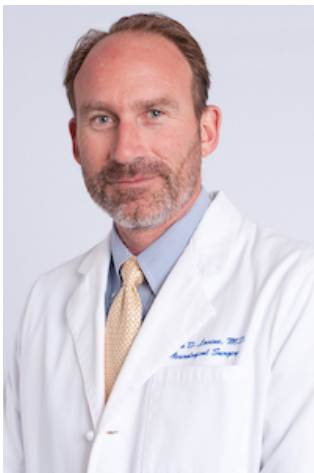


CV Section News

Chairman's Message

Editor: Ketan R. Bulsara MD
Co-Editor: Andrew Ducruet MD



Welcome to Los Angeles! I am particularly pleased to invite you to Los Angeles for the upcoming AANS/CNS Joint Cerebrovascular Section meeting from February 15-16, 2016. Because Los Angeles is my birthplace, I am particularly excited to be serving as the Chair of the Society during our Annual Meeting in this fabulous location. Once again, our conference will precede the American Heart Association/American Stroke Association International Stroke Meeting that will be held in downtown LA while ours will be at the Sheraton Universal Hotel in proximity to Universal Studios.

We are once again fortunate to be partnering with the Society of Neurointerventional Surgery (SNIS) in both a scientific and organizational capacity. Our international collaborator for this meeting will be the Neurosurgical Society of Australasia, headed by Dr. Mark Dexter from Sydney, Australia. Several speakers from "downunder" will give the perspective of the treatment of CV disease in Australia. Peter Nakaji and Felipe Albuquerque have organized an outstanding scientific program featuring several prominent national and international speakers. Topics will range from the impact of recent trials on cerebrovascular practice, to the impact of scientific research, and treatment of the challenging high-risk patient. A local flavor session will describe the treatment of CV disease in the greater Los Angeles Area.

Jean Raymond from Montreal, Canada will give the Leussenhop Lecture. His talks are always thought provoking and his ideas are drawn from many years of clinical and scientific excellence.

Information and registration for the meeting can be found on our website: www.cvsection.org.

Our Section members and executive committee members have been extremely busy with several important initiatives. We are pleased that the Committee on Advanced Subspecialty Training of the Society of Neurological Surgeons (CAST) Certification Pathway has been finalized for both individual CV Practitioners as well as Fellowship Training Programs. This is the culmination of years of tireless work by multiple devoted individuals from Neurosurgery, Radiology and Neurology. We hope that this will begin the process of insuring quality CV care for all of our patients. Please visit our website for further information and a link to the applications for certification.

The Joint CV Section and the Neuropoint Alliance have created a CV Module for the National Neurosurgery Quality and Outcomes Database (N2QOD). Several centers are now recording data. There is a need for more centers to participate in this important project. Quality and outcomes reporting has been mandated, and this represents an excellent tool for measuring our treatments and providing the best outcome possible through careful analysis of our successes and failures.

We continue to work with the AHA, Joint Commission, the Cerebrovascular Commission, and Brain Attack Coalition to use consistent and appropriate guidelines for the certification of primary and comprehensive stroke centers. There has been much discussion about varied standards by different accreditation organizations, and lack of adoption of previously negotiated standards. The latest action will be further discussions through a newly formed AHA Hospital Accreditation Scientific Committee, and an editorial consensus statement from the Cerebrovascular Coalition with the help of key CV Section members.

Once again, I am very grateful to the CV Section Members who volunteer many hours and countless energy to these and many other important projects. Their efforts will ultimately insure the best care for our patients and scientific advancement in our field. We also value our collaboration with our partner societies, and I look forward to seeing you soon in Los Angeles.

A handwritten signature in black ink, appearing to read "Sean D. Lavine". The signature is fluid and cursive, with a large initial "S" and "L".

Sean D. Lavine, MD
Chair, AANS/CNS Joint Cerebrovascular Section.

SECRETARY'S MESSAGE



The AANS/CNS Section on Cerebrovascular Surgery is going strong. The successful representation for neurosurgery to the larger cerebrovascular community is of paramount importance during these exciting and changing times. The growth of neurosurgical involvement in the treatment of acute ischemic stroke has been unprecedented, and work continues to refine and improve the care of hemorrhagic stroke patients. The newly launched cerebrovascular module of N2QOD has gained excellent momentum and is quickly developing into a critical engine for quality improvement in CV surgery. As CV section members you can be proud of the section's efforts to improve

patient care.

We are also excited for our upcoming annual meeting in Los Angeles, CA. Dr. Peter Nakaji is already hard at work, collaborating with the Society of Neurointerventional Surgery (SNIS) to plan a truly outstanding annual meeting. The collaboration with the SNIS has been stronger than ever, resulting in a cooperative relationship that is much stronger than the individual parts. Collaborative efforts on policy development, education, research, and quality initiatives abound, and our field is stronger for it.

I strongly encourage you to visit our website (<http://www.cvsection.org/>). Dr. Babu Welch and his team have made great strides in improving the site and it is now, truly, an outstanding resource for our membership. There are many great new initiatives through the website. I promise that if you check it out, you'll be glad you did.

The CV Section remains a vital component of the neurosurgical community and you, as a member, can be proud of the contributions made by the section over the past months. We encourage all neurosurgeons and cerebrovascular practitioners to become involved in our educational, research and advocacy activities.

J Mocco, MD, MS

MEMBERSHIP UPDATE*William Mack, MD*

The membership of the Section remains strong at 2252 members (374 active, 103 lifetime, 58 international, 43 adjunct, 1687 resident/fellow, 35 medical students). The membership committee will continue to work with the parent organizations (AANS/ CNS) and the young neurosurgeons committee to support and recruit new members. We have also encouraged adjunct membership applications from our close collaborators and high quality colleagues in other specialties. We have seen a steady increase in applications. Membership benefits include priority access to seminars and courses at the Annual Meeting, and receipt of the Cerebrovascular Section Newsletter.

UPCOMING MEETINGS**CV Section Annual Meeting (2016)**

Preparations are well underway for the AANS/CNS Joint Cerebrovascular Section meeting, to be held February 15-16, 2016, at the Sheraton Universal Hotel in Los Angeles, California. There is still time to register, and housing remains open, though the advanced hotel deadline is closing fast. As usual, the meeting will be coordinated with the International Stroke Conference (ISC). This year's CV Section meeting features the latest in clinical trials updates, complex cases in a "High-Risk Patient" Session, challenging cerebrovascular and endovascular problems in "Where We Fail", and updates on diverse topics such as training, coding, and regulatory issues. Dr. Sean Lavine will deliver his Chair address and welcome Luessenhop lecturer Jean Raymond. There is a Los Angeles-themed session and reception. The partner society, the Neurosurgical Society of Australasia, will be featured in its own session. Very strong abstract submissions will round out the meeting with new data. The meeting will close with a "Monster Show" of complications and their management with lessons learned, delivered by leaders in open cerebrovascular and endovascular surgery. Come join us in Los Angeles!

Peter Nakaji, MD, CV Section Annual Meeting Programming Chair

Adam Arthur, MD, CV Section Annual Meeting Programming Co-Chair

Felipe Albuquerque, MD, SNIS Annual Meeting Programming Program Chair



Jean Raymond, 2016 Luessenhop Lecturer

International Stroke Conference Program Committee Update (2016)

William Mack, MD, Kevin Cockroft MD, Babu Welch MD

The 2016 International Stroke Conference is planned for February 17-19, 2016 in Los Angeles, CA following the CV section meeting. The CV section is responsible for designing the sessions on vascular malformations and subarachnoid hemorrhage and other Neurocritical care management. The titles for these sessions are: “Treatment of Dural Arteriovenous Fistulas” and “Issues in the Neurocritical Care Management of Aneurysmal Subarachnoid Hemorrhage”. An additional session entitled “Towards Definitive Medical Therapies for Intracerebral Hemorrhage” will focus on critical management of intracerebral hemorrhage. CV section delegates were also involved in refining a session entitled, “Surrogates of rupture for intracranial aneurysms.” The CV section has multiple speakers, moderators and presenters involved in sessions across the entire conference. We look forward to seeing everybody in Los Angeles for the meeting!

AANS Meeting (Chicago, IL, April 30-May 4, 2016)

Adam Arthur, MD, Annual Meeting Programming Chair

Brian Jankowitz, MD, Annual Meeting Programming Co-Chair

The Cerebrovascular Section sessions at the upcoming 2016 AANS meeting should be intriguing for anyone interested in vascular neurosurgery. Dr. Steven Giannota will deliver the Yasargil Lecture and Dr. William Couldwell will be giving the Donaghy Lecture. There will be a debate on how best to interpret the results of BRAT by two of the authors, Drs Spetzler and McDougall. And we will have presentations by a host of vascular luminaries, including Bob Harbaugh, David Langer and many others.



CNS Meeting (San Diego, CA, September 24-28th, 2016)

CV section organizers: Brian Jankowitz MD and Stavropoula Tjoumakaris MD



AANS/SNIS/SVIN Endovascular Techniques for Fellows Course (Medical Education Research Institute, Memphis TN, October 7-9, 2016)

AANS Open Vascular and Endovascular Techniques for Residents Course (Medical Education Research Institute, Memphis TN, October 20-22, 2016)

Technology Forum

Andrew F. Ducruet, M.D.

Assistant Professor of Neurological Surgery and Clinical & Translational Science

University of Pittsburgh

Multiple recent clinical trials have unequivocally demonstrated the overwhelming clinical outcome benefit associated with mechanical thrombectomy in properly selected patients with emergent large vessel occlusion (ELVO) [1-6]. The majority of these trials required the use of a stentriever, and the most recent update of the AHA guidelines for acute ischemic stroke include the use of stentriever as level I evidence [7]. While it is clear that the use of such devices has improved the speed and quality of reperfusion, there remain a significant proportion of patients who suffer poor outcome often from distal embolism to the same or different vascular territory.

The EmboTrap system (Neuravi Ltd., Galway, Ireland) is a next-generation stentriever device informed by extensive preclinical research on the interaction of thrombus, device, and vessel wall. This device is composed of a 2-layer Nitinol structure including an inner 1.25mm closed cell stent with high radial force surrounded by a larger outer structure with lower radial force but larger cells (**Figure 1**). The outer structure is designed to allow thrombus into the space between the two layers, while the inner layer maintains a channel through the clot to allow for reperfusion. The larger outer petals are designed to maintain a grip on the thrombus during retraction, while the closed distal end aims to minimize distal emboli. The device is delivered through an 0.021 inch microcatheter, and was approved under the CE mark in Europe in 2013. EmboTrap was one of the devices utilized in the ESCAPE Trial.

The first-in-man experience was published in November 2014 [8]. A total of 40 patients were treated using this device at 5 large volume European stroke centers. Anterior circulation occlusions comprised 87.5% of cases treated, including 25% ICA terminus, and 20% tandem occlusions. The investigators achieved a TICI 2b-3 reperfusion in 38 of 40 (95%) cases. Additional devices were required in 11 of 40 (28%) of cases. Mean procedural time to reperfusion was 54 minutes, and a mean number of 1.8 passes was utilized. Procedural complications were seen in 2 of 40 cases (5%), both ICA dissections treated conservatively without clinical sequela, and no device-related complications were observed. Good clinical outcome (mRS 0-2) at 90 days was observed in 35% of patients with available clinical follow-up.

The ongoing ARISE II single-arm clinical trial seeks to evaluate the safety and efficacy of the EmboTrap device in the treatment of ELVO (internal carotid, Middle cerebral, vertebral, or basilar) within 8 hours

of ischemic onset. For patients treated within 3-8 hours, a small core must be documented through MRI (<50cc), CT ASPECTS (6-10), or CT perfusion (CBV <50cc). Primary endpoint is TICI 2b-3 flow in ≤ 3 passes with EmboTrap. Manual Co-aspiration is allowed, but an aspiration pump is not. There are currently 8 active sites internationally. The hope is that this device will allow for an incremental, but important, improvement on existing devices that will translate into improved clinical outcome for patients. The EmboTrap device represents yet another example of the ongoing interaction between neurointerventionalists, researchers, and industry that continues to drive advances within the neurointerventional space.

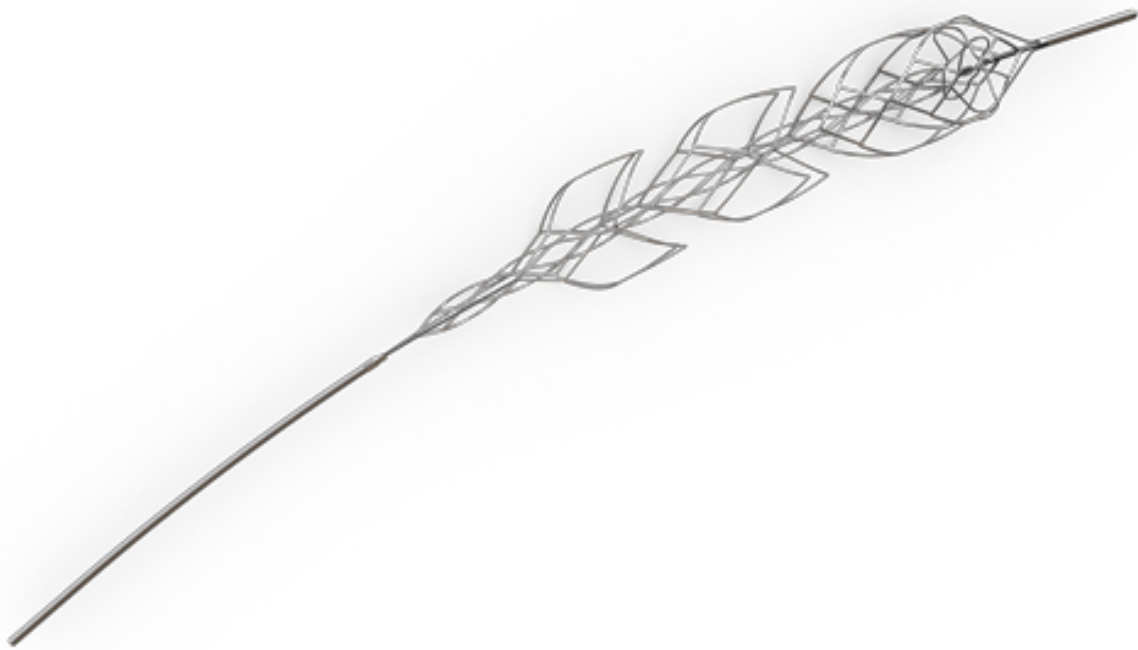


Figure 1: The EmboTrap device pictured with its inner and outer structures.

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3. Goyal M, Demchuk AM, Menon BK, Eesa M, Rempel JL, Thornton J, Roy D, Jovin TG, Willinsky RA, Sapkota BL et al: Randomized assessment of rapid endovascular treatment of ischemic stroke. *The New England journal of medicine* 2015, 372(11):1019-1030.
4. Jovin TG, Chamorro A, Cobo E, de Miquel MA, Molina CA, Rovira A, San Roman L, Serena J, Abilleira S, Ribo M et al: Thrombectomy within 8 hours after symptom onset in ischemic stroke. *The New England journal of medicine* 2015, 372(24):2296-2306.
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8. Kabbasch C, Mpotsaris A, Liebig T, Soderman M, Holtmannspotter M, Cronqvist M, Thornton J, Mendes Pereira V, Andersson T: First-In-Man Procedural Experience with the Novel EmboTrap(R) Revascularization Device for the Treatment of Ischemic Stroke-A European Multicenter Series. *Clinical neuroradiology* 2014.

OPPORTUNITIES FOR FUNDING

AANS FELLOWSHIP/GRANTS

<http://www.aans.org/Grants%20and%20Fellowships.aspx>

CNS FELLOWSHIP/GRANTS

<https://www.cns.org/grants-awards/grants-awards-and-fellowships>

AMERICAN HEART ASSOCIATION

http://my.americanheart.org/professional/Research/FundingOpportunities/Funding-Opportunities_UCM_316909_SubHomePage.jsp

BRAIN ANEURYSM FOUNDATION

<http://www.bafound.org/applying-research-grant>

THE ANEURYSM AND AVM FOUNDATION

http://www.taafonline.org/pr_grants.html

Calendar

February 15-16, 2016

Cerebrovascular Section Meeting
Los Angeles, CA

February 17-19, 2016

International Stroke Conference
Los Angeles, CA

April 30-May 4th, 2016

AANS Annual Meeting
Chicago, IL

September 24-26, 2016

CNS Annual Meeting
San Diego, CA



The 9th Annual

Cerebrovascular Complications Conference (3C)

SAVE THE DATE



June 12-15, 2016 • Four Seasons Resort • Jackson Hole, WY

Save the date for this meeting designed to meet the complex educational needs of physicians from diverse backgrounds through a no-holds-barred sharing of our worst complications, focusing on how the disaster occurred and how you might prevent it in the future. The exchange of ideas among physicians, scientists, and other health care professionals will be facilitated and encouraged in a confidential environment through a format of case discussions and candid debates.

Conference information will be available soon at our website, www.3cmeeting.com.

For further conference information, contact Courtney Ferron at 716.888.4805 or cferron@jacobsinstitute.com.