani, Cockroft (Co-Vice Chairs), Hoh, Khalessi, Lavine, Levy, Mack, Mocco, Zipfel
  - Review of documents meeting criteria for a Guidelines document

- CV Section Guidelines Committee
  - New Chair: Cockroft
  - Review of broader range of documents including consensus statements, technical reports, standards, etc.
AHA/ASA projects
Flag ship guidelines: $1^0$ prevention, $2^0$ prevention, ICH, SAH, Acute Stroke, Rehab

- SAH guidelines: (Writing Committee Chair: Connolly; AANS/CNS representative: Hoh).
  - Endorsed by AANS/CNS, published May 2012.

- Acute Stroke guidelines: (designated peer reviewer: J Mocco)
  - Endorsed by AANS/CNS, publication pending

- $1^0$ and $2^0$ prevention: (AANS/CNS representative: Wilson)
  - Commissioned

- ICH guidelines: (AANS/CNS representative: Bendok)
  - Commissioning delayed to Feb/March 2013
Other upcoming projects:

- Definition of Stroke (designated peer reviewer: Welch)
  - Revised manuscript under review
- Risk of Cervical Arterial Dissection after Chiropractic Manipulation (AANS/CNS rep: Albuquerque)
  - Commissioned, underway
- Palliative and End of Life Care in Stroke (AANS/CNS rep: Zipfel)
  - Commissioned, underway
- Evaluation/Management of Malignant Infarctions (AANS/CNS rep: Carter)
  - Commissioned
- Women’s Guidelines for stroke (AANS/CNS rep: Awad)
  - Commissioned
- Unruptured aneurysms (AAN/CNS rep: Cockroft; Chair: Thompson)
  - Commissioned
- Eligibility of IV tpA treatment of acute ischemic stroke
  - Pending
AHA/ASA projects

Potential future projects
- Management of Brain AVMs
- Dural AVFs
- Cavernomas
AHA/ASA projects

Flag ship guidelines: 1\(^{st}\) prevention, 2\(^{nd}\) prevention, ICH, SAH, Acute Stroke, Rehab

- SAH guidelines: (Writing Committee Chair: Connolly; AANS/CNS representative: Hoh).
  - Endorsed by AANS/CNS, publication May 2012.

- Acute Stroke guidelines: (designated peer reviewer: J Mocco)
  - Reviewed; revised copy pending

- 2\(^{nd}\) prevention: (AANS/CNS representative: Wilson)
  - Due for commissioning in April

- ICH guidelines: (AANS/CNS representative: Bendok)
  - Commissioned
AHA/ASA projects
Other upcoming projects:

- Definition of Stroke (designated peer reviewer: Welch)
  - Reviewed, revised copy pending

- Risk of Cervical Arterial Dissection after Chiropractic Manipulation
  (AANS/CNS representative: Albuquerque)
  - Commissioned

- Palliative and End of Life Care in Stroke (AANS/CNS representative: Zipfel)
  - Commissioned

- Evaluation and Management of Malignant Infarctions (AANS/CNS representative: Carter)
  - Due to be commissioned
AHA/ASA projects

Upcoming projects SOC:

- Women’s stroke guidelines
- Update on unruptured aneurysms

Potential future projects

- Management of Brain AVMs
- Dural AVFs
- Cavernomas
National Quality Forum

Dr. Kevin Cockroft
### Measure group #5: Mortality and Readmissions

<table>
<thead>
<tr>
<th>Number and Title</th>
<th>0467 Acute Stroke Mortality Rate (IQI 17)</th>
<th>2026 Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following an acute ischemic stroke hospitalization</th>
<th>2027 Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following an acute ischemic stroke hospitalization</th>
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<tbody>
<tr>
<td>Measure focus</td>
<td>In-hospital death</td>
<td>Death (any cause) within 30 days of index admission</td>
<td>Readmission (any cause) within 30 days of index discharge</td>
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<tr>
<td>Patient population</td>
<td>Patients 18+, principal dx=stroke</td>
<td>Patients 65+, 12 months FFS Medicare Part A/B, principle dx=acute ischemic stroke</td>
<td>Patients 65+, 12 months FFS Medicare Part A/B, principle dx=acute ischemic stroke</td>
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<tr>
<td>Denominator exclusions</td>
<td>Transferring to another short-term hospital, MDC 14 (pregnancy, childbirth, and puerperium), missing discharge disposition, gender, age, quarter, year or principal diagnosis</td>
<td>Transferred from another acute care hospital, with inconsistent or unknown mortality status or other unreliable data, discharged against medical advice (AMA), enrolled in the Medicare hospice program any time in the 12 months prior to the index hospitalization including the first day of the index admission</td>
<td>Within hospital death, transferred to another acute care facility, discharged against medical advice (AMA), without at least 30 days post-discharge claims data, only one 30-day readmission counted, no hospitalization counted as both a readmission and an index admission</td>
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<td>Timeframe</td>
<td>In-hospital</td>
<td>Within 30 days</td>
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<td>Level of analysis</td>
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<td>Data source</td>
<td>Administrative claims</td>
<td>Administrative claims, other</td>
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Neurovascular Coalition

Drs. Wilson and Cockroft
SNIS Update

Dr Michael Alexander
President, SNIS
Update on the SNIS 2012

Michael J. Alexander, MD FACS
Professor and Clinical Chief
Department of Neurosurgery
Cedars-Sinai Medical Center
Los Angeles, California

President, Society of NeuroInterventional Surgery
Leadership

- Cameron McDougall – Second Past President
- Josh Hirsch – Past President
- Michael Alexander – President
- Philip Meyers – President-Elect
- Peter Rasmussen – Vice President

- Michael Kelly – Neurosurgery Member-at-Large
Membership Update

Number of Members

Recent Meetings

SNIS Annual Meeting
San Diego, California
715 attendees
Guest speaker: Dr. Peter Carmel

Fellows course - 71 attendees

IESC Stroke Practicum at ASNР
New York, New York
291 attendees
Future Meetings

SNIS Annual Meeting 2013
Loews Miami Beach Hotel
Miami, FL

Joint CV Section and IESC Meeting 2013
Sheraton Waikiki Hotel
Honolulu, HI

SNIS Annual Meeting 2014
The Broadmoor
Colorado Springs, CO
Publications - Journal Update

Initial publication July 2009 as a quarterly journal

Indexed in Thomson-Reuters 2010

Initial impact factor 1.07

Indexed in Pub Med / Medline September 2011

Transition to bi-monthly publication in January 2012

Increased submissions from U.S. and international, More frequent issue publication

Official journal for SNIS, SVIN, ANZSNR, ? Pacific Rim NeuroInterventional Societies
JNIS Submissions 2011-12

- Australia
- Belgium
- Brazil
- Canada
- China
- France
- Germany
- India
- Iran, Islamic Republic of
- Israel
- Italy
- Japan
- Korea, Republic of
- Netherlands
- Serbia
- Spain
- Sweden
- Taiwan
- Turkey
- United Kingdom
- United States
Advocacy

- FDA Panel on intracranial stent HDE review
- NINDS/NIH Stroke Work Group
- FDA position statement for venous stenting in MS
- Anthem BC policy review for thrombectomy in AIS
- Abbott application for carotid stenting revised FDA approval indications
- Vertebral augmentation – multiple payer policy reviews
- Comprehensive Stroke Center designation criteria
Accreditation and Board

- Alarming increase in number of NeuroInterventional fellowship programs
- Standard for fellowship training not standardized
  - ACGME criteria need to be revised
- Formation of multi-discipline accreditation pathway with board certification
  - Ensure quality minimum training standards for all NeuroInterventionalists regardless of specialty
Brain Attack Coalition

Dr. Judy Huang
Membership Update

Dr Gregory J. Zipfel
CV Section Membership Update

Current Members

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Change</th>
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<td>Active</td>
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<td><strong>Total</strong></td>
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<td>Resident</td>
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Applications for vote

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<tr>
<td>International</td>
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<td>Adjunct Associate</td>
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Continuing membership initiatives

- Annual E-blasts to identify new members
  - Recent graduates (September 2012)
  - SNIS (September 2012)
  - NASBS (September 2012)
## Membership Applications for Discussion and Vote

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Category</th>
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<tr>
<td>Beverly Aagaard Kienitz MD</td>
<td>Adjunct</td>
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<tr>
<td>Arani Bose MD</td>
<td>Adjunct</td>
</tr>
<tr>
<td>Luis Fernando Gonzalez MD</td>
<td>Active</td>
</tr>
<tr>
<td>Charles C. Matouk MD</td>
<td>Active</td>
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<tr>
<td>Alfio P. Piva MD</td>
<td>Active</td>
</tr>
<tr>
<td>Steven Quarfordt MD</td>
<td>Adjunct</td>
</tr>
<tr>
<td>Daniel Sahlein</td>
<td>Adjunct</td>
</tr>
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</table>
Fundraising Committee

Drs. Hoh and Rasmussen
Research Fellowship Committee

Dr. Robert J. Dempsey
Dr. Peter Rasmussen
Cerebrovascular Research Award Update – 2013

As Chair of the Robert J. Dempsey, MD, Cerebrovascular Research Award, I am pleased to report the Cerebrovascular Section of the American Association of Neurological Surgeons and The Congress of Neurological Surgeons plans to once again award two $15,000 Resident Research Awards in Cerebrovascular Disease in 2013.

The reviewers for the past year were: Drs. Robert Dempsey, Robert Friedlander, Dandan Sun, and G. Edward Yates. We appreciate their help and hope they will be able to continue in the future.

The Joint Section has taken on the responsibility of fundraising to establish ongoing funding. Information and applications for the 2013 award are being sent to program directors, neurosurgery journals, and appropriate websites at this time with applications due by March 1, 2013. We look forward to another year promoting resident research.

Sincerely,

Robert J. Dempsey, MD
Chairman and Manucher J. Javid
Professor of Neurological Surgery
Department of Neurological Surgery

RJD:1vb
Website Committee Report

Gregory J. Zipfel

Committee Members
Bill Ashley  Edward Duckworth
Bernard Bendok  Chirag Gandhi
Bob Carter  Bill Mack
Roc Chen  Clemens Schirmer
Amir Dehdashti  Scott Simon
Aclan Dogan  Babu Welch
Rose Du


Update

- New website design in progress
  - Contract signed with Vividsites (September 6)
  - Website kickoff web meeting held (September 14)
  - Website committee working meeting scheduled (October 8)
  - Time table = 3-4 months
Curriculum Development & Education Committee

Dr. Bernard Bendok
CNS Webinars 2012
<table>
<thead>
<tr>
<th>Date</th>
<th>Planning Docs</th>
<th>Subspecialty</th>
<th>Topic(s)</th>
<th>Moderator</th>
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</table>
2. Evaluate recent guidelines on severe traumatic brain injury  
3. Discuss prognosis and cognitive outcome after traumatic brain injury                                                                                                                                                                                                 | Jamie Ullman, Jamshid Ghajar, Gerald Grant |
| April 3, 2012      | Intracranial Arteriovenous Malformations Innovative Use of All the Tools: Microsurgical, Radiosurgical and Interventional Approaches | Bernard Bendok, Andy Ringer, Felipe Albuquerque, Michael Lawton, Adnan Siddiqui | 1. Discuss the microsurgical indications, techniques and complications avoidance for AVMs  
2. Discuss the endovascular indications, techniques and complications avoidance for AVMs  
3. Discuss the radiosurgical indications, techniques, and complications avoidance for AVMs.                                                                                                                                                                                                 | Bernard Bendok, Andy Ringer, Felipe Albuquerque, Michael Lawton, Adnan Siddiqui |
| April 24, 2012     | Oral Board Review                                                             | Taryn M. Bragg, Bermans Iskandar, Art Dipatri                               | 1. Identify cutaneous manifestations associated with congenital spinal abnormalities  
2. Discuss the treatment of various types of spina bifida  
3. Identify and discuss the treatment of posterior fossa tumors, pineal region tumors, Chiari malformations, syringomyelia, hydrocephalus, brainstem gliomas, craniosynostosis and plagiocephaly.                                                                                                                                 | Taryn M. Bragg, Bermans Iskandar, Art Dipatri |
| April 25, 2012     | Oral Board Review                                                             | Ricardo Hanel, John Wilson, Andrew Ringer                                    | 1. Discuss the natural history, data, and surgical management algorithms for ruptured and unruptured INTRACRANIAL aneurysms.  
2. Describe the interplay of endovascular, surgical and gamma knife therapy for arteriovenous malformations with an emphasis on treatment indications.  
3. Identify the diagnosis and treatment for AVF and CCF.  
4. Explain the data supporting the treatment of asymptomatic and symptomatic carotid atherosclerotic disease with complication thresholds for CEA and CAS benefit.                                                                 | Ricardo Hanel, John Wilson, Andrew Ringer |
| April 26, 2012     | Oral Board Review                                                             | Amgad Hanna, Robert Spinner, Olawale Sulaiman                               | 1. Describe different entrapment neuropathies and how they present clinically,  
2. Describe the relevant evaluation options for specific peripheral nerve injuries  
3. Discuss approaches to surgical treatment of common nerve pathologies.                                                                                                                                                                                                 | Amgad Hanna, Robert Spinner, Olawale Sulaiman |
| May 1, 2012        | Free Guidelines Webinar: Summary of Guidelines for the management of acute ischemic stroke and intracerebral hemorrhage | Adnan Siddiqui, Jose Biller, Sepideh Amin-Hanjani, Brian Hoh, Erol Veznedaroglu | 1. Evaluate guidelines on subarachnoid hemorrhage management  
2. Evaluate guidelines on intracerebral hemorrhage management                                                                                                                                                                                                                                                                                                                                 | Adnan Siddiqui, Jose Biller, Sepideh Amin-Hanjani, Brian Hoh, Erol Veznedaroglu |
2. Assess techniques for minimally invasive spine  
3. Discuss complication avoidance in minimally invasive spine                                                                                                                                                                                                                                                                                                                                     | Robert Issacs, Stefan Mindea, Rick Fessler, John Liu, Larry Khoo |
2. Discuss the advantages of traditional skull base approaches  
3. Compare endoscopic to traditional skull base approaches                                                                                                                                                                                                                                                                                                                                  | Daniel Yoshor, Jim Evans, Ossama Al Mefty or Jacque Morocos, Ted Schwartz, Ed Laws |
| June 7, 2012       | Follow-up Free Guidelines Webinar: Case-based update on Guidelines on Severe Traumatic Brain Injury | Jamie Ullman, Jamshid Ghajar, Shelly Timmons                                | 1. Describe the physiology of severe traumatic brain injury  
2. Evaluate recent guidelines on severe traumatic brain injury  
3. Discuss prognosis and cognitive outcome after traumatic brain injury                                                                                                                                                                                                                                                                                                                                | Jamie Ullman, Jamshid Ghajar, Shelly Timmons |
| September 6, 2012  | Complex Spine Surgery: Techniques, Complication avoidance and case illustration | Michael Rosner, Frank La Marca, Tyler Koski, Patrick Hsieh, Christopher Ames | 1. Discuss the importance of biomechanics and sagittal and coronal balance when treating complex spinal diseases.  
2. Discuss surgical approaches and technical nuances of complex spine surgery  
3. Discuss complication avoidance of complex spine surgery.                                                                                                                                                                                                                                                                                                                                   | Michael Rosner, Frank La Marca, Tyler Koski, Patrick Hsieh, Christopher Ames |
<table>
<thead>
<tr>
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<th>Topic(s)</th>
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<tr>
<td>September 13, 2012</td>
<td>Follow-up Free Guidelines Webinar: Summary of Guidelines for the management of acute ischemic stroke and intracerebral hemorrhage</td>
<td>Adnan Siddiqui</td>
<td>1. Evaluate guidelines on subarachnoid hemorrhage management</td>
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<td></td>
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<td>Sepideh Amin-Hanjani, Erol Veznedaroglu</td>
<td>2. Evaluate guidelines on intracerebral hemorrhage management</td>
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<tr>
<td>September 18, 2012</td>
<td>The Moving Target of Concussion: Evolving approaches to an important public health dilemma</td>
<td>Russ Lonser, Steven Casha</td>
<td>1. Define brain concussion</td>
<td></td>
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<tr>
<td></td>
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<td>Hunt Batjer, Richard Ellenbogen, Kevin Guskiewicz, Margo Petukian</td>
<td>2. Describe mechanisms of concussion prevention and analysis</td>
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<td>3. Discuss approaches to pateintn with concussion</td>
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<td></td>
<td>Beverly Walters, Nicholas Theodore</td>
<td>2. Identify the classification of cervical spine injury and fractures</td>
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<td>October 23, 2012</td>
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<td>Taryn M. Bragg, Bermans Iskandar, Art Dipatri</td>
<td>1. Identify cutaneous manifestations associated with congenital spinal abnormalities.</td>
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<td>Taryn M. Bragg, Bermans Iskandar, Art Dipatri</td>
<td>2. Recognize the interplay of endovascular, surgical, and gamma knife therapy for arteriovenous malformations with an emphasis on treatment indications.</td>
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<td>4. Master the data supporting the treatment of asymptomatic and symptomatic carotid atherosclerotic disease with complication thresholds for cca and car benefit.</td>
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<td>Ricardo Hanel, John Wilson, Andrew Ringer</td>
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<td>November 6, 2012</td>
<td>Follow-up Free Guidelines Webinar: Case-based update on Guidelines for Severe Traumatic Brain Injury</td>
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<td>1. Describe the physiology of severe traumatic brain injury</td>
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<td>3. Describe treatment outcomes related to managing patients with complex intracranial aneurysms.</td>
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<td>Beverly Walters, Nicholas Theodore</td>
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Bylaws/Rules & Regulations Committee

Dr. Charles Prestigiacomo
2 new proposals approved at the CNS meeting Executive Council Meeting.

#1 As it currently stands, applications that are complete need to wait several months before receiving “rubber stamp” approval at the next EC meeting. Other Sections applications are approved once application is complete
2 new proposals approved at the CNS meeting Executive Council Meeting.

#2 SVIN to appoint a liaison to represent them at the CV EC meeting, and for us to have a reciprocal seat at their meeting.
Nominating Committee

Dr. E. Sander Connolly
Old Business
Neuropoint Alliance

Dr Kevin Cockroft
IAC carotid stent facility accreditation standards

Dr Kevin Cockroft
The IAC Standards for Carotid Stenting Accreditation
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IAC Carotid Stenting Sponsoring Organizations

A nonprofit organization, the IAC Carotid Stenting is supported by the following organizations while operating independently of their activities. Representatives from these organizations, listed below, make up the IAC Carotid Stenting Board of Directors.

- American Academy of Neurology (www.aan.com)
- American Association of Neurologic Surgeons and Congress of Neurologic Surgeons Cerebrovascular Section (www.cvsection.org)
- American Society of Neuroradiology (www.asnr.org)
- American Association of Physicians in Medicine (www.aapm.org)
- Neurocritical Care Society (www.neurocriticalcare.org)
- Society of Interventional Radiology (www.sirweb.org)
- Society of NeuroInterventional Surgery (www.snisonline.org/guest/guest.php)
- Society of Vascular and Interventional Neurology (www.svin.org/Pages/default.aspx)
- Society for Vascular Medicine (http://svmb.org)
- Society for Vascular Surgery (www.vascularweb.org)
BAF Updates

• The BAF has restructured its Medical Advisory Board to have a more formal structure with revolving positions as well as a greater presence nation wide as well as overseas. The roles of President and Vice President have been established with three year terms and regional co directors have been established with the same terms. To see who hold these various positions and what new members have been added please go to: http://www.bafound.org/medical-advisory-board

• The BAF awarded $200,000 in research grants this September at their research symposium in St. Louis. One of the grants awarded was the Christopher C. Getch Chair of research in the amount of $15,000. This amount was primarily by the BAF general research funds and $5,000 from the CV Joint Section. It would be great if this Chair could be granted annually and if the CV Joint Section could continue to be a funder of this either via a direct donation or some other fundraising mechanism.

• Last May the foundation went to DC to lobby on Capitol Hill regarding the importance of brain aneurysm awareness, early detection, and research funding. Over 35 people from 13 different states attended including physicians from the medical advisory board. It would be great to have a greater presence this May 2013 from the medical advisory board.

• The foundation is in the final stages of becoming a registered charity in Canada
The BAF is developing a medical educational lecture to be delivered via PRI-MED conferences targeting primary care professionals and nurses. The lecture will be focused on the importance of early detection, via proper diagnosis and scanning, as well as discussing treatment options. The lecture will be CME/CEU accredited. The first conference we plan to do this for is at PRI-MED East which will take place in Boston, MA on Nov 15, 2012 and includes people from MA, MH, ME, NY, CT, and RI and has a general attendance of 6,000+. Aesculap did provide some sponsorship. The total cost is $35,000. Dr. David will be presenting the lecture in Boston. If all goes well the BAF will look to do this in other cities as well as look into having an on-line course available.

The foundation continues to grow financially. The BAF is moving towards the million dollar mark for the first time. With $680,000 of revenue through 9/30/2012, the BAF is $80,000 ahead of last year at this same time.
Senior Society Matrix/
Milestones and Modules

Dr. Sander Connolly
Meri Institute/CV Sect
Resident & Fellows Courses

Dr Adam Arthur
Dr Erol Veznedaroglu
Dr. J Mocco
Dr. Adnan Siddiqui
New Business
Response to Mechanical Thrombectomy Policy - Wellpoint

(Drs. Khalessi, Mocco)
Joint Commission Stroke Certification

(Dr. Amin-Hanjani)
July 20, 2012

Jean Range, MF, RN, CPHQ
Executive Director, Certification
The Joint Commission
One Renaissance Blvd.
Oakbrook Terrace, IL 60181

Subject: Joint Commission Criteria for Stroke Center Certification

Dear Ms. Range:

The American Association of Neurological Surgeons (AANS), American Board of Neurological Surgery, Congress of Neurological Surgeons (CNS), AANS/CNS Joint Cerebrovascular Section, Society of Neurornterventional Surgery (SNIS) and the Society of Neurological Surgeons (SNS) are pleased that the American Heart Association and Joint Commission are attempting to further standardize the care of stroke patients nationally. However, we have grave concern over the standards set forth related to the surgical and endovascular care of patients with hemorrhagic and ischemic diseases. Certification will be interpreted by the American public as a standard of excellence in medical care; therefore it is critical that we set standards that meet these expectations.

As outlined below, there have been numerous studies that demonstrate that patients have better medical outcomes at high volume centers with high volume physicians.
Treatment of Aneurysms

In regards to treatment of aneurysms, many authors have demonstrated that for both unruptured and ruptured aneurysms treated either with endovascular or surgical procedures, high volume centers have lower mortality, fewer adverse outcomes, lower cost of care and shorter hospital stays (Barker et al Neurosurgery 2003; Solomon et al, Stroke, 1996; Hoh et al, Am J Neuroradiol, 2003; Vespa et al, Neurocrit Care, 2011). In these studies, the high volume centers with better outcomes have consistently been demonstrated to be those treating greater than 20 to 30 cases annually – both for surgical clipping and endovascular coiling respectively.

Furthermore, patients with aneurysmal subarachnoid hemorrhage represent a population with intensive critical care needs requiring an experienced team and setting, akin to trauma centers caring for complex trauma patients. Multiple studies have demonstrated the outcomes benefit of treatment of such patients in high volume centers (Cross et al, J Neurosurg 2003; Vespa et al, Neurocrit Care 2011). The recent AHA/ASA Guidelines for Management of Aneurysmal Subarachnoid Hemorrhage further reinforced this concept by firmly recommending treatment of such patients at high volume centers, defined as greater than 35 aneurysmal subarachnoid cases per year.
The case volume put forth to satisfy the initial criteria for comprehensive stroke center certification was disappointing to say the least. The literature and the undersigned Neurosurgical societies do not support the concept that 10 craniotomies per year for aneurysm clipping is sufficient to provide patients the best opportunity to have a good outcome. In addition, 15 endovascular aneurysm procedures per year appears to be at or below the minimum cut-off. The revised language put forth that now combines this into 15 coiling or clippings is wholly inconsistent with published standards, guidelines and peer-reviewed literature. The rationale cited by the Joint Commission of “considerable feedback that surgical clipping...being performed much less often and that coiling...being performed much more frequently” ignores recent data indicating that still 40-50 percent of aneurysms in the U.S. require surgical clipping (Smith et al, J Neurosurg, 2011). Furthermore, proficiency in both modalities of treatment should be considered paramount in offering truly comprehensive stroke treatment for aneurysms. The low volume requirement, and the combining of treatment modalities into one requirement, does a disservice to the public who may not appreciate the complexities of medical care and rely on groups such as the Joint Commission to help them determine which medical centers are optimized for better outcomes.

To that end, we strongly urge the Joint Commission to return to the goal of this endeavor, which is to certify centers that demonstrate that their hospital system is optimized to achieve the best possible outcomes for stroke patients.

1. We urge that the minimum number of aneurysm treatments (coiling and clipping) be increased from 15 per year to at least 40 per year, with a minimum of at least 15 microsurgical and 15 endovascular procedures. It is imperative that centers demonstrate that they are capable of adequately treating aneurysms with BOTH clipping and coiling approaches.

2. We also advocate the recommendations of the AHA/ASA guidelines which support demonstrating care of at least 35 patients annually with aneurysmal subarachnoid hemorrhage.
Ischemic Stroke

Regarding ischemic stroke, outcomes after endovascular intervention have similar results in relation to volume. Gupta et al (J Neurointervent Surg, 2012) demonstrated that high volume centers had shorter time between CT and start of thrombectomy, shorter procedural times, and were more likely to have a good outcome and achieve successful reperfusion of the ischemic brain. High volume centers were defined as centers that performed more than 50 endovascular thrombectomies/revascularizations per year.

Current criteria only require the availability of stroke interventionalists, but set no standards for demonstrating a volume of intra-arterial treatment. The data supports placing some minimum thresholds for intra-arterial interventions in order to maintain appropriately high standards for acute ischemic stroke care.

1. We urge that the stroke center certification requirements incorporate a minimum number of endovascular ischemic stroke cases. Based upon consensus and emerging data, at least 10 endovascular ischemic stroke cases every year should be considered as a criteria to qualify for comprehensive stroke center status.
Thank you for considering our comments and recommendations. We would like to discuss this matter further and look forward to arranging a conference call or meeting with appropriate representatives from the Joint Commission.

Sincerely,

Mitchel S. Berger, MD, President
American Association of Neurological Surgeons

Christopher E. Wolff, MD, President
Congress of Neurological Surgeons

Nelson M. Oyesiku, MD, PhD, Chairman
American Board of Neurological Surgery

Joshua A. Hirsch, MD, President
Society of Neuroradiology

Sepi Amin-Hanjani, MD, Chair
AANS/CNS Cerebrovascular Section

Ralph G. Dacey, Jr., MD, President
Society of Neurological Surgeons

cc: Tammy Gregory, Vice President, Quality and Health IT
American Heart Association
Kelly L. Podgorny DNP, MS, CPHQ, RN, Project Director
Division of Healthcare Quality Evaluation
Joint Commission
Mark J. Alberts, MD, Professor of Neurology, Chief of the Division of
Stroke and Cerebrovascular Disease
Northwestern University Feinberg School of Medicine

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725 15th Street, NW, Suite 500
Washington, DC 20005
Office: 202-446-2024
Facsimile: 202-628-5264
Email: korrico@neurosurgery.org
August 30, 2012

Dear Drs. Berger, Oyesiku, Amin-Hanjani, Wolfa, Hirsch, and Dacey:

Thank you for your recent letter in reference to the Comprehensive Stroke Center Certification (CSC) procedural volume requirements. We agree that CSC Certification requirements are extremely important; we also agree that the American public is likely to interpret achievement of this certification as a standard of excellence in complex stroke care.

The Joint Commission and the American Heart Association developed the CSC Certification requirements in January 2011, following years of deliberation and planning. As you have noted, our goal in developing CSC certification was to promulgate national standards for the care of complex stroke patients with a framework of requirements substantially derived from the Brain Attack Coalition’s (BAC) recommendations (Stroke, 2005; Stroke, 2011). In addition to the BAC recommendations, an extensive literature review was also conducted to inform the standards development process.

In June 2011, an interdisciplinary Technical Advisory Panel (TAP) was convened to advise The Joint Commission on the important components of a CSC. The advisory panel consisted of 25 neurologists, neurosurgeons, interventional radiologists, and doctoral-level pharmacologists and nurses nominated by the nation’s preeminent neurological and neurosurgical associations and societies. As you know, three members were nominated by the American Association of Neurological Surgeons, the Congress of Neurological Surgeons, and the Society of NeuroInterventional Surgery. The TAP’s recommendations were used to further refine the CSC standards to create proposed requirements. Following the June TAP meeting, The Joint Commission engaged in a six-week “field review” in which proposed requirements were posted for public comment using a structured, electronic survey process. The TAP was reconvened telephonically following the completion of the field review. The Joint Commission’s Board of Commissioners’ Standards and Survey Procedures Committee approved the Comprehensive Stroke Certification requirements on December 14, 2011.
Following the appearance of the pre-publication version of the CSC requirements on our website, The Joint Commission received a large number of responses from the field indicating that the requirement of 10 surgical clippings for aneurysm per year was neither feasible nor clinically indicated for many organizations. Many organizations expressed concern to The Joint Commission that they would be ineligible for CSC certification because they perform so few surgical clipping procedures, despite the fact they treat a significant number of aneurysms. Based on this substantial feedback, and after consultation with a number of experts and practitioners in the field, it was understood that while the original requirement of 10 or more craniotomies for aneurysm clipping procedures was valid at the time of our initial research, recent changes in the field of stroke care suggested that this requirement was already outdated. Consequently, the volume requirements pertaining to aneurysms were revised to its current status which states:

DSPM 1, EP 2, C: The Comprehensive Stroke Center demonstrates that 15 or more endovascular coiling or surgical clipping procedures for aneurysm are performed per year.
Since presentation of this revised volume requirement on July 17, 2012, your organizations are encouraging The Joint Commission to again modify it. The Joint Commission appreciates that complex stroke care is a rapidly evolving field with changes in technology, techniques and an understanding of the science. The American Heart Association’s Hospital Accreditation Science Committee recently emphasized to The Joint Commission that the science underlying complex stroke care continues to evolve, and that **additional revisions to the CSC certification requirements should be anticipated.** Therefore, The Joint Commission will commence a review of **all CSC requirements** for relevance in **January 2013.** The recommendations and literature you have presented to The Joint Commission will be considered at that time. The Joint Commission anticipates engaging your organizations in the next iteration of this important program.

Thank you again for your contribution to our certification process. We look forward to working with you in the coming year.

Kind regards,

Jean Range  
Executive Director  
Healthcare Services Certification
MOC Vascular Module

(Drs. Bendok and Siddiqui)
CNS Fellowship Committee: Request to have Fellows featured at CV Section Meeting.

(Dr. J Mocco)
CAS Response to Industry Letter

(Dr. Wilson)
CV Section Response

Abbott's CMS Carotid Artery Stent (CAS) Coverage Expansion Strategy:

The CV Section leadership and selected membership representing both open and endovascular trained neurosurgeons have been engaged in discussions in response to a draft proposal by Abbott to a formal request that CMS open National Coverage Decision (NCD) 20.7 for reconsideration.

We believe it is the appropriate time for CMS to reconsider the current NCD, in light of: 1) the recently completed Carotid Revascularization Endarterectomy versus Stent Trial (CREST), which led the FDA to expand the indication for Abbott Vascular's CAS system to include standard surgical-risk symptomatic and asymptomatic patients, 2) the recent ACC/AHA Multi-Society Guideline publication with a Level I (Level of Evidence: B) recommendation for CAS as an alternative to CEA in symptomatic patients with a low risk of endovascular complication, and a Level IIb recommendation for asymptomatic patient, and 3) CMS' recent Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) meeting held in January 2012. In addition, there is increasing evidence of improvements in the medical regimen to prevent stroke and death in asymptomatic patients. Finally, a number of industry-sponsored post-market extension studies have closed (CABANA-Boston Scientific and CHOICE-Abbott Vascular), creating access challenges for Medicare beneficiaries.

The following coverage proposal is a draft document to highlight areas of consensus and others where consensus could not be reached during discussions within the CV Section. It is drafted to comment on specific proposals noted in the Abbott document. The Abbott proposal utilizes CMS' Coverage with Evidence Development (CED) authority, a coverage model developed by CMS that seeks to align the interests of diverse stakeholders.
Symptomatic Patients:

**Abbott Proposal:** For symptomatic patients with carotid stenosis ≥ 50% stenosis by angiography or ≥ 70% by ultrasound, magnetic resonance angiography (MRA) or computed tomography angiography (CTA), regardless of surgical risk status, carotid artery stenting (CAS) would be a Medicare-covered treatment option subject to the coverage restrictions described below:

- Mandatory participation in a CMS-approved national database registry (e.g. NCDR-CARE®, SVS-VQIP, CAS-QIP) is required for all symptomatic patients undergoing CAS.
  - CMS, in consultation with the professional community and registry programs would set minimum standards for data elements collected (i.e., NIH stroke scale determination at 30 days, peri-procedural adverse events). These same registry data would serve as the basis for site- and operator-level outcomes analyses required for reporting and accreditation.
- Mandatory facility certification by a CMS-approved independent accrediting body (e.g. ACE or IACCSF) is required for all symptomatic patients undergoing CAS.
  - Similar to above, CMS, in consultation with the professional community and accreditation bodies, would set minimum standards for accreditation (i.e., facility requirements, operator training and experience). Utilizing each facility’s national database registry data, as well as other facility-level criteria, independent accrediting organizations would make determinations concerning accreditation in an unbiased and objective manner. Sites that do not adhere to minimum data collection / reporting requirements or that have inadequate patient safety outcomes according to pre-established guidelines for symptomatic patients (e.g., AHA 6% 30-day death & stroke benchmark) will be required to undergo remediation and/or lose their accreditation and therefore their ability to offer CAS as a treatment option for Medicare patients.
The costs of participation in such a CED-based program for symptomatic patients would be borne by the facilities performing carotid stenting procedures; these facilities would be required to subscribe and submit data to a national database registry, as well as obtain the necessary accreditation by a CMS approved body. Such a request would follow the approach taken in other recent CMS national coverage decisions.

CV Section Response:

1. There was broad consensus that coverage should be expanded for younger (age <65) standard risk symptomatic patients with carotid stenosis ≥ 70% stenosis by angiography from the current status of coverage limited to high surgical risk patients with symptomatic carotid stenosis ≥ 70% stenosis.

2. There was also consensus that for patients with high surgical risk who have symptomatic carotid stenosis ≥ 50% but <70% stenosis by angiography there should be no expansion of coverage for the concern that maximal medical therapy remains an excellent alternative in light of the reported high risk of stroke and death in high-risk CAS registries and the lower natural history of stroke in this population.

3. There was no consensus reached over expansion of CAS coverage for standard surgical risk patients who have symptomatic carotid stenosis ≥ 50% but <70% stenosis by angiography.

4. There was broad consensus for the additional stipulations in regards mandatory participation in national registries and mandatory facility certification.
Asymptomatic Patients:

Abbott Proposal: Currently, the medical community remains divided on how to interpret the evidence regarding treatments for asymptomatic patients with significant carotid artery disease. The aforementioned organizations acknowledge that no direct head-to-head randomized trials have been conducted to date comparing CAS to contemporary best medical therapy. Furthermore, questions have been raised regarding the relevance of prior randomized trials comparing CEA to medical therapy.

As has recently been done in other NCDs, we recommend that CMS set a timeline for the submission of proposals for such studies, perhaps two years from finalization of the NCD. We believe this is a realistic time frame to allow for submission of pragmatic studies that will continue to build the evidence base. In addition, CMS should outline an overarching research question these studies should seek to address. For example, do Medicare beneficiaries who are asymptomatic for carotid artery disease and undergo carotid revascularization procedures (CAS or CEA), in addition to receiving optimal medical management, experience a clinically significant reduction in stroke risk, compared to patients who receive optimal medical management alone? In addition, CMS should consider providing direction regarding sub-questions as well. Below, we propose a number of such questions:

- What are the positive and / or negative predictors of stroke in patients with asymptomatic carotid artery disease?
- What diagnostic and imaging modalities best differentiate patients’ stroke risks? Which of these modalities can be reasonably and effectively integrated into health care organizations?
- Do specific patient subgroups have different stroke risk profiles? Is there a natural progression of carotid atherosclerosis, and if so, does stroke risk fluctuate with progression of disease?

- What facility and operator factors are associated with favorable and/or worse CAS outcomes, and how can these factors be used to improve CAS outcomes?

Finally, CMS should articulate standards of scientific integrity and relevance to the Medicare population, as has been done in recent NCDs.

**CV Section Response:**

1. There was broad agreement with Abbott’s proposal that there remains lack of adequate data comparing ANY intervention; CEA or CAS, to current maximal medical therapy for asymptomatic patients.

2. There was also strong support to study this population through additional registries and trials designed at addressing the many areas of ‘data gap’.

3. Therefore, there was consensus in recommending no expansion of coverage for asymptomatic patients.
Vasospasm Treatment

Ketan R. Bulsara MD
How long have you been in practice?

- < 5 years
- 5-10 years
- > 10 years
What is your volume of aneurysmal SAH?
How do you/your team screen for cerebral vasospasm? (please select all that apply)

- Daily TCDs
- A routine CTA (between days 5-10)
- A routine angiogram (between days 5-10)
- Other (please specify in next question)
When do you institute treatment for cerebral vasospasm? (please select all that apply)
What is your first line treatment for symptomatic cerebral vasospasm?
If aggressive NICU management does not alleviate symptoms do you/your team use endovascular methods to treat cerebral vasospasm?
For symptomatic cerebral vasospasm we use the following intra-arterial agent as first line:

- **Verapamil**: 100%
- **Nicardipine**: 40%
- **Minnone**: 10%
- **Papaverine**: 10%
- **Other (please specify in next question)**: 10%


What is your second line intra-arterial agent?

- Verapamil
- Nicardipine
- Milrinone
- Papaverine
- Other (please specify in next question)
How often would you estimate that you see an immediate angiographic change after administration of intra-arterial agent?
Angioplasty is utilized for (select as many as apply)

- Proximal vasospasm: 150
- Distal vasospasm (A2, M2, P2 etc and beyond): 30
- Not applicable: 10

The graph above shows the utilization of angioplasty for different types of vasospasm.
In your experience, how effective is endovascular treatment for cerebral vasospasm?
Future Direction

- This practice survey data is first glimpse of vasospasm treatment practices across the country. Some insights into common practice which may be of interest publishing.

- Variability of practice in primarily use of intra-arterial agents. Looking into prospective registry that would allow systematic collection of data to determine if certain IA agents more effective in different patient populations.
Thank you!