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REGISTRATION FEES

Invited Speakers	Free
Speakers younger than 35 with accepted abstracts	Free
Student, trainee and young attendees	€ 200,00
Participants	€ 350,00
ISNVD Members	€ 300,00

*Registration fees includes:*

*Participant, students:* Access to all scientific session; congress kit; welcome cocktail; coffee breaks; working lunches

*Accompanying person:* Welcome cocktail

The registration fee does not include the insurance of participants against personal accidents, sickness, theft or property damage.

SCIENTIFIC INFORMATION

Projections

- Oral presentations must be prepared in Power Point format
- Speakers are strongly recommended to save their presentations on a pen drive.
- Speakers with their presentations on personal laptop are kindly requested to go to the Multimedia Slide centre
- We kindly recommended speakers to contact the Multimedia Slide centre the day before their presentation

# 7th Annual ISNVD Scientific Meeting

## SCIENTIFIC PROGRAMME

### 4 May 2017

Session 1     9.30 - 10.30

Training Course on ECD. Innovative ultrasound imaging of extracranial vessels

Chairs: *Marcello Mancini - Paolo Zamboni*

1. *Marcello Mancini*: Ultrasound imaging of vulnerable atherosclerotic plaque.
2. *Paolo Zamboni*: Application of a lumped ECD model in CCSVI cases and in post-op follow-up
3. *Francesco Sisini*: What does JVP tell us?
4. *Erica Menegatti*: JVP Reproducibility
5. *Karen Marr*: Jugular Venous flow quantification using automated compared to manual based calculation using Doppler sonography
6. *Carla Virgilio*: How we assess IJV stenosis before angioplasty

Lecture 1     10.35 - 10.50

Keynote Speaker: *Mat Daemen*

Plaque fissure: an underestimated cause of intraplaque hemorrhage.

**Session 2     10.55 - 13.10****Cerebral protection device in CAS**Chairs: *Piergiorgio Cao, Andrea Stella*

1. *Stefania Marconi*: Benchmark compliant models for in-vitro testing and fluid-dynamics studies applied to cerebro-vascular diseases.  
Discussant: *Theodorus Van Bakel*
2. *Enrico Marone*: 3D Printing can be useful in complex Arch approach for treatment of cerebrovascular disease  
Discussant: *Bianca Pane*
3. *Alison Halliday*: Neurological events in ACST2 trial.  
Discussant: *Alessia Giaquinta*
4. *Carlo Pratesi - Aaron T. Fargion*: Does local anaesthesia reduce the risk of brain hypoperfusion during carotid cross clamping?  
Discussant: *Giuseppe Galzerano*
5. *Francesco Spinelli*: Perioperative tips and tricks to reduce the risk of cerebral embolism during CEA  
Discussant: *Giuseppe D'Arrigo*
6. *Franco Grego*: A comprehensive approach is an effective strategy to prevent neurological ischemic event during CEA  
Discussant: *Enrico Gallitto*
7. *Gianluca Faggioli*: The impact of ischemic cerebral lesions in the outcome of symptomatic and asymptomatic patients submitted to carotid revascularization  
Discussant: *Filippo Benedetto*
8. *Sonia Ronchey*: Crossing the Aortic Arch for CAS: is always safe?  
Discussant: *Giovanni Spinella*
9. *Antonio Micari*: Radial artery approach for CAS reduce the risk of cerebral embolization.  
Discussant: *Pasqualino Sirignano*
10. *Andrea Stella*: Are highly calcific carotid plaques less vulnerable?  
Discussant: *Matteo Orrico*

Debate 1

### Cerebral Protection Devices

- Pro proximal protection devices  
*Piero Montorsi*
- Pro distal protection devices  
*Piergiorgio Cao*

Lecture 2     13.15 - 13.30

Keynote Speaker - *Alberto Figueroa*

### Imaging and computational methods for patient-specific modeling of cerebrovascular perfusion

Session 3     13.35 - 15.35

### New devices and techniques to improve outcomes of carotid treatment

Chairs: *Carlo Setacci, Nicola Mangialardi*

1. *Carlo Setacci*: Endoluminal plaque prolapse in carotid stenting: our experience with Optical Coherent Tomography and IVUS.  
Discussant: *Sonia Ronchey*
2. *Fabio Verzini*: Are Close cells stents effective to reduce stroke rate?  
Discussant: *Andrea Kahlberg*
3. *Antonio Micari*: Free neurological events of CS: our experience with double layer micromesh stent system.  
Discussant: *Giovanni Pratesi*
4. *Francesco Speziale*: Potential benefits of new generation of carotid stent  
Discussant: *Enrico Marone*
5. *Fabio Micilotta*: Novel technology for carotid disease: delivering performance today and tomorrow  
Discussant: *Giuseppe D'Arrigo*

6. **Alberto Froio:** Is Proximal Device a tool to manage complex lesions?  
Discussant: *Filippo Benedetto*
7. **Francesco Setacci:** As I prevent brain damage during carotid reinterventions  
Discussant: *Antonio Micari*
8. **Domenico Palombo:** Eversion technique is my first choice. As I gained the gap with CEA .  
Discussant: *Umberto Bracale*
9. **Giuseppe D'Arrigo:** New technical option to fix distal intimal flap during eversion carotid endarterectomy.  
Discussant: *Gianluca Faggioli*
10. **Laurent Chiche:** Carotid Aneurysm  
Discussant: *Fabio Verzini*
11. **Angelo Argenterì:** Surgical reconstruction of the extracranial vertebral artery  
Discussant: *Michele Antonello*
12. **Mauro Gargiulo:** Carotid revascularization for radiation induced stenosis  
Discussant: *Santi Trimarchi*

Opening Ceremony 15.40

*Pierfrancesco Veroux, Paolo Zamboni*  
and *Jonathan Steven Alexander*

**Session 4 16.00 - 18.30****Acute stroke prevention during TAVI and Aortic Arch repair.**

Chairs: *Roberto Chiesa, Michael Dake*

1. *Corrado Tamburino*: New horizons of transcatheter mitral and aortic valve implantation.  
Discussant: *Davide Capodanno*
2. *Robert Zivadinov*: Effect of a cerebral protection device on brain lesions following TAVI in patients with severe aortic stenosis.  
Discussant: *Franco Patti*
3. *Santi Trimarchi*: Prevention of brain hypoperfusion and damage during open arch repair  
Discussant: *Laurent Chiche*
4. *Germano Melissano*: New horizons of spinal cord protection in thoracic aneurysm repair.  
Discussant: *Fabio Verzini*
5. *Roberto Chiesa*: Open repair of TAA, when and why  
Discussant: *Enrico Marone*
6. *Theodorus Van Bakel*: Computational trial in Aortic Arch endovascular repair.  
Discussant: *Santi Trimarchi*
7. *Claudio Moscheni*: From clinical lab to clinical experience: the process of device development  
Discussant: *Michele Antonello*
8. *Piergiorgio Cao*: Total endovascular arch repair – does it increase the risk of brain injury?  
Discussant: *Franco Grego*
9. *Frans Moll*: Brain protection and outcome in patient treated with endovascular Arch repair.  
Discussant: *Mario Lachat*
10. *Rylski Bartosz*: Double branch stent graft in Arch repair and techniques to improve neurological outcome  
Discussant: *Raffaele Pulli*



11. *Geert-Willem Schurink*: Brain protection strategies in total endovascular Arch repair  
Discussant: *Mauro Gargiulo*
12. *Michael Dake*: Late update of trials with TBD device.  
Discussant: *Germano Melissano*
13. *Mario Lachat*: Aortic Arch repair: The Zurich experience with a novel stent graft system waiting CE approval  
Discussant: *Sonia Ronchey*
14. *Nicola Mangialardi*: Parallel graft technique in urgent Arch repair.  
Discussant: *Giovanni Pratesi*
15. *Hamady Mohamad*: Latest experience with proximal scallop stent graft.  
Discussant: *Gianluca Faggioli*

## 5 May 2017

Session 5      8.00 - 9.00

### Annette Funicello Foundation Presentations

Chairs: *Carol Schumacher, Paolo Zamboni*

1. *J. Winny Yun*: Neurolymphatics and MS
2. *Helen Kavnoudias*: Comparative findings of multimodal imaging of the internal jugular veins in MS patients.
3. *Robert Zivadinov*: Follow up of AFRF
4. *Marcella Laganà*: Combined study of neurodegeneration, cerebrovascular reactivity and venous drainage impairments in Parkinson's Disease and Multiple Sclerosis
5. *Nicole Ziliotto*: Exome sequencing and transcriptomic analysis in jugular wall for detection of CCSVI biomarkers in MS

**Lecture 3     9.05 - 9.20**

*Angelo Argenteri*

**Iconographic history of the Brain**

**Session 6     9.25 - 10.15**

**Latest breaking imaging in acute stroke**

Chairs: *L. Nelson Hopkins, Hai Sun*

1. *Luis Lopez-Ibor*: Imaging of intracranial vascular malformations causing stroke
2. *Meiyun Wang*: The use of MRI in early diagnosis and evaluation of cerebral ischemia
3. *Mark Haacke*: STAGE imaging, a new rapid protocol for stroke imaging
4. *Corrado Cittanti*: The value of PET-CT imaging to define vital and ischemic brain tissue
5. *Nelson Hopkins*: Time is Brain: is always true? Novel emerging concepts in imaging of Acute stroke

**Session 7     10.20 - 12.50**

**New Horizons in the extra and intracranial treatment of Acute Ischemic Stroke**

Chairs: *Piergiorgio Cao, Alison Halliday*

1. *Marcello Longo*: Patient selection
2. *Anna Teresa Mazzeo*: Anesthesiology protocols in patients with acute ischemic stroke
3. *L. Nelson Hopkins*: Strategies, and therapeutic protocol related to brain lesions in acute setting

## Debate 2

### Timing and indications of carotid treatment in acute setting

- *Francesco Speziale*: pro CEA
- *Nicola Mangialardi*: pro CAS

Closing remarks: *Frans Moll*

4. *Roberto Chiesa*: Carotid shunting decrease brain hypoperfusion and damage in patients underwent CEA in acute ischemic setting
5. *Antonio Pitrone*: Latest breaking treatments of acute ischemic stroke

## Debate 3

### Carotid treatment within 48 hours in patient with acute ischemic stroke:

- *Hai Sun*: better wait
- *Nelson Hopkins*: yes, we can go.

Closing remarks: *Frans Moll*

6. *Rosario Papa*: Role of thromboaspiration techniques in the treatment of acute intracranial artery occlusion
7. *Guglielmo Pero*: Endovascular treatment of intracranial stenosis in acute setting

**Session 8    12.55 - 14.35**

**Brain hypoperfusion and neurodegeneration**

Chairs: *Jonathan Steven Alexander, Mark Haacke*

1. *Mat Daemen*: The Dutch heart brain connection program: an update
2. *H. Kevin Lin*: Cardiac arrest induced hypoperfusion in neurodegeneration
3. *Marcella Laganà*: Cerebral blood flow measurement with arterial spin labeling MR
4. *Niels Bergsland*: Patterns of cerebral blood flow in the gray matter of healthy individuals: Cross sectional independent component analysis study.
5. *Dejan Jakimovski*: Imaging of the vascular system using MRV-factors influencing inter-subject comparisons.
6. *Gedaminas Cepinkas*: Novel protective anti-inflammatory mechanisms in cerebral circulation
7. *Ludmila S. Belayev*: Protecting against cerebrovascular injury with novel docosanoids
8. *Chi Ping Chung*: Intracranial arterial hemodynamics and cognitive functions

**Session 9    14.40 - 15.55**

**Latest researches**

Chair: *Clive Beggs, Mark Haacke*

1. *Mark Haacke*: An update of the presence of CCSVI in Parkinson's disease
2. *Clive Beggs*: Analyzing the aqueductal cerebrospinal fluid pulse: a statistical approach
3. *Eleuterio Toro*: CNS interacting fluid compartments: progress in mathematical modelling

4. *Giacomo Gadda*: Monitoring cerebral venous return in astronauts during spaceflights. Correlation with vision impairments and other microgravity symptoms
5. *Hai Sun*: The surgical management of Moyamoya disease
6. *Dejan Jakimovski*: Low or retrograde Facial vein flow is associated with more advanced global and regional brain atrophy in MS.

**Session 10**      **16.00 - 17.00**

**Has the new generation of Carotid Stent the potential to reduce cerebral macro and micro embolization?**

Chair: *Carlo Setacci, Nicola Mangialardi*

1. *Alison Halliday*: Stent and cerebral protection in the ongoing ACST-2 Trial
2. *Carlo Setacci*: Carotid renaissance: new techniques and devices decrease early and long term brain lesion rate
3. *Piero Montorsi*: Complex Aortic Arch anatomy: is radial approach the way to go?
4. *Antonio Micari*: Optical coherence tomography and plaque prolapse with new generation of carotid stents
5. *Giuseppe Galzerano*: European Clear road study: outcomes of a novel dual layer micromesh stent system for the treatment of carotid stenosis.

**6 May 2017**

**Session II 8.15 - 09.55**

**Imaging and mechanisms of neurodegeneration**

Chairs: *Mat Daemen, Robert Zivadinov*

1. *Fabrizio Salvi*: When developmental venous anomaly becomes aggressive: a model of brain drainage, hypoperfusion and injury
2. *Karen Stokes*: Protein Carbonyls, Diabetes and stroke risk / severity
3. *Jake Neumann*: Role of delta PKC in synaptic transmission and global cerebral ischemia
4. *Francesco Bernardi*: Coagulation pathways in Multiple Sclerosis
5. *Douglas Fraser*: Endothelial compromise in DKA, microbleeds and cognition
6. *Stefano Viotti*: Multiple sclerosis lesion characterization with SWI and QSM at 1.5 T.
7. *Dejan Jakimovski*: Higher frequency of neck vessels in multiple sclerosis patients-association beyond body mass index, age and gender influence.
8. *Franco Patti*: Gray matter damage and cognitive impairment in primary progressive multiple sclerosis

**Lecture 4 10.00 - 10.20**

Keynote Speaker: *Byung-Boong Lee*

**Defective development of Vena Cava: embryological interpretation of hemodynamic consequences**

**Lecture 5 10.20 - 10.40**

Keynote Speaker: *Seshadri Raju*

**Compliance properties of the vein: a forgotten concept.  
Ideal venous hemodynamics-oriented device for the treatment of obstructive venous disease**

## Anatomical and hemodynamic changes of venous flow: could stenting be the solution?

Chairs: *Ivo Petrov, Salvatore J.A. Sclafani*

1. *Byung-Boong Lee*: Occlusive truncular venous anomaly of the Thorax and Neck: general overview
2. *Alessia Giaquinta*: Assessment of venous size and stenosis: ECD, IVUS and Catheter Venography integrated method.
3. *Seshadri Raju*: Indications and potential benefits of venous stenting in the treatment of occlusive disease versus balloon angioplasty
4. *Michael Dake*: Clinical presentation and treatment of delayed venous outflow of the thorax and neck
5. *Paolo Zamboni*: Modifications of intracranial pressure following decompression of the internal jugular vein.
6. *Pierfrancesco Veroux*: Compliant venous scaffold for the treatment of impaired venous outflow from the brain
7. *Salvatore J.A. Sclafani*: Left renal vein stenting is an effective method to improve spinal cord blood flow
8. *Hector Ferral*: Endovascular treatment of obstructive diseases of inferior vena cava, iliac and femoral veins.
9. *Kenneth Liu*: Intracranial venous stenting for Ehlers Danlos

Session 13 12.40 - 14.05

## Bridging the gap between extracranial flow and Brain.

Chairs: *Michael Dake – Hector Ferral*

1. *Noam Alperin*: The brain-eye axis and CSF: Spaceflight-induced vision impairments in astronauts
2. *Hector Ferral*: Statistical evaluation of the Amsterdam study
3. *Ivo Petrov*: Hypercapnia and hypoxaemia due to impaired venous blood draining and significant improvement after endovascular treatment in patients with CCSVI
4. *Eleutorio Toro*: A Mathematical model applied to the study of Meniere's Disease
5. *Aldo Bruno/Luigi Califano*: PTA in patients with Meniere's Syndrome: 24-month clinical outcomes.
6. *Alessia Giaquinta / Clive Beggs*: Clinical benefits after balloon angioplasty in patients with impaired IJV flow
7. *Paolo Zamboni*: Brave Dreams trial

14.10 Awards and Closing Remarks:

*J. Steven Alexander - Pierfrancesco Veroux - Paolo Zamboni*

15.00 – 17.15

## Meeting with international patients associations

Chairs: *Fabrizio Salvi, Carol Schumacher, Pierfrancesco Veroux, Paolo Zamboni*

Keynote testimonial: *Nicoletta Mantovani*

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