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<th>Time</th>
<th>Tuesday, April 29</th>
<th>Wednesday, April 30</th>
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<tr>
<td>8-10</td>
<td><strong>Refresher Course on Cerebral Autoregulation</strong>&lt;br&gt;Dr. Jorge Serrador &amp; Dr. Yu-Chieh Tzeng.&lt;br&gt;San Diego Marriott Marquis &amp; Marina, Balboa</td>
<td><strong>Cerebral Autoregulation in Pathological Conditions</strong>&lt;br&gt;Convention Center, Room 20A</td>
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<td><strong>Cerebral Autoregulation, Brain White Matter Lesions and Cognitive Dysfunction in Mild Cognitive Impairment</strong>&lt;br&gt;Dr. Rong Zhang</td>
<td><strong>Extremes in Cerebral Autoregulation: Clinical Experience in Head Trauma Patients,</strong>&lt;br&gt;Dr. Rune Aaslid</td>
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<td><strong>The cytokines TNF, MCP-1, and CINC-1 mediate diminished dilation of middle cerebral artery after ischemic stroke in rats</strong>&lt;br&gt;Z Broskova, D Anthony, Z Bagi</td>
<td><strong>Regional cerebral blood flow responses to rapid reductions in blood pressure after high level spinal cord injury: the effect of alpha1-agonist</strong>&lt;br&gt;A Phillips, A Krassioukov, P Ainslie, D Warburton</td>
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<td><strong>Cerebral blood flow regulation during blood loss compared to lower body negative pressure in humans</strong>&lt;br&gt;J Barnes, B Johnson, V Convertino, M Joyner, C Rickards</td>
<td><strong>tPA-S481A prevents impairment of cerebrovascular autoregulation by endogenous tPA after traumatic brain injury by upregulating p38 MAPK and inhibiting ET-1</strong>&lt;br&gt;W Armstead, L Bohman, J Riley, S Yarovoi, A Higazi, D Cines</td>
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| 10:30-12:30 | **Autonomic and Other Control of the Cerebral Circulation**  
Convention Center, Room 25B  
*Reflex Cerebrovascular Control in Humans: Parsimony Cannot Play Here!*  
Dr. Kevin Shoemaker  
*Autoregulation, critical closing pressure, and hemorrhage in the brain of the preterm neonate: ontogeny and insights for management strategies*  
Dr. Ken Brady  
*Increases in sympathetic activity during cold pressor test does not cause cerebral vasoconstriction*  
J Serrador, M Blatt, B Ghobreal, M Falvo  
*The role of cerebral oxygenation on tolerance to central hypovolemia*  
Victoria L. Kay Caroline A. Rickards  
*Immunohistochemical evidence of a reduced vasodilatory capacity in vertebrobasilar arteries in pre-hypertensive Spontaneous Hypertensive Rats (PH-SHR)*  
E Roloff, S Kasparov, J Paton  
*Comparing cerebral blood flow velocity and cerebral blood flow measures between transcranial Doppler ultrasound and phase contrast magnetic resonance imaging during hypercapnia and hypocapnia*  
N Coverdale, J Gati, O Opalevych, A Perrotta, JK Shoemaker |
| --- | --- |
| 12:30-2:15 | **Poster Sessions**  
*Cerebral Autoregulation in Pathological Conditions*  
*Cerebral Blood Flow Regulation in Aging*  
**Poster Sessions**  
*Autonomic and Other Control of the Cerebral Circulation*  
*Cerebral Autoregulation: The Quandary of Quantification* |
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<td>2:30-4:30</td>
<td><strong>Practical Course on Performing TCD</strong>&lt;br&gt;San Diego Marriott Marquis &amp; Marina, Balboa</td>
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<td><strong>Cerebral Autoregulation: The Quandary of Quantification</strong>&lt;br&gt;Convention Center, Room 25B</td>
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<td><em>TCD: What does velocity tell us? The debate over absolute vs relative changes</em>&lt;br&gt;Dr. Jorge Serrador</td>
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<td><em>From models to numbers</em>&lt;br&gt;Dr. David Simpson</td>
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<td><em>The mirage of autoregulation</em>&lt;br&gt;Prof. Ronney Panerai</td>
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<td><em>Resisting the seduction of cerebral autoregulation</em>&lt;br&gt;Dr. Yu-Chieh Tzeng</td>
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<td><em>Nonstationary multivariate modeling of cerebral autoregulation during resting state and hypercapnia</em>&lt;br&gt;K Kostoglou, M Poulin, G Mitsis</td>
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<td>Interindividual relationships between blood pressure and cerebral blood flow variability&lt;br&gt;T Witter, B MacRae, T O'Donnell, M Berry&lt;br&gt;YC Tzeng</td>
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<td>5-6</td>
<td><strong>CARNet Bootstrap Meeting</strong>&lt;br&gt;San Diego Marriott Marquis &amp; Marina, Cardiff</td>
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<td>6-7</td>
<td><strong>CARNet Business Meeting</strong>&lt;br&gt;San Diego Marriott Marquis &amp; Marina, Marina Ballroom G</td>
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POSTER SESSIONS

Cerebral Autoregulation in Pathological Conditions

*Contribution of voltage-gated potassium channels in cerebrovascular dysfunction associated with a genetic model of ischemic small vessel disease*
F Dabertrand, C Kråigaard, A Bonev, J Brayden, A Joutel, M Nelson

*The cytokines TNF MCP-1 and CINC-1 mediate diminished dilation of middle cerebral artery after ischemic stroke in rats*
Z Broskova, D Anthony, Z Bagi

*Sudden Onset of Hearing Loss after Cerebral Ischemia*
P Kamat, A Kalani, S Tyagi, N Tyagi

*Improving the sensitivity of neurovascular coupling assessment using motor-cognitive paradigms post-stroke*
A Salinet, T Robinson, R Panerai

*Dynamic cerebral autoregulation is heterogeneous in different subtypes of acute ischemic stroke*
Z Ni Guo, J Liu, Y Xing, Y Yang

*Brain tissue oxygenation in response to changes in arterial pressure in patients with mild cognitive impairment*
J Liu, T Tarumi, B Tseng, C Hill, K Armstrong, L Hynan, T Hodics, R Zhang

*Dynamic Cerebral Autoregulation and Tissue Oxygenation in Amnestic Mild Cognitive Impairment*
T Tarumi, D Dunsky, M Ayaz, J Liu, C Hill, K Armstrong, K Martin-Cook, M Cullum, R Zhang

*Regional cerebral blood flow responses to rapid reductions in blood pressure after high level spinal cord injury: the effect of alpha1-agonist*
A Phillips, A Krassioukov, P Ainslie, D Warburton

*Cerebral blood flow regulation during blood loss compared to lower body negative pressure in humans*
J Barnes, B Johnson, Convertino, M Joyner, C Rickards

*Cerebral Autoregulation in Fulminant Hepatic Failure*
R Nogueira, F Mendes, M Pacheco, K Lins, M Jacobsen, T Edson, B Seng-Shu

*Dynamic cerebral pressure-flow relationships in aging and long-term heart transplant recipients*
J Smirl, M Haykowsky, K Marsden, H Jones, M Nelson, P Ainslie

*Blunted Cerebrovascular Response to Exogenous Nitric Oxide in POTS*
A Del Pozzi, M Medow, J Stewart

*tPA-S481A prevents impairment of cerebrovascular autoregulation by endogenous tPA after traumatic brain injury by upregulating p38 MAPK and inhibiting ET-1*
W Armstead, L Bohman, J Riley, S Yarovoi Abd, A Higazi, D Cines

Uncoupling of flow-pressure relationships following sport concussion in elite athletes
S Bishop, T Burnett, J Smirl, P Ainslie, P Donkelaar, P Neary

Reduced Vestibular Function in Veterans is Associated with Worse Cerebral Autoregulation
J Serrador, A Acosta, B Ghobreal, M Blatt

Cerebral blood flow regulation is affected immediately following a concussion
J Tosto, M Falvo, L Reyes, M Blatt, B Ghobreal, J Serrador

Two approaches to the Pressure-Volume Relationship after Traumatic Brain Injury using respiratory stimuli
C Haubrich

Post-traumatic stress disorder does not affect cerebrovascular reactivity
J Stojanovic-Radic, L Reyes, B Ghobreal, M Blatt, A Acosta, H Chandler, J Serrador

Autonomic Dysfunction in Veterans with Gulf War Illness
L Reyes, M Falvo, M Blatt, B Ghobreal, A Acosta, J Serrador

Cerebral autoregulation: the quandry of quantification

The effects of transcranial Doppler probe placement on cerebral autoregulation measurements
D de Jong, J Lagro, A van den Abeelen, K Slump, O Meulenbroek, J Claassen

Evaluating the repeatability of measuring CBFV and estimating ARI at the MCA vs ICA
R Nogueira, N Saeed, R Panerai, T Robinson, E Bor-Seng-Shu

Methodological considerations for cerebrovascular reactivity testing and analysis
J Inskip, R Ravensbergen, S O’Connor, V Claydon

The Effect of Different Body Positions on the Assessment of Dynamic Cerebral Autoregulation
J Luis, J Chacon

Influence of dynamic cerebral autoregulation on presyncope in endurance athletes
M Paquette, O Le Blanc, A Gaudreau, P Moreau, A Clâ©ment, G Thibault, P Brassard

Middle cerebral artery mean flow velocity changes to non-pharmacologically induced hypertension and hypotension in humans
P Brassard, M Paquette, O Le Blanc, A Gaudreau, P Moreau, A Clâ©ment, G Thibault

Are there differences in cerebral autoregulation between small increases or decreases of blood pressure?
D Simpson, A Birch, R Panerai

Quantifying autoregulation from estimated model parameters: an optimization approach
D Simpson, C Berroeta, E Katsogridakis, R Panerai
Comparison of Autoregulatory Indexes on Spontaneous Variations with Linear Support Vector Machines
Max L. Chacon, F Bello, J Jara, R Panerai

Nonstationary multivariate modeling of cerebral autoregulation during resting state and hypercapnia
K Kostoglou, M Poulin, G Mitsis

Interindividual relationships between blood pressure and cerebral blood flow variability
T Witter, B MacRae, T O'Donnell, M Berry, Y Tzeng

Autonomic and other control of the cerebral circulation

Are the upper limits of cerebral autoregulation at gross and microcirculatory levels different? Does nitric oxide (NO) play a role?
E Thompson, A Coney, J Marshall

Comparing cerebral blood flow velocity and cerebral blood flow measures between transcranial Doppler ultrasound and phase contrast magnetic resonance imaging during hypercapnia and hypocapnia
N Coverdale, J Gati, O Opalevych, A Perrotta, J Shoemaker

Influence of cholinergic blockade on the cerebral blood flow response to exercise in humans
I Braz, A Shantsila, A Adlan, N Secher, J Fisher

Effects of physical exertion and heat on cerebrovascular response in professional firefighters
J Neary, M Butz, B Dahlstrom, J Smirl, S Bishop

Blunted increases in vertebral blood flow during L-arginine infusion in patients with hypertension
L Vianna, I Fernandes, T Barbosa, T Amaral, N Rocha, N Secher, A Nambreg

Effects of antioxidants on cerebrovascular hemodynamics during moderate and high intensity exercise
G Moralez, D White, P Raven

Oscillatory Cerebral Blood Flow in Postural Tachycardia Syndrome
A Del Pozzi, M Medow, J Stewart

Increases in sympathetic activity during cold pressor test does not cause cerebral vasoconstriction
J Serrador, M Blatt, B Ghobreal, M Falvo

Immunohistochemical evidence of a reduced vasodilatory capacity in vertebrobasilar arteries in prehypertensive Spontaneous Hypertensive Rats (PH-SHR)
E Roloff, S Kasparov, J Paton

Spinal cord injury and disruption of extrinsic sympathetic control of cerebral vasculature does not significantly alter cerebrovascular reactivity to carbon dioxide
J Inskip, R Ravensbergen, S O'Connor, V Claydon

Time dynamics of cerebral blood flow during LBNP
M Kasprowicz, M Czosnyka, R Diehl, C Haubrich
APS Cerebral blood flow regulation in aging

*Cerebral autoregulation individual variability and white matter hyperintensity*
J Liu, B Tseng, M Khan, T Tarumi, C Hill, K Armstrong

*Cerebral Hemodynamics in Normal Aging: Associations with Central Hemodynamics and Cerebral Small Vessel Disease*
T Tarumi, M Ayaz, J Liu, B Tseng, R Parker, R Jonathan, C Tinajero, W Zaidi, R Zhang

*Reduced cerebral autoregulation as the genesis of symptoms in orthostatic intolerance in elderly*
M Sanders, A van den Abeelen, C Slump, J Lagro, J Claassen

*Age-related differences in carotid and cerebral blood flow regulation*
S Kruse, S Ranadive, J Taylor, M Joyner, J Barnes

*The impact of aging on cerebral vasomotor reactivity to carbon dioxide*
J Riley, T Tarumi, R Parker, K Armstrong, Cynthia Tinajero, R Zhang