

Scientific Programme

Saturday, 10th May 2008

11.00-13.00 Registration of Participants

13.00-16.45 TUTORIALS

Chair: P. Prati (*Udine - Italy*) - P.J. Touboul (*Paris - France*)

- 13.00-13.15 **Physics and diagnostic US**
R. Brucher (*Ulm - Germany*)
- 13.15-13.30 **Artifacts in vascular imaging**
L. Derchi (*Genova - Italy*)
- 13.30-13.45 **Cervical artery dissection**
C. Baracchini (*Padova - Italy*)
- 13.45-14.00 **Potentials and pitfalls of US in cervical vessel stenosis**
F. Ferrio (*Torino - Italy*)
- 14.00-14.15 **TCD: how to do it**
A. Alexandrov (*Birmingham - USA*)
- 14.15-14.30 **Diagnostic protocols in neurosonology**
G. Meneghetti (*Padova - Italy*)
- 14.30-14.45 **TCD: lights and pitfalls**
Z. Garami (*Houston - USA*)
- 14.45-15.00 **Vasospasm**
G. Iacopino (*Palermo - Italy*)
- 15.00-15.15 **Intraoperative monitoring in neurosurgery**
P. Limoni (*Bologna - Italy*)
- 15.15-15.30 **Intracranial stenosis and occlusions**
G.A. Ottonello (*Genova - Italy*)
- 15.30-15.45 **Acute stroke**
C. Molina (*Barcelona - Spain*)
- 15.45-16.00 **Microemboli**
M. Jauss (*Giessen - Germany*)
- 16.00-16.15 **TCD monitoring in cardiovascular surgery**
D. Russell (*Oslo - Norway*)
- 16.15-16.30 **Patent foramen ovale**
M. Del Sette (*Genova - Italy*)

16.45-18.00 PRACTICAL SESSION

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

TEACHERS: Brucher, Derchi, Baracchini, Ferrio, Alexandrov, Meneghetti, Garami, Ottonello, Molina, Jauss, Russell, Del Sette, Ajmar, Bianchini, Brusa, Rizzi, Dinia, Olah, Csapo

18.00-19.00 TEST PRACTICAL PART 1

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

Sunday, 11th May 2008

8.30-11.45 TUTORIALS

Chair: L. Csiba (*Debrecen - Hungary*) - M. Kaps (*Giessen - Germany*)

- 08.30-08.45 **Cerebral hemodynamics**
M. Silvestrini (*Ancona - Italy*)
- 08.45-09.00 **PFO and migraine**
C. Finocchi (*Genova - Italy*)
- 09.00-09.15 **Cerebral circulatory arrest**
M. Marinoni (*Firenze - Italy*)
- 09.15-09.30 **The quantification of tight carotid and vertebral artery stenosis by US**
J.M. de Bray (*Angers - France*)
- 09.30-09.45 **TCCD: intracranial vessel detection**
N. Carraro (*Trieste - Italy*)
- 09.45-10.00 **TCCD: pathological findings**
G. Malferrari (*Reggio Emilia - Italy*)
- 10.00-10.15 **Cerebral venous system**
E. Stolz (*Giessen - Germany*)
- 10.15-10.30 **Parenchyma imaging**
U. Walter (*Rostock - Germany*)
- 10.30-10.45 **Perfusion imaging**
G. Seidel (*Lübeck - Germany*)
- 10.45-11.00 **Neuro-vascular coupling**
M. Kaps (*Giessen, Germany*)
- 11.00-11.15 **Neuromuscular diseases**
A. Tagliafico (*Genova - Italy*)
- 11.15-11.30 **Endothelial function testing**
L. Csiba (*Debrecen - Hungary*)
- 11.30-11.45 **Endovascular treatment monitoring by US**
S. Horner (*Graz - Austria*)

12.00-13.00 PRACTICAL SESSION

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

TEACHERS: Silvestrini, de Bray, Finocchi, Marinoni, Carraro, Malferrari, Sanguigni, Stolz, Walter, Seidel, Kaps, Csiba, Niederkorn, Horner, Bartels, Olah, Csapo

13.00-14.00 **Lunch**

13.30-14.00 EXECUTIVE COMMITTEE MEETING

14.00-16.00 THEORETICAL AND PRACTICAL TEST - PART 2

Chair: G.M. von Reutern (*Nidda - Germany*) - E. Bartels (*Göttingen - Germany*)

16.00-19.00 Opening Ceremony

Chair: D. Russell (*Oslo - Norway*), G.F. Gensini (*Firenze - Italy*)

Greetings from the ESNCH

K. Niederkorn (*Graz - Austria*)

Greetings from the University of Genova

G. Deferrari (*Genova - Italy*)

Greetings from the Department of Neurosciences

M. Abbruzzese, G.L. Mancardi (*Genova - Italy*)

Lecture: Post-stroke depression

C. Gandolfo (*Genova - Italy*)

Lecture: Vascular dementia

D. Inzitari (*Firenze - Italy*)

Lecture: Evidence-Based Medicine in Neurosonology

S. Ricci, on behalf of the Cochrane Neurological Network (*Perugia - Italy*)

19.00-20.00 General Assembly of the Italian Society of Neurosonology and Cerebral Hemodynamics (SINSEC)

20.00 Welcome Cocktail

Monday, 12th May 2008

08.30-09.45 SESSION 1: Acute Stroke

Chair: G.A. Ottonello (*Genova - Italy*), H. Furuhashi (*Tokyo - Japan*)

08.30-08.45 **Acute stroke monitoring**

A. Alexandrov (*Birmingham - USA*)

08.45-09.00 **Enhanced thrombolysis**

C. Molina (*Barcelona - Spain*)

09.00-09.15 **US and antithrombotic treatment**

M. Kaps (*Giessen - Germany*)

09.15-09.30 **Recovery after stroke and US**

M. Silvestrini (*Ancona - Italy*)

09.30-10.15 ORAL PRESENTATIONS

Chair: D. Palombo (*Genova - Italy*), C. Molina (*Barcelona - Spain*)

09.30-09.40 **Middle cerebral artery main stem occlusion: natural course and impact of alteplase and sonothrombolysis on recanalization**

J. Eggers, J. Koehler, (*Hamburg - Germany*)

09.40-09.50 **Fast-track duplex US in acute stroke**

S.J. Schreiber¹, F. Doepp¹, J.M. Valdueza², J.E. Röhl¹ (¹*Bad Segeberg - Germany*, ²*Berlin - Germany*)

09.50-10.00 **Timing of microbubble-enhanced sonothrombolysis strongly predicts intracranial hemorrhage in acute ischemic stroke**

L. Dini^{1,2}, M. Rubiera¹, M. Ribo¹, E. Santamarina¹, O. Maisterra¹, R. Delgado-Mederos¹, J. Alvarez-Sabin¹, J. Montaner¹, M. Del Sette², C.A. Molina¹ (¹*Barcelona - Spain*, ²*Genova - Italy*)

10.00-10.10 **Sonothrombolysis acceleration by bubble liposomes in vitro**

T. Zenitani, M. Yogo, R. Suzuki, K. Maruyama, H. Furuhashi (*Tokyo - Japan*)

10.15-11.15 SESSION 2: Atherosclerosis, carotid plaques, lipids, statins

Chair: V. Toso (*Vicenza - Italy*), V. Demarin (*Zagreb - Croatia*)

10.15-10.30 **Cerebral hemodynamics, lipids and statins: the SPARCL study**

N. Bornstein (*Tel Aviv - Israel*)

10.30-10.45 **Extracranial and intracranial arteritis**

E.B. Ringelstein (*Münster - Germany*)

10.45-11.00 **Carotid plaques: which drugs?**

J.M. Molto (*Alicante - Spain*)

11.00-11.15 **Cervical artery dissection**

C. Baracchini (*Treviso - Italy*)

11.15-12.45 SYMPOSIUM: Comorbidity between hypertension, migraine and stroke: the Miracle project
Chair: C. Gandolfo (*Genova - Italy*), M. Del Sette (*Genova - Italy*)

- 11.15-11.30 **Migraine as a risk factor for stroke**
A. Carolei (*L'Aquila - Italy*)
- 11.30-11.45 **Hypertension and stroke: speculations coming from the large trials**
E. Agabiti Rosei (*Brescia - Italy*)
- 11.45-12.00 **Hypertension, large and small vessel disease**
L. Csiba (*Debrecen - Hungary*)
- 12.00-12.15 **The Project MIRACLES: comorbidity between migraine and hypertension**
B. Trimarco (*Napoli - Italy*)
- 12.15-12.45 **General discussion**

12.45-13.30 ORAL PRESENTATIONS

Chair: G. Lanza (*Varese - Italy*), E.B. Ringelstein (*Münster - Germany*)

- 12.45-12.55 **Usefulness of an US perfusional approach and derived maps for predicting the prognosis of MCA and T-type occlusion stroke patients**
G. Malferrari, M. Zedde, G. De Berti, M. Maggi, F. Nicoli, G. Borasi, N. Marcello (*Reggio Emilia - Italy*)
- 12.55-13.05 **Safety evaluation of newly developed transcranial targeting low-frequency ultrasonic thrombolysis system (TCT-LOFUT) at 490kHz for Macaca monkey's brain**
J. Shimizu, T. Fukuda, T. Abe, M. Ogihara, J. Kubota, A. Sasaki, T. Azuma, K. Sasaki, K. Shimizu, T. Ohishi, S.I. Umemura, H. Furuhashi (*Tokyo - Japan*)
- 13.05-13.15 **Asymptomatic carotid emboli study (ACES): baseline data**
J. Siegel, K. Jones, R. Topakian, H.S. Markus
For The Aces Investigators (*London - UK*)
- 13.15-13.25 **Increased expression of visfatin in unstable carotid plaques – possible role in plaque destabilization**
M. Skjelland, A. Dahl, T. Dahl, A. Yndestad, E. Øie, A. Michelsen, K. Krohg-Sørensen, D. Russell, P. Aukrust, B. Halvorsen (*Oslo - Norway*)

13.30-14.30 SYMPOSIUM WORKING LUNCH
The Clinical Role of Contrast-Enhanced US in Neurosonology
Chair: M. Del Sette (*Genova - Italy*), M. Kaps (*Giessen, Germany*)

- 13.30-13.50 **Potential of contrast US in neurology: microbubbles for prognostic, diagnostic and peri-interventional assessment**
C. Greis (*Konstanz - Germany*)
- 13.50-14.05 **Principles of Cerebral Perfusion Imaging**
G. Seidel (*Lübeck - Germany*)
- 14.05-14.20 **Practical value of contrast-enhancement for transcranial color-coded sonography (TCCS): improved diagnostic yield in chronic and acute patients**
E. Stolz (*Giessen - Germany*)
- 14.20-14.30 **Discussion**

14.30-17.00 SESSION 3: Vascular cognitive impairment

Chair: P. Cerrato (*Torino - Italy*) - V. Oliveira (*Lisbon - Portugal*)

- 14.30-14.45 **Predictors of carotid clamping intolerance: a reminder for carotid artery stenting procedures**
G.P. Anzola (*Brescia - Italy*)
- 14.45-15.00 **Invasive procedure and silent cerebral ischemia**
D. Russell (*Oslo - Norway*)

15.00-17.00 ORAL PRESENTATIONS

Chair: J. Klingelhöfer (*Chemnitz - Germany*), B. Gossetti (*Roma - Italy*)

- 15.00-15.10 **Hypertension-dependent reduction in mental efficiency is associated with different cerebral haemodynamic abnormalities according to age**
S. Castellani, F. D'Abate, E. Di Nunzio, I. Tanini, M. Nieri (*Firenze - Italy*)
- 15.10-15.20 **Is there an association between white matter lesions, cognitive decline and microembolic signals in patients with atrial fibrillation?**
M.A. Ritter¹, C. Tentrop¹, H. Wersching¹, C. Stehling¹, H. Lohmann¹, S.P. Kloska¹, P. Kirchhof², S. Knecht¹, D.G. Nabavi¹
(¹Berlin - Germany, ²Münster - Germany)

- 15.20-15.30 **Visually evoked cerebral blood flow response remains impaired for months after cessation of smoking**
L. Olah¹, Y. Yonai¹, N. Boms¹, K. Csapo¹, S. Molnar¹, B. Rosengarten², N.M. Bornstein³, L. Csiba¹
(¹Debrecen - Hungary, ²Giessen - Germany, ³Tel-Aviv - Israel)
- 15.30-15.40 **Difference in plaque area between lacunar stroke and the atherothrombotic stroke subtype**
J. Carneado-Ruiz, J. Sánchez-Paya, A. Alfaro-Sáez, M. Lezcano-Rodas, L. Berenguer-Ruiz, F. Mira-Berenguer, J.M. Molto-Jorda, F. Gracia (Madrid - Spain)
- 15.40-15.50 **Reversible vascular parameters after short-term therapy of hypertension**
K. Csapo¹, Z. Bajko², C.S. Szekeres², K.R. Kovacs², P. Soltesz¹, L. Csiba¹ (¹Debrecen - Hungary, ²Targu Mures - Romania)
- 15.50-16.00 **Statin treatment improves cerebral more than systemic endothelial dysfunction in patients with arterial hypertension**
J. Pretnar-Oblak, M. Šabovič, M. Zaletel, T. Pogačnik, B. Žvan (Ljubljana - Slovenia)
- 16.00-16.10 **Atherosclerosis and IMT - 12 years after ischemic stroke at a young age**
U. Waje-Andreassen¹, H. Naess¹, L. Thomassen¹, Ge. Eide², R. Meijer², Ca. Vedeler¹
(¹Bergen - Norway, ²Leiden - The Netherlands)
- 16.10-16.20 **Systematic TCCS analysis of the A2 segment of the anterior cerebral artery and the pericallosal artery**
A. Rogge¹, F. Doepp², S. Schreiber², Jm. Valdueza¹ (¹Bad Segeberg - Germany, ²Berlin - Germany)
- 16.20-16.30 **Unilateral versus bilateral detection of right-to-left shunt by power M-mode transcranial doppler**
J.T. Jesurum, C.J. Fuller, M.A. Moehring, J.M. Renz, & M.P. Spencer (Seattle - USA)
- 16.30-16.50 **No cinderella but three knights TCCD, HMR and TEE) at heART-HUR's round table for PFO identification and quantification**
N. Carraro, V.M. Sarra, L. Pagnan, G. Pizzolato (Trieste - Italy)
- 16.40-16.50 **Percutaneous closure of patent foramen ovale in patients with presumed paradoxical embolism: periprocedural results and long-term risk of recurrent neurological events**
M. Balbi, D. Rollando, G. Gnecco, M. Del Sette, L. Dinia, G. Sivori, L. Strada, A. Barsotti (Genova - Italy)
- 16.50-17.00 **Unilateral vertebral artery hypoplasia is associated with decreased net vertebral flow volume**
A. Ching Chao¹, Yen-Yu Chen², Han-Hwa Hu³
(¹Kaohsiung - Taiwan, ²Changhua - Taiwan, ³Taipei - Taiwan)
- 17.00 -17.30 SESSION 4: Perfusion imaging**
Chair: C. Fieschi (Roma - Italy) - L. Castellán (Genova - Italy)
- 17.00-17.15 **Microbubbles and brain tissue perfusion imaging**
T. Shiogai (Kyoto - Japan)
- 17.15-17.30 **Cerebral perfusion studies in acute stroke**
G. Seidel (Lübeck - Germany)
- 17.30-17.45 **New insights in perfusion imaging**
E. Bartels (Göttingen - Germany)
- 17.45-18.30 ORAL PRESENTATIONS**
Chair: C. Fieschi (Roma - Italy) - L. Castellán (Genova - Italy)
- 17.45-17.55 **Transcranial perfusionsonography preceding thrombolysis - perfusion deficit correlates with clinical as well as vascular status**
W. Niesen, W. Marouf, C. Weiller, A. Hetzel (Freiburg - Germany)
- 17.55-18.05 **Differentiating ICH from early hemorrhagic transformed ischemic infarction with transcranial perfusion sonography**
A. Schläger, S. Struempell, C. Weiller, A. Hetzel, W. Niesen (Freiburg - Germany)
- 18.05-18.15 **Volume estimation of intracerebral hematoma with transcranial sonography**
W. Niesen, A. Schläger, S. Struempell, C. Weiller, A. Hetzel (Freiburg - Germany)
- 18.15-18.25 **Cerebral blood flow in interictal migraineurs: transcranial doppler study**
M. Alpaidze, M. Janelidze (Tbilisi - Georgia)
- 18.30 GENERAL ASSEMBLY OF ESNCH**
- 20.30 Italian Gala Dinner with Music**

Tuesday, 13th May 2008

08.30-09.30 SESSION 5: Cerebral hemodynamics, arteries and veins

Chair: S. Castellani (*Firenze - Italy*), D. Evans (*Leicester - UK*)

08.30-08.45 **Cerebral hemodynamics in syncope and epilepsy**

G. Micieli (*Milano - Italy*)

08.45-09.00 **Hemodynamics in cerebral artery stenting**

K. Niederkorn (*Graz - Austria*)

09.00-09.15 **Neurosonology in the future**

R. Aaslid (*Seattle - USA*)

09.15-09.30 **The intracranial venous system**

E. Stolz (*Giessen - Germany*)

09.30-11.30 ORAL PRESENTATIONS

Chair: N. Bornstein (*Tel Aviv - Israel*), F. De Falco (*Napoli - Italy*)

09.30-09.40 **Hemodynamic evaluation of vertebral artery hypoplasia by magnetic resonance angiography and ultrasonography**

H. Mitsumura, M. Yogo, K. Inoue, H. Furuhashi (*Tokyo - Japan*)

09.40-09.50 **Validation of a one-dimensional model of the arterial cerebral circulation**

P. Reymond¹, F. Perren², D. Rüfenacht², N. Stergiopoulos¹ (¹*Lausanne - Switzerland*, ²*Geneva - Switzerland*)

09.50-10.00 **Migraine with aura attack after diagnostic microbubbles injection**

L. Caputi¹, S. Usai¹, M.R. Carriero¹, M. Del Sette², G.P. Anzola³, L. Grazi¹, D. D'amico¹, G. Bussone¹, E. Parati¹ (¹*Milano - Italy*, ²*Genova - Italy*, ³*Brescia - Italy*)

10.00-10.10 **Changes in cerebrovascular reactivity following repetitive transcranial magnetic stimulation**

F. Sallustio, G. Koch, S. Di Legge, B. Rizzato, D. Centonze, G. Bernardi, P. Stanzione (*Roma - Italy*)

10.10-10.20 **Prognosis of mobile plaques in carotid arteries**

K. Nagatsuka, N. Toratani, T. Torii, Bh. Hyun, K. Iihara, S. Miyamoto, H. Naritomi (*Osaka - Japan*)

10.20-10.30 **Safety and efficacy of PFO closure: a comparison between amplatzer and cardiastar devices**

A. Tanzi, M. Devetak, S. Mantovan, U. Talliani, E. Aurier, C. Zanferrari, (*Parma - Italy*)

10.30-10.40 **High frequency repetitive transcranial magnetic stimulation induces a decrease of cerebral vasomotor reactivity**

F. Vernieri, P. Maggio, F. Tibuzzi, M.M. Filippi, P. Pasqualetti, J.M. Melgari, C. Altamura, P. Palazzo, P.M. Rossini (*Roma - Italy*)

10.40-10.50 **Doppler US 'Knock' phenomena produced by fluid in an obstructed branch vessel**

E. M. L. Chung¹, K.V. Ramnarine¹, C.V. Long¹, C. Udommongkol², B.R. Chambers², D.H. Evans¹ (¹*Leicester - UK*, ²*Victoria - Australia*)

10.50-11.00 **Seeking for stroke etiology: TCD monitoring for right-to-left shunt in patients with acute cerebral ischemia of uncertain origin**

S. Di Legge, M. Diomedi, F. Sallustio, E. De Marchis, B. Rizzato, D. Samà, G. Koch, P. Stanzione (*Roma - Italy*)

11.00-11.10 **Cerebral hemodynamics and cerebrovascular reactivity to hypercapnia during repeated maximal apneas in breath hold divers**

M. Diomedi, S. Di Legge, G. Raimondi, G. Leone, G. Misaggi, A. Renna, A. Simonitto, G. Bernardi (*Roma - Italy*)

11.10 -11.20 **Predictors of carotid clamping intolerance: a reminder for carotid artery stenting procedures**

G.P. Anzola¹, P. Limoni², G. Cavrini² (¹*Brescia - Italy*, ²*Bologna - Italy*)

11.20-11.30 **Blood flow velocity (BFV) measurements in the basal vein of rosenthal (BVR) to differentiate vasospasm and hyperperfusion in subarachnoid hemorrhage (SAH): an alternative for the MCA/ICA-Index?**

F. Doepp¹, J.M. Valdueza², D. Gruber¹, A. Bick-Sander¹, S.J. Schreiber¹ (¹*Berlin - Germany*, ²*Bad Segeberg - Germany*)

11.30 - 12.15 SESSION 6: Non-cerebrovascular use of US

Chair: G. Abbruzzese (*Genova - Italy*) - A. Zaninelli (*Milano - Italy*)

11.30-11.45 **Sickle cell anemia**

G. Meneghetti (*Padova - Italy*)

11.45-12.00 **Transcranial sonography in movement disorders**

U. Walter (*Rostock - Germany*)

12.00-12.15 **Peripheral nerves US**

A. Tagliafico (*Genova - Italy*)

12.15-13.30 ORAL PRESENTATIONS

Chair: M. Sturzenegger (*Bern - Switzerland*), U. Walter (*Rostock - Germany*)

12.15-12.25 **Brain parenchyma sonography in Huntington's disease in relation to the neurological and psychiatric status**
C. Krogias, C. Saft, K. Strassburger, R. Gold, C. Norra, G. Juckel, D. Ninphius (*Bochum - Germany*)

12.25-12.35 **Transcranial sonography in spinocerebellar ataxia type 2**
M. Mijajlovic, N. Dragasevic, E. Stefanova, I. Petrovic, M. Svetel, V. Kostic (*Belgrade - Serbia*)

12.35-12.45 **Acute anxiety and brain circulation: a TCD study with clomipramine challenge**
F. Rotella, M. Marinoni, F. Alari, F. Lejeune, F. Cosci, M. Ciampelli, D. Depinesi, C. Faravelli (*Firenze - Italy*)

12.45-12.55 **Improved analysis of substantia nigra US images in healthy subjects with and without heterozygous *Parkin* mutations**
G. Seidel¹, C. Kier¹, C. Cyrus¹, N. Brüggemann¹, J. Hagenah¹, U. Hofmann¹, T. Aach², C. Klein¹ (*¹Lübeck - Germany, ²Aachen - Germany)*

12.55-13.05 **Vasospasm due to intracranial aneurysm rupture: value of TCD monitoring**
M. Fontanella, M. Ferrio, V. Zappalà, C. Benevello, D. Garbossa, M. Berardino, G. Bradac, A. Ducati (*Torino - Italy*)

13.05-13.15 **Monitoring changes in intracranial hemodynamics after carotid endarterectomy with the pulsatile apparent resistance**
A. Schaafsma (*Groningen - The Netherlands*)

13.15-13.25 **Perioperative monitoring of cerebral hemodynamics in patients with arteriovenous malformations**
V.B. Semenyutin¹, V.A. Aliev¹, V.P. Bersnev¹, A. Patzak², P.I. Nikitin¹, V.A. Pak¹, A.V. Kozlov¹ (*¹St. Petersburg - Russia, ²Berlin - Germany)*

13.30-15.00 POSTER SESSION with Lunch

Chair: L. Thomassen (*Oslo - Norway*), W. Liboni (*Torino - Italy*)
G. Rodriguez (*Genova - Italy*), P. Traubner (*Bratislava - Slovak Republic*), G. Baltgaile (*Riga - Latvia*), F. Iemolo (*Ragusa - Italy*), A.Y. Razumovski (*Cockeysville - USA*)

15.00- 16.00 SESSION 7: Cerebral monitoring

Chair: R.G. Ackerstaff (*Utrecht - Netherlands*), L. Provinciali (*Ancona - Italy*)

15.00-15.15 **TCD monitoring in the intensive care unit**
M. Marinoni (*Firenze - Italy*)

15.15-15.30 **New perspectives in cardiovascular US monitoring**
Z. Garami (*Houston - USA*)

15.30-15.45 **Hyperflow and hypoflow patterns in brain injury. The role of neurosonology**
M. Visocchi (*Roma - Italy*)

16.00-17.00 ORAL PRESENTATIONS

Chair: K. Niederkorn (*Graz - Austria*), M. Del Sette (*Genova, Italy*)

16.00-16.10 **Continuous monitoring in the vertebrobasilar artery utilizing a newly developed transducer holder (Sonopod) for TCCD sonography**

T. Shiogai, M. Matsumoto, K. Ikeda, A. Morisaka, K. Yoshikawa, Y. Nagakane, T. Mizuno, M. Nakagawa (*Kyoto - Japan*)

16.10-16.20 **TCD evaluation of cerebral hemodynamics in Fabry disease**

A. Caruso, F. Alari, W. Borsini, V. Mastronardi, M. Marinoni (*Firenze - Italy*)

16.20-16.30 **Relationship between carotid artery stenosis and stroke after total arch replacement**

N. Toratani, K. Nagatsuka, H. Sasaki, H. Ogino, H. Naritomi (*Osaka - Japan*)

16.30-16.40 **Brain death and flow patterns in the internal carotid artery siphon**

P. Cardona, A. Escrig, H. Quesada, F. Rubio (*Barcelona - Spain*)

16.40-16.50 **Is 30 min. monitoring sufficient time evaluating microembolic signals as predictor of recurrent ipsilateral ischaemic stroke in symptomatic patients with high grade carotid stenosis?**

T. Zuromskis¹, D. Jatuzis², R. Watterholm³, R. Volkmann³ (*¹Vilnius - Lithuania, ²Göteborg, Sweden, ³Scarborough - UK)*

16.50-17.00 **Ultrasonographic assessment of intracranial hemodynamics in acute stroke patients**

Foad Abd Allah, N. Chalabi, O. Hussein, H. Aref, A. Borai, N. Adel, A. Abo Mousa (*Cairo - Egypt*)

17.00 SCIENTIFIC AWARDS

Invitation to the 14th ESNCH Meeting 2009

Closing Ceremony