08:00-09:00  LAA  1F, Main Hall

08:00-08:20  Opening and Introduction

E. Lo (United States)
H. Kinouchi (Japan)
H. Okazawa (Japan)

08:20-08:40  Lifetime Achievement Award

Chair(s)  M.E. O’Donnell (United States)
K. Masamoto (Japan)

08:40-09:00  Recipient of the Lifetime Achievement Award

E. Hamel (Canada)

09:00-10:00  PRL  1F, Main Hall

Presidential Lecture

Chair(s)  E. Lo (United States)

The role of capillary pericytes in regulating cerebral blood flow in health, ischaemia and Alzheimer’s disease

D. Attwell (United Kingdom)

11:00-12:30  SY01  5F, 503

Hot Techniques in Neuroimaging of Cerebrovascular Disease

Chair(s)  S. Wegener (Switzerland)
T. Farr (United Kingdom)

11:00-11:18  SY01-1  Cellular imaging of the neurovascular unit

K. Masamoto (Japan)

11:18-11:36  SY01-2  Laser speckle and 2photon imaging in the thrombin stroke model

M. El Amki (Switzerland)

11:36-11:54  SY01-3  Structural mouse brain connectome imaging in vascular dementia

T. Farr (United Kingdom)

11:54-12:12  SY01-4  Structural and functional connectivity imaging in the rodent brain

R. Dijkhuizen (Netherlands)
12:12-12:30 SY01-5 Deep Learning for stroke data analysis
L. Herzog (Switzerland)

12:30-13:30 5F, 503
ISCBFM General Assembly

11:00-12:30 BS01

Translational Studies in Stroke

Chair(s) J. Boltze (United Kingdom)
M. Balkaya (United States)

11:00-11:15 BS01-1 CD36 deficiency reduce scar formation and improve functional outcome in chronic stroke
M. Balkaya, ID. Kim, S. Cho (United States)

11:15-11:30 BS01-2 DNA polymerase-beta-dependent DNA repair pathway contributes to neuronal survival and white matter protection against cerebral ischemia
M. Xu, R. Anne Stetler, L. Zhang, Y. Shi, S. Hassan, J. Zhao, M.V.L. Bennett, J. Chen (United States)

11:30-11:45 BS01-3 Older female mice lacking triggering receptor expressed on myeloid cells-2 have worse post-stroke neurological function and enhanced pro-inflammatory responses
K. Kurisu, R. Kacimi, Z. Zheng, C. Hsieh, M.A. Yenari (United States)

11:45-12:00 BS01-4 Optogenetic induction of peri-infarct spreading depolarizations in the ET-1 rat model of focal cortical ischemia
P. Bazzigaluppi, A. Dorr, J. Mester, M. Koletar, B. Stefanovic (Canada)

12:00-12:15 BS01-5 Brain functional connectivity changes in acute ischemic stroke measured with bedside diffuse optical tomography
B.A. Burke, A.T. Eggebrecht, K.M. Bergonzi, A. Sherafati, T.M. Burns-Yocum, A.K. Fishell, G. Kumar, R. Dhar, JM. Lee, J.P. Culver (United States)
### Scientific Program | Friday, July 5th 2019

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<tr>
<th>Time</th>
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| 12:15-12:30   | BS01-6  | 5F, 502  | Clinical validation of Penumbra and ischemic core prediction from deep learning algorithm using baseline multimodal MRI in acute ischemic stroke patients: A multi-center study  
Y. Yu, Y. Xie, T. Thamm, E. Gong, C. Huang, S. Christensen, M.G. Lansberg, G.W. Albers, G. Zaharchuk (United States) |
| 11:00-12:30   | BPSY01  | 5F, 502  | Mapping Neuronal and Synaptic Changes using Specific PET Probes: Animal and Clinical Applications  
Chair(s): J.C. Baron (United Kingdom/France)  
R. Carson (United States) |
| 11:00-11:05   |         |          | Introduction                                                                                   |
| 11:05-11:25   | BPSY01-1|          | PET studies using mitochondrial complex-1 tracers in brain damage  
H. Tsukada (Japan) |
| 11:25-11:45   | BPSY01-2|          | Mapping the Metabotropic Glutamate Receptor-5 (MgluR5) using PET  
C. DeLorenzo (United States) |
| 11:45-12:05   | BPSY01-3|          | Mapping selective neuronal damage after ischemic stroke and relationships with microglial activation  
J.C. Baron (United Kingdom/France) |
| 12:05-12:25   | BPSY01-4|          | Imaging synaptic density in the living brain  
T. Toyonaga (United States) |
| 12:25-12:30   |         |          | Discussion                                                                                   |
| 13:30-15:00   | SY02    | 5F, 503  | A Window into the Brain: Innovative Approaches for Estimating Brain Metabolism in Animals and Humans  
Chair(s): S. Marinesco (France)  
AK. Bouzier Sore (France) |
| 13:30-13:36   |         |          | Introduction                                                                                   |
13:36-13:57 SY02-1 Seeing is believing: visualizing brain glucose utilization with deoxyglucose: from in vitro to in vivo
L. Pellerin (Switzerland)

13:57-14:18 SY02-2 Brain cell energy metabolism visualized with genetically-encoded fluorescent probes
L.F. Barros (Chile)

14:18-14:39 SY02-3 Following brain metabolism changes in vivo using NMR spectroscopy and MRI during brain activation: importance of lactate
AK. Bouzier Sore (France)

14:39-15:00 SY02-4 Dysfunctions in brain metabolism after traumatic brain injury evidenced by microelectrode biosensors
C. Allioux (France)

13:30-15:00 BS02 5F, 501
Advanced Imaging: PET & MRI
Chair(s) S. Kaczmarz (Germany)  F. Boada (United States)

13:30-13:45 BS02-1 Static and dynamic structure-function relationships across anatomical connectivity strengths in the rodent and human brain
M. Straathof, M.R.T. Sinke, W.M. Otte, R.M. Dijkhuizen (Netherlands)

13:45-14:00 BS02-2 [18F]MK-6240 for imaging tau in patients with Alzheimer’s disease: Longitudinal evaluation in Alzheimer’s disease and cognitively normal adults at 6 and 12 months
C.A. Salinas, A. Purohit, J. Beaver, L. Martarello (United States)

14:00-14:15 BS02-3 Reward anticipation processing in major depressive disorder and prediction of treatment response - an fMRI study
I.M. Brandt, K. Köhler-Forsberg, M.B. Jorgensen, A. Poulsen, G.M. Knudsen, V.G. Frokjaer, P.M. Fisher (Denmark)

14:15-14:30 BS02-4 Human line-scanning fMRI: Initial results of ultra-high temporal and spatial resolution hemodynamic imaging
JC.W. Siero, I. Siero, S. Choi, X. Yu (Netherlands, Germany)
14:30-14:45 BS02-5 Brain temperature and metabolites- an in-vivo mr spectroscopy assessment of energy states, metabolism, neuronal maturation, and neurotransmission in infants undergoing therapeutic hypothermia for hypoxic-ischemic encephalopathy
TW. Wu, J. Wisnowski, B. Tamrazi, R. Chapman, S. Bluml (United States)

14:45-15:00 BS02-6 MR-based protocol for metabolically-based evaluation of tissue viability during recanalization therapy: initial experience
F.E. Boada, Y. Qian, S. Baete, E. Raz, M. Shapiro, P.K. Nelson, K. Ishida (United States)

13:30-15:00 BPS01
Neurotransmission & Psychiatry
Chair(s) J. Booij (Netherlands)
J.C. Price (United States)

13:30-13:45 BPS01-1 Lower nicotinic and muscarinic receptor occupancy in regions with high acetylcholine concentration: towards an index of regional acetylcholine balance in the human brain

13:45-14:00 BPS01-2 PET imaging of [11C]BIIB104, an AMPA positive modulator, in the living NHP brain
M. Kaliszczak, S. Nag, S. Dandapani, R. Arakawa, A. Forsberg, K. Varnäs, J. Beaver, C. Shaffer, C. Halldin, L. Martarello (United States, Sweden)

14:00-14:15 BPS01-3 Task-sensitivity of functional [18F]FDG-PET in comparison to functional MRI and arterial spin labeling

14:15-14:30 BPS01-4 Patients with major depressive disorder have lower cerebral serotonin 4 receptor PET binding than healthy controls
14:30-14:45 BPS01-5 Regional correlation between glucose metabolism and synaptic density in healthy subjects
J. van Aalst, J. Ceccarini, P. Dupont, M. Koole, K. Van Laere (Belgium)

14:45-15:00 BPS01-6 Cerebral adenosine receptor availability after sleep deprivation is associated with specific dynamic connectivity states determined by resting state fMRI
D. Elmenhorst, C. Li, EM. Elmenhorst, T. Kroll, D. Aeschbach, A. Bauer (Germany, United States)

16:00-17:30 SY03 Immune-Neurovascular Interactions in the Injured Developing Brain
Chair(s) Z. Vexler (United States)

16:00-16:05 Introduction

16:05-16:25 SY03-1 Neuronal rescue and protection by modulating immune system and blood-brain barrier in immature brain
T. Ikeda (Japan)

16:25-16:45 SY03-2 Neonatal infection and TLR-type dependent effects on hypoxia-ischemia (H-I) and blood-brain barrier (BBB)
C. Mallard (Sweden)

16:45-17:05 SY03-3 Brain maturation dependent patterns of neuroinflammation and vascular leakage in stroke
Z. Vexler (United States)

17:05-17:25 SY03-4 Vascular modifications following injury in the developing brain
A. Obenaus (United States)

17:25-17:30 Discussion
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<td>16:00-17:30</td>
<td>BS03</td>
<td>5F, 501</td>
<td>Neurovascular Coupling: Mechanisms</td>
<td>E.M.C. Hillman (United States) S. Grubb (Denmark)</td>
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<td>16:00-16:15</td>
<td>BS03-1</td>
<td></td>
<td>Spatial-temporal dynamics of functional hyperemia: mural cell</td>
<td>R.L. Rungta, E. Chaigneau, B. Osmanski, S. Charpak (France)</td>
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<td>calcium and vascular responses from the synapse to the pia</td>
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<td>16:15-16:30</td>
<td>BS03-2</td>
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<td>Precapillary sphincters exist in the brain and regulate blood flow</td>
<td>S. Grubb, C. Cai, L. Khennouf, B. Hald, R. Murmu, S. Zambach, M. Lauritzen (Denmark)</td>
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<td>16:30-16:45</td>
<td>BS03-3</td>
<td></td>
<td>The contribution of specific inhibitory cortical interneurons to</td>
<td>L. Lee, L. Boorman, E. Glendenning, C. Christmas, P.S. Sharp, E. Bracci, J. Berwick, C. Howarth</td>
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<td>neurovascular coupling</td>
<td>(United Kingdom)</td>
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<td>16:45-17:00</td>
<td>BS03-4</td>
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<td>Cerebral hemodynamics are differentially regulated by excitatory</td>
<td>J. Lee, A.R. Bice, Z.P. Rosenthal, JM. Lee, A.Q. Bauer (United States)</td>
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<td>and inhibitory circuits</td>
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<td>17:00-17:15</td>
<td>BS03-5</td>
<td></td>
<td>Simultaneous multispectral fiber-photometry and functional MRI</td>
<td>WT. Zhang, TH. Chao, SH. Lee, B.M. Katz, TW. Wang, E.A. Oyarzabal, G. Cui, YY.I. Shih (United States)</td>
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<td>reveals heterogeneous neurovascular coupling in cerebral cortex and</td>
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<td>17:15-17:30</td>
<td>BS03-6</td>
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<td>Simultaneous mesoscopic Ca$^{2+}$ imaging and fMRI: Neuroimaging</td>
<td>E. Lake, X. Ge, X. Shen, F. Hyder, J.A. Cardin, M.J. Higley, D. Scheinost, X. Papademetris, M.C.</td>
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<td>spanning spatiotemporal scales</td>
<td>Crair, R. Constable (United States)</td>
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16:00-17:30 | BPS02 | 5F, 502

### Novel imaging agents and preclinical imaging: I

**Chair(s)** Y. Huang (United States)
Y. Kiyono (Japan)

**16:00-16:15 | BPS02-1** Evaluation of the first \(^{18}\)F-labeled PET radiotracer \(^{18}\)F-LY2459989 for imaging kappa opioid receptor in humans

**N.B. Nabulsi**, M. Naganawa, S. Li, S. Henry, D. Matuskey, K. Lim, P. Emery, J. Ropchan, R.E. Carson, Y. Huang (United States)

**16:15-16:30 | BPS02-2** Kinetic analysis and test-retest variability of \[^{18}\]F LSN3316612, a novel PET radioligand for imaging O-GlcNAcase in human brain


**16:30-16:45 | BPS02-3** Evaluation of a radiofluorinated benzazepine-1,7-diol analogue for imaging the GluN2B subunits of the N-Methyl-D-Aspartate receptor

H. Ahmed, A. Haider, I. Iten, R. Wallimann, S. Häne, A.M. Herde, R. Schibli, L. Mu, B. Wünsch, **S.M. Ametamey** (Switzerland, Germany)

**16:45-17:00 | BPS02-4** Development and initial in vivo evaluation in monkey brain of \[^{11}\]C T-1650, a novel PET ligand for phosphodiesterase-4 subtype D


**17:00-17:15 | BPS02-5** \(^{18}\)F-SDM-8 is an excellent PET radiotracer for imaging the synaptic vesicle glycoprotein 2A: First experience in humans


**17:15-17:30 | BPS02-6** Evaluation of \[^{11}\]C(R)-NR2B-Me, a novel PET RADIOligand for imaging The NR2B subunit of the NMDAR complex in rat and monkey brain

**SCIENTIFIC PROGRAM | FRIDAY, JULY 5TH 2019**

17:30-19:00 SY04 5F, 503

**The Role of the Microbiome in Acute and Chronic Brain Disease**

Chair(s) F. Sohrabji (United States)

17:30-17:32 Introduction

17:32-17:54 SY04-1 Estrogen protection against EAE modulates the microbiota and mucosal-associated regulatory cells

**H. Offner** (United States)

17:54-18:16 SY04-2 Microbiota alterations and intestinal inflammation post-spinal cord injury in rat model

**S. Daunert** (United States)

18:16-18:38 SY04-3 Microbiota-immune cell interaction: Critical role of gut metabolites in neuroinflammation

**C. Benakis** (Germany)

18:38-19:00 SY04-4 Reproductive senescence and brain injury remodel the gut microbiome and modulate the effects of estrogen treatment in female rats

**F. Sohrabji** (United States)

17:30-19:00 BS04 5F, 501

**Hemorrhagic stroke**

Chair(s) H. Yoshioka (Japan)

P. Fischer (United States/Germany)

17:30-17:45 BS04-1 Using zebrafish larval models of intracerebral haemorrhage to study brain injury, locomotor and neuroinflammatory outcomes

**P. Kasher**, S. Crilly, A. Parry-Jones, S. Allan (United Kingdom)

17:45-18:00 BS04-2 Spreading depolarizations limit hematoma expansion in a model of intracortical hemorrhage: a novel protective role

**P. Fischer**, K. Sugimoto, D.Y. Chung, I. Tamim, T. Takizawa, T. Qin, M.A. Yaseen, F. Schlunk, M. Endres, C. Ayata (Germany, United States)

18:15-18:30  BS04-4  Pro-inflammatory response promoted by Porphyromonas gingivalis lipopolysaccharide enhances the rupture of experimental intracranial aneurysms T. Miyamoto, K.T. Kitazato, Y. Tada, K. Shimada, M. Korai, T. Yamaguchi, Y. Kanematsu, S. Nagahiro, Y. Takagi (Japan)

18:30-18:45  BS04-5  Correlates of spreading depolarization, spreading depression and negative ultraslow potential in human epidural versus subdural electrocorticography J.P. Dreier, S. Major, C.L. Lemale, V. Kola, C. Reiffurth, K. Schoknecht, N. Hecht, J.A. Hartings, J. Woitzik (Germany, United States)

18:45-19:00  BS04-6  The effect of subarachnoid hemorrhage on resting state functional connectivity and behavior in mice D. Chung, G. Jin, S. Kura, F. Oka, S. Aykan, D. Boas, S. Sakadžić, M. Yaseen, M. Whalen, C. Ayata (United States, Japan)

17:30-19:00  BPS03  Novel imaging agents and preclinical imaging: II

Chair(s) M. Higuchi (Japan) M. Vicente-Rodriguez (United Kingdom)


SCIENTIFIC PROGRAM | FRIDAY, JULY 5TH 2019

18:00-18:15  BPS03-3  The new PET tracer $^{18}$F-SDM-8 effectively detects reduced SV2a binding in a rodent model of Alzheimer’s disease
P. Sadasivam, L. Smith, J. Spurrier, S. Lee, M. Lindemann, T. Toyonaga, R. Pracitto, R.E. Carson, S. Strittmatter, Z. Cai (United States)

18:15-18:30  BPS03-4  PET imaging of colony stimulating factor 1 receptor in rat brains

18:30-18:45  BPS03-5  PET-CT shows distinct brain uptake and retention for a nanobody and PAMAM dendrimer after intra-arterial delivery
W. Lesniak, C. Chu, A. Jablonska, B. Behnam Azad, M. Pomper, P. Walczak, M. Janowski (United States, Poland)

18:45-19:00  BPS03-6  Characterization of two mGluR4 radiotracers $[^{18}$F]KALB001 and $^{[11}$C]KALB012 in non-human primates

19:30  Hard Rock Cafe Yokohama

   Early Career Networking Evening
Saturday, July 6th
08:00-09:30 SY05 5F, 503

Interrogation of Pericyte Function in CNS Physiology & Pathophysiology

Chair(s) T.P. Davis (United States)
E. Lo (United States)
A. Shih (United States)

08:00-08:05 Introduction

08:05-08:22 SY05-1 A role for pericytes in cerebrovascular regeneration after stroke
LP. Bernier (Canada)

08:22-08:39 SY05-2 Interrogating mural cell identity and function in vivo
R. Hill (United States)

08:39-08:56 SY05-3 Pericyte-deficiency in cerebral blood flow regulation
K. Kisler (United States)

08:56-09:13 SY05-4 Pericytes regulate cerebral microvascular blood flow in health and disease
A. Mishra (United States)

09:13-09:30 SY05-5 Do pericytes proliferate and differentiate into microglia-like cells after ischemic stroke?
Y. Yao (United States)

08:00-09:30 BS05 5F, 501

Dementia and Cognition Impairment

Chair(s) Y. Luo (China)
A.F. Logsdon (United States)

08:00-08:15 BS05-1 ApoE-dependent pharmacogenetic response to rapamycin for Alzheimer’s disease prevention
M. Xia, AL. Lin, B. Ganganna, F. Hyder (United States)

08:15-08:30 BS05-2 The relationship between cognitive function, cortical blood flow and sub-cortical white-matter health in the elderly
08:30-08:45 BS05-3 Carotid arterial stiffness and cerebral blood flow pulsatility in patients with amnestic mild cognitive impairment
T. Tomoto, J. Sugawara, C. Chiles, B. Curtis, T. Tarumi, E.P. Pasha, R. Zhang (United States, Japan)

08:45-09:00 BS05-4 White matter hyperintensities impact on regional brain volumes and white matter microstructure: a general population study (HUNT MRI)
A.K. Haberg, L. Eikenes, T.R. Vangberg (Norway)

09:00-09:15 BS05-5 Genetic deletion of Krüppel-like transcription factor 11 aggravates the pathogenesis of vascular cognitive impairment and dementia
C. Zhou, P. Sun, X. Zhang, KJ. Yin (United States)

09:15-09:30 BS05-6 Neuropsychiatric symptoms relate to tau but not amyloid in Alzheimer’s disease spectrum

08:00-08:15 BPS04-1 TauIQ - a quantitative algorithm for Tau PET imaging in clinical trials
A. Whittington, J. Seibyl, J. Hesterman, R.N. Gunn (United Kingdom)

08:15-08:30 BPS04-2 Joint pattern analysis applied to PET DAT and VMAT2 imaging reveals new insights into Parkinson’s disease induced presynaptic alterations
J.F. Fu, I. Klyuzhin, J. McKenzie, N. Neilson, E. Shahinfard, K. Dinelle, M.J. McKeown, A. Stoessl, V. Sossi (Canada)

08:30-08:45 BPS04-3 Likelihood estimation of drug occupancy - generalization to multiple occupancy measurements
A. Ilhan, F. Zanderigo, R.T. Ogden, G. Knudsen, C. Svarer, M. Schain (Denmark, United States)
08:45-09:00  BPS04-4  Resting-state networks revealed based on synaptic density PET
X.T. Fang, T. Toyonaga, A.T. Hillmer, P.D. Worhunsky, R.E. Carson (United States)

09:00-09:15  BPS04-5  Image reconstruction methods affect computer-aided
assessment of patient pathologies of flutemetamol and FDG
brain PET examinations in patients with neurodegenerative
diseases

09:15-09:30  BPS04-6  Towards a gold standard for validation of quantification methods
for PET neuroreceptor imaging
T. Funck, N. Palomero-Gallagher, M. Omidyeganeh, C. Lepage, PJ. Toussaint, N. Khalili, K. Zilles, A.C. Evans, A. Thiel (Canada, Germany)

10:30-12:00  SY06  5F, 503

Honoring Richard Traystman: Advances in Investigation of
CBF and Metabolism

Chair(s)  E. Lo (United States)
          R.C. Koehler (United States)
          P. Herson (United States)

10:30-10:40  Honoring the Legacy of Richard J. Traystman

10:40-11:00  SY06-1  Advances in Neuroimaging with PET
P. Herscovitch (United States)

11:00-11:20  SY06-2  Advances in CBFM Regulation
B. Stefanovic (Canada)

11:20-11:40  SY06-3  Advances in Neuroprotection
J. Boltze (United Kingdom)

11:40-12:00  SY06-4  Advances in CNS-peripheral Crosstalk
K. Abe (Japan)
**Sponsored Seminar 1: PET/MRI TOMORROW TODAY**

Chair(s): H. Okazawa (Japan)

- **12:10-12:35 SS1-1** PET-MRI in neurodegenerative diseases
  - M. Lubberink (Sweden)

- **12:35-13:00 SS1-2** Quantitative brain PET/MRI imaging and its clinical application
  - H. Okazawa (Japan)

  Sponsored by GE Healthcare Japan Corporation

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**Sponsored Seminar 2**

Chair(s): K. Abe (Japan)

- **12:10-12:35 SS2-1** Promising stroke prevention in anticoagulation for elderly patients with AF
  - T. Urabe (Japan)

- **12:35-13:00 SS2-2** Effectiveness of anticoagulants for preventing further cerebral microbleeds in acute ischemic stroke patients with non-valvular atrial fibrillation and at least one microbleed: CMB-NOW multisite pilot trial
  - S. Takizawa (Japan)

  Sponsored by DAIICHI SANKYO COMPANY, LIMITED.

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**Sponsored Seminar 3**

Chair(s): N. Saito (Japan)

- **12:10-12:35 SS3-1** Advanced neuroimaging of small vessel disease—Association with outcome of patients with oral anticoagulants—
  - Y. Yakushiji (Japan)

- **12:35-13:00 SS3-2** Brain protection against ischemic injury—Collateral circulation as a potential therapeutic target—
  - K. Kitagawa (Japan)

  Sponsored by Bristol-Myers Squibb/Pfizer Japan Inc.
Digital Metabolic Map of the Human Brain from BigBrain
Stereological Cellular Atlas

Chair(s): Y. Yu (China)

13:00-13:30 SY07-1 BigBrain: Future directions in cytoarchitectural mapping
A. Evans (Canada)

P. Herman (United States)

13:55-14:20 SY07-3 Human brain energy map of signaling and non-signaling processes computed on the basis of cellular staining
Y. Yu (China)

14:20-14:30 Discussion

Advances in Basic through Clinical Stroke

Chair(s): G. Bix (United States)
P. Li (China)

13:00-13:15 BS06-1 Activity dependent neuroprotection in the acute phase after stroke
M. Balbi, D. Xiao, LP. Bernier, M. Vanni, J. Boyd, J. LeDue, B. MacVicar, T.H. Murphy (Canada)

13:15-13:30 BS06-2 ATN-161 reduces inflammation and blood-brain barrier dysfunction following in vitro stroke conditions in association with conservation of claudin-5 expression
D.N. Edwards, J.F. Fraser, G.J. Bix (United States)

13:30-13:45 BS06-3 Optogenetic functional activation expands infarct volume independent of periinfarct spreading depolarizations in focal cerebral ischemia
K. Sugimoto, D.Y. Chung, P. Fischer, T. Takizawa, T. Qin, M.A. Yaseen, S. Sakadžić, C. Ayata (United States, Japan)

13:45-14:00 BS06-4 Dendritic remodeling of the spinal motor neurons in the denervated gray matter after stroke in mice
X. Gan, M. Chopp, J. Fang, L. He, Z. Liu (China, United States)
14:00-14:15 BS06-5 Pre-clinical investigation of a novel thrombolytic and anti-inflammatory therapy for the treatment of acute ischaemic stroke

K. South, E. Lemarchand, S.M. Allan (United Kingdom)

14:15-14:30 BS06-6 A multi-center investigation of the association of acute stroke severity and long-term outcome with acute stroke lesion topography


13:00-14:30 BPS05-5F, 502

Brain Imaging Methodology: II

Chair(s)
M. Lubberink (Sweden)
J.F. Fu (Canada)

13:00-13:15 BPS05-1 Simulating the effect of cerebral blood flow changes on quantification of $[^{18}F]flutemetamol$ and $[^{18}F]florbetaben$ studies

F. Heeman, M. Yaqub, I. Lopes Alves, K. Heurling, J. Gispert, S. Bullich, C. Foley, R. Boellaard, A.A. Lammertsma, the AMYPAD Consortium (Netherlands, Sweden, Spain, Germany, United Kingdom)

13:15-13:30 BPS05-2 The white matter reference region used in amyloid PET is susceptible to flow and input function fluctuation: a consideration of kinetics

M. Kameyama, K. Ishibashi, J. Toyohara, K. Ishii (Japan)

13:30-13:45 BPS05-3 Alzheimer’s disease pattern derived from pharmacokinetic modeling of $^{11}$C-Pittsburgh compound B PET scans


14:00-14:15  BPS05-5  Non-invasive quantification of tau accumulation in dementia using simultaneous ¹⁸F-PI-2620 PET/MRI  

14:15-14:30  BPS05-6  Impact of image processing on [¹¹C]PIB amyloid quantification  

15:30-17:00  SY08  Brain Metabolism and Aging: Opportunities and Controversies

Chair(s)  M.S. Goyal (United States)

15:32-15:54  SY08-1  In vivo imaging of mitochondrial and glycolytic activities in aging and dementia  
Y. Ouchi (Japan)

15:54-16:16  SY08-2  Classic blood flow and oxygen metabolic characterization of human cerebral small vessel disease  
JM. Lee (United States)

16:16-16:38  SY08-3  Alzheimer’s disease and diabetes: the metabolic interplay of two disparate diseases  
S. Macauley-Rambach (United States)

16:38-17:00  SY08-4  A machine learning perspective on metabolic brain aging  
M.S. Goyal (United States)
Brain Injuries: Traumatic, Ischemic, & Hypoxic

Chair(s)  M.E. O’Donnell (United States)  
E. Rocha Ferreira (Sweden)

15:30-15:45  BS07-1  Neurovascular dysfunction develops post-mild traumatic brain injury in a pediatric animal model  
A. Ichkova, B. Rodriguez-Grande, ML. Fournier, J. Aussudre, E. Zub, P. Sicard, N. Marchi, J. Badaut (France, United States)

15:45-16:00  BS07-2  Morphological and molecular changes of astrocytes following a juvenile mild traumatic brain injury  

16:00-16:15  BS07-3  M2 microglia-derived exosome promotes white matter repair and long term functional recovery after cerebral ischemia in mice  
Y. Li, L. Luo, Z. Zhang, Y. Wang, Y. Tang, GY. Yang (China)

16:15-16:30  BS07-4  Investigation into susceptibility of brain endothelial cells to secondary hypoxia challenge in two models of traumatic brain injury  
E. Park, T. Barretto, T. Telliyan, G. Ferrier, J. Tavakkoli, A.J. Baker (Canada)

16:30-16:45  BS07-5  Caloric restriction confers long-term protection against grey and white matter injury after transient focal ischemia  
W. Zhang, J. Zhang, X. Gao, Y. Zhao, D. Chen, N. Xu, H. Pu, R. Stetler, Y. Gao (China, United States)

16:45-17:00  BS07-6  Changes in sensorimotor function after traumatic brain injury are related to alterations in white matter integrity as shown with MRI in rats  
## BPS06 5F, 502

### Quantitative brain imaging using integrated PET/MRI

**Chair(s)** H. Okazawa (Japan)
A.P. Fan (United States)

15:30-15:45  
Overview of Quantitative PET/MRI by Audrey P. Fan

15:45-16:00  
**BPS06-1** Increased tau aggregation in young traumatic brain injury and post-concussion syndrome patients  

16:00-16:15  
**BPS06-2** Investigating the optimal method to generalize an ultra-low-dose amyloid PET/MRI deep learning network across scanner models  
*K.T. Chen*, M. Schürer, J. Ouyang, E. Gong, S. Tiepolt, O. Sabri, G. Zaharchuk, H. Barthel (United States, Germany)

16:15-16:30  
**BPS06-3** H$_2$O$^{15}$-PET and BOLD fMRI during galvanic vestibular stimulation - not entirely the same thing  

16:30-16:45  
**BPS06-4** Validation of resting-state connectivity in the dopaminergic system using a simultaneously acquired [$^{11}$C]raclopride PET/BOLD fMRI protocol  
*L. Kuebler*, T. Ionescu, M. Amend, S. Buss, R. Stumm, A. Maurer, B.J. Pichler, K. Herfert (Germany)

16:45-17:00  
**BPS06-5** Simultaneous PET-MR-EEG to detect dopamine release during absence seizures  

### SY09 5F, 503

### Latest Aspects of Immunology in Stroke

**Chair(s)** K. Niizuma (Japan)  
J. Chen (United States)

17:00-17:05  
Introduction
17:05-17:20 SY09-1 Microglial/macrophage responses after stroke  
**J. Chen** (United States)

17:20-17:35 SY09-2 IL23 producing conventional dendritic cells control the detrimental IL17 response in stroke  
**M. Gelderblom** (Germany)

17:35-17:50 SY09-3 Damage associated molecular patterns in ischemic stroke  
**T. Shichita** (Japan)

17:50-18:05 SY09-4 Neuroinflammation during the chronic recovery phase after stroke  
**A. Liesz** (Germany)

18:10-18:30 Discussion

**17:00-18:30 BS08 5F, 501**

**Cerebrovascular Regulation: Experimental and Clinical**

Chair(s)  
K. Hayakawa (Japan)  
J. Goettler (Germany)

17:00-17:15 BS08-1 Membrane lipid-K\(_i\)2.x channel interactions enable hemodynamic sensing in cerebral arteries  
M. Sancho, S. Fabris, B.O. Hald, S.L. Sandow, T.L. Poepping,  
**D.G. Welsh** (Canada, Denmark, Australia)

17:15-17:30 BS08-2 Vascular and metabolic dysfunctions in APP/PS1 mouse model of Alzheimer’s disease  
**B. Iordanova**, M. Fukuda, W. Klunk, A.L. Vazquez (United States)

17:30-17:45 BS08-3 Regulation of cerebral blood flow and neurovascular coupling by microglia  
**E. Csaszar**, N. Lenart, C. Cserep, Z. Kornyei, R. Fekete,  
B. Posfai, A. Schwarcz, A. Denes (Hungary)

17:45-18:00 BS08-4 Derivation of an intracranial pressure index by the waveform analysis of cerebral blood flow measured non-invasively using fast diffuse correlation spectroscopy  
J.B. Fischer, A. Ghouse, S. Tagliabue, F. Maruccia, R. Zucca,  
U.M. Weigel, J. Sahuquillo, M.A. Poca,  
**T. Durduran** (Spain)
18:00-18:15 BS08-5 Haemodynamic impairments in asymptomatic unilateral carotid artery stenosis are most pronounced within individual watershed areas

**S. Kaczmarz**, J. Goettler, J. Petr, M.B. Hansen, J. Kufer, A. Hock, K. Mouridsen, F. Hyder, P. Christine (Germany, United States, Denmark)

18:15-18:30 BS08-6 Uncoupling of cerebral blood flow and oxidative metabolism in patients with asymptomatic high-grade carotid artery stenosis assessed by multi-modal MRI

**J. Goettler**, S. Kaczmarz, C. Zimmer, C. Sorg, C. Preibisch, F. Hyder (Germany, United States)

17:00-18:30 BPS07-5F, 502

**Imaging in Neurological Diseases**

Chair(s) P. Rosa-Neto (Canada)
T. Toyonaga (United States)

17:00-17:15 BPS07-1 Amyloid-dependent and amyloid-independent effects of tau in Alzheimer’s disease

**J. Therriault**, T. Pascoal, P. Rosa-Neto (Canada)

17:15-17:30 BPS07-2 Failure of remyelination in periventricular white matter lesions in Multiple Sclerosis

**M. Tonietto**, E. Poirion, C. Papeix, M. Bottlaender, B. Bodini, B. Stankoff (France)

17:30-17:45 BPS07-3 On regional variations of SUVR values and off-target binding of tau-imaging tracers in cognitively normal older subjects: Indirect comparisons of [18F]AV1451 to [18F]RO-948


17:45-18:00 BPS07-4 [11C]JNJ717 P2X7 receptor PET as a novel neuroinflammation target: ex vivo and in vivo comparison with [18F]DPA714 in human ALS

**D. Van Weehaeghe**, E. Van Schoor, M. Koole, J. De Vocht, S. Ceelen, L. Declercq, D.R. Thal, P. Van Damme, G. Bormans, K. Van Laere (Belgium)
18:00-18:15 BPS07-5  Evaluation of mitochondrial and synaptic function in Alzheimer’s disease (AD): a $[^{18}\text{F}]$BCPP-EF, $[^{11}\text{C}]$SA4503 and $[^{11}\text{C}]$UCB-J PET study
A.V. Venkataraman, A. Mansur, Y. Lewis, E. Kocagoncu, A. Lingford-Hughes, M. Huiban, J. Passchier, J.B. Rowe, H. Tsukada, D. Brooks, R.N. Gunn, P.M. Matthews, EA. Rabiner, MINDMAPS Consortium (United Kingdom, Japan, Australia)

18:15-18:30 BPS07-6  Plasma neurofilament light chain is associated with $[^{18}\text{F}]$flortaucipir PET in Alzheimer’s disease and with $[^{18}\text{F}]$florbetapir PET in cognitively normal elderly

19:30 The Yokohama Bay Hotel Tokyo
ISCBFM Banquet
Sunday, July 7th

http://brain2019.jp
SCIENTIFIC PROGRAM | SUNDAY, JULY 7TH 2019

08:00-09:00 NLA 5F, 501, 502

Niels Lassen Award Session

Chair(s) E. Lo (United States)
H. Kinouchi (Japan)

08:00-08:15 NLA-1 Mechanisms underlying negative fMRI responses in the striatum
D. Cerri, D. Albaugh, B. Katz, S. Lee, L. Walton, W. Zhang,
A. Etkin, G. Cui, G. Stuber, YY. Shi (United States)

08:15-08:30 NLA-2 Systemic Inflammasome activation links post-stroke monocyte
activation and T cell death
S. Roth, V. Singh, J. Yang, T. Li, S. Zhang, O. Groß,
A. Liesz (Germany, China)

08:30-08:45 NLA-3 Longitudinal imaging of calcium functional connectivity across
development in the mouse cortex
R.M. Rahn, A.R. Bice, L.M. Brier, J.D. Dougherty,
J.P. Culver (United States)

08:45-09:00 NLA-4 Correlation between APT-CEST and 18F-Choline PET in glioma
at 3T
M. Rega, F. Torrealdea, J. Hearle, M. Zaiess, F. Fraioli,
A. Shankar, A. Bainbridge, J. Dickson,
H. Hyare (United Kingdom, Germany)

09:00-10:00 PL 5F, 501, 502

Plenary Lecture

Chair(s) H. Kinouchi (Japan)
H. Okazawa (Japan)

Repair of axons and circuits after spinal cord injury
Y. Zou (United States)
11:00-12:30 BS09 5F, 503

Neurovascular Coupling: Clinical and Pathophysiological aspects

Chair(s)  Z. Ungvari (United States)
          M. Koide (United States)

11:00-11:15 BS09-1  Effects of intracranial pressure on neurovascular coupling
                     D. Acharya, D. Issar, J. Yang, A. Ruesch, S. Schmitt,
                     M.A. Smith, J.M. Kainerstorfer (United States)

11:15-11:30 BS09-2  Crippled capillary-to-arteriole electrical signaling impairs functional hyperemia in a mouse model of chronic hypertension
                     M. Koide, F. Dabertrand, T.A. Longden, O.F. Harraz,
                     N.R. Tykocki, G.C. Wellman, M.T. Nelson (United States, United Kingdom)

11:30-11:45 BS09-3  Reduced tissue plasminogen activator underlies neurovascular dysfunction induced by amyloid-β peptides
                     J. Zhou, P. Zhou, J. Anrather, C. Iadecola, L. Park (United States)

11:45-12:00 BS09-4  Nicotinamide mononucleotide supplementation rescues cerebromicrovascular endothelial function and neurovascular coupling responses, improving cognitive function in aged mice: role of sirtuin-mediated attenuation of mitochondrial oxidative stress
                     Z. Ungvari, S. Tarantini, MN. Valcarcel-Ares, P. Toth,
                     A. Yabluchanskiy, Z. Tucsek, P. Hertelendy, E. Farkas,
                     A. Csiszár (United States, Hungary)

12:00-12:15 BS09-5  Derive hemodynamic response function from resting-state activity using multispectral fiber photometry
                     TH.H. Chao, W. Zhang, B. Katz, E. Oyarzabal, S. Lee,
                     D.H. Cerri, YY.I. Shih (United States)

12:15-12:30 BS09-6  Arterial spin labeling underestimates cerebral blood flow in regions with fast arrival times: a simultaneous $[^{18}\text{O}]{\text{PET/MRI}}$ study with acetazolamide challenge
                     Y. Ishii, T. Thamn, J. Guo, M.M. Khalighi, M. Wardak, J.H. Park,
                     G.K. Steinberg, F.T. Chin, G. Zaharchuk, A.P. Fan (United States, Japan, Germany)
SCIENTIFIC PROGRAM | SUNDAY, JULY 7TH 2019

11:00-12:00 JSY 5F, 501

**JCBFM Symposium**

Chair(s) R. Dijkhuizen (Netherlands)

11:00-11:05 Introduction

**J. Chen** (United States)

11:05-11:17 JSY-1 The continuum of spreading depolarizations in acute cortical lesion development: Examining Leão’s legacy

**J.P. Dreier** (Germany)

11:17-11:29 JSY-2 Glymphatic clearance controls state-dependent changes in brain lactate concentration

**I. Lundgaard** (Sweden)

11:29-11:41 JSY-3 Epiplexus cells in brain hemorrhages and hydrocephalus

**G. Xi** (United States)

11:41-11:53 JSY-4 Differential vulnerability in the neurovascular unit: implications for designing ‘neuro’ protection

**P.D. Lyden** (United States)

11:53-12:00 Discussion

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11:00-12:30 BS10 5F, 502

**Blood-Brain Barrier & the Neurovascular Unit**

Chair(s) L. Belayev (United States)

A. Urayama (United States)

11:00-11:15 BS10-1 MicroRNA-98 preserves the blood brain barrier (BBB) in cerebral ischemia/reperfusion

**S. Rom**, D. Bernstein, V. Zuluaga-Ramirez, S. Gajghate, N. Reichenbach, Y. Persidsky (United States)

11:15-11:30 BS10-2 Brain microvascular complications occur in high-fat fed hyperglycemic and not euglycemic mice: role of the gut microbiome

**T.S. Salameh**, W.G. Mortell, W.A. Banks (United States)

11:30-11:45 BS10-3 CD36 on perivascular macrophages mediates neurovascular dysfunction, cerebral amyloid angiopathy, and cognitive deficits in mice overexpressing Alzheimer’s amyloid-β peptides

**K. Uekawa**, L. Park, J. Seo, Y. Hattori, P. Zhou, J. Anrather, C. Iadecola (United States)
11:45-12:00  BS10-4  Prion-like propagation of soluble tau aggregates to brain microvascular endothelial cells promotes cellular senescence and blocks eNOS activation

12:00-12:15  BS10-5  Organic anion transporting polypeptide (OATP)-mediated transport at the blood-brain barrier is required for atorvastatin-induced neuroprotection in experimental ischemic stroke
T.P. Davis, W. Abdullahi, J.J. Lochhead, P.T. Ronaldson (United States)

12:15-12:30  BS10-6  Two-photon fluorescence imaging: a platform to investigate cell-penetrating peptides and liposome-based nanocarriers for drug delivery across the heterogeneous BBB in vivo
K. Kucharz, K. Kristensen, M. Kristensen, M. Lund, T. Andresen, B. Brodin, M. Lauritzen (Denmark)

12:40-13:30  SS4-5F, 503  Sponsored Seminar 4
Chair(s)  M. Fujimura (Japan)

12:40-13:05  SS4-1  Optical Imaging and Modulation of Cerebral Microcirculation
K. Masamoto (Japan)

13:05-13:30  SS4-2  Neurosurgical Phlebology—Prevention of Postoperative Venous Infarction
H. Nakase (Japan)

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## SCIENTIFIC PROGRAM | SUNDAY, JULY 7TH 2019

### 12:40-13:30 SS5 5F, 501

#### Sponsored Seminar 5

**Chair(s)** T. Tominaga (Japan)

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| 12:40-13:05 | SS5-1   | 5F, 501 | Roles of CT and MRI in acute ischemic stroke—penumbral tissue clock imaging—

**S. Takahashi** (Japan)

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<th>Time</th>
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| 13:05-13:30 | SS5-2   | 5F, 501 | Perampanel, the novel non-competitive selective AMPA-R antagonist: Protective potential for refractory seizures and brain insults

**A. Kato** (Japan)

Sponsored by Eisai

### 12:40-13:30 SS6 5F, 502

#### Sponsored Seminar 6

**Chair(s)** I. Date (Japan)

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| 12:40-13:30 | SS6-1   | 5F, 502 | Mechanism and management of stroke-associated comorbidities, dementia and epilepsy

**M. Ihara** (Japan)

Sponsored by Otsuka Pharmaceutical Co., Ltd.

### 13:30-15:00 SY10 5F, 503

#### Blood-Brain Barrier Repair in CNS Disease:

**New Mechanistic Insights, Novel Therapeutic Strategies**

**Chair(s)** B. Bauer (United States)

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| 13:30-13:45 | SY10-1 | 5F, 503 | The holey holy barrier: blood-brain barrier dysfunction in epilepsy, TBI, stroke, and Alzheimer’s disease

**B. Bauer** (United States)

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| 13:45-14:10 | SY10-2 | 5F, 503 | Nitric oxide synthase is a potential target for treating the neurological sequelae of repetitive blast injury

**A.F. Logsdon** (United States)

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| 14:10-14:35 | SY10-3 | 5F, 503 | Two PDGF receptors in CNS differentially regulate BBB function in stroke and glioma

**M. Sasahara** (Japan)
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<th>Time</th>
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<tr>
<td>14:35-15:00</td>
<td>SY10-4</td>
<td>Restoring cerebral perivascular environment to attenuate amyloid deposition in Alzheimer’s disease and cerebral amyloid angiopathy</td>
<td>A. Urayama (United States)</td>
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<td>13:30-15:00</td>
<td>BS11</td>
<td>Novel Preclinical Imaging Applications</td>
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<td>13:30-13:45</td>
<td>BS11-1</td>
<td>Mesoscopic and microscopic imaging of sensory responses in the same animal</td>
<td>D. Boido, R.L. Rungta, B.F. Osmanski, M. Roche, T. Tsurugizawa, D. Le Bihan, L. Ciobanu, S. Charpak (France)</td>
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<tr>
<td>13:45-14:00</td>
<td>BS11-2</td>
<td>Significantly reduced <em>in vivo</em> transmembrane sodium gradient in cancer</td>
<td>M.H. Khan, J.J. Walsh, D. Coman, S.K. Mishra, F. Hyder (United States)</td>
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<tr>
<td>14:00-14:15</td>
<td>BS11-3</td>
<td>Brain tissue oxygenation is modulated by voluntary exercise in AD awake mice</td>
<td>X. Lu, M. Moeini, B. Li, O. de Montgolfier, Y. Lu, E. Thorin, F. Lesage (Canada, Islamic Republic of Iran, United States)</td>
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<tr>
<td>14:15-14:30</td>
<td>BS11-4</td>
<td>Simultaneous fMRI and fast-scan cyclic voltammetry: in vitro dopamine sensing and in vivo oxygen detection at multiple spatial scales</td>
<td>L. Walton, M. Verber, R.M. Wightman, YY. Shih (United States)</td>
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<td>14:30-14:45</td>
<td>BS11-5</td>
<td>Visualising the pulsing brain; a feasibility study combining MRI with transcranial tissue doppler (TCTD) ultrasound measurements</td>
<td>M.E. Alharbi, C. Banahan, J. Ince, J. Minhas, S. George, M. Oura, M. Horsfield, K. Ramnarine, E. Chung, M. Mark (United Kingdom, Japan, United States)</td>
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13:30-15:00  BS12  5F, 502

Neuroinflammation

Chair(s)  Y. Tang (China)
Y. Gao (China)

13:30-13:45  BS12-1  Paracrine IL-6 as a driving force of post-stroke regeneration
M.T.C. Kuffner, C.J. Hoffmann, J. Lips, M. Kirchner, S.P. Koch, M. Foddis, S. Müller, M. Endres, U. Dirnagl, C. Harms (Germany)

13:45-14:00  BS12-2  M2 microglial derived exosome improves functional recovery via reducing glial scar formation after ischemic stroke in mice
Z. Li, Y. Song, T. He, W. Li, R. Wen, Y. Tang, G.Y. Yang, Z. Zhang (China)

14:00-14:15  BS12-3  Microglia-leukocyte crosstalk during neurotropic viral infection in the brain
R. Fekete, T. Szlepák, V. Szirt, D. Levard, M. Rubio, E. Pinteaux, Á. Dénes (Hungary, France, United Kingdom)

14:15-14:30  BS12-4  Neuroinflammation-induced lymphangiogenesis near the cribriform plate contributes to drainage of CNS-derived antigens and immune cells
M. Hsu (United States)

14:30-14:45  BS12-5  Cannabinoid receptor 2 agonists protected blood barrier, decreased neuroinflammation and altered immune responses in HIV infection in humanized mouse model and model of encephalitis

14:45-15:00  BS12-6  Investigating neuroinflammation in small vessel disease with [11C]PBR28 PET imaging and post-mortem tissue validation
**Brain and Immunity in Health and Disease**

Chair(s): Z. Fabry (United States)

16:00-16:30 SY11-1 Neutrophils and neuroinflammation  
**E.T. Benveniste** (United States)

16:30-17:00 SY11-2 Gut and brain axis (Microbiome, stroke immunity)  
**C. Iadecola** (United States)

17:00-17:30 SY11-3 Immune effects on neuronal function  
**M. Schwartz** (Israel)

**Neuroprotection revisited- novel mechanisms and applications**

Chair(s): K. Abe (Japan)  
K.C. Morris-Blanco (United States)

16:00-16:15 BS13-1 Gut dysbiosis promotes lipopolysaccharide-induced neuroinflammation after stroke  
**N. Kurita**, K. Yamashiro, R. Tanaka, Y. Ueno, N. Miyamoto, S. Nakajima, T. Urabe, Y. Yamashiro, N. Hattori (Japan)

16:15-16:30 BS13-2 DNA hydroxymethylation protects the brain after stroke via global regulation of neuroprotective genes  
**K.C. Morris-Blanco**, T. Kim, M.S. Lopez, B. Chelluboina, M. Bertogliat, R. Vemuganti (United States)

16:30-16:45 BS13-3 Neuroprotective effects of microglia via P2Y, receptors against ischemic neuronal injury  
**Y. Fukuimoto**, S. Koizumi, H. Yoshioka, T. Yagi, K. Kanemaru, H. Kinouchi (Japan)

16:45-17:00 BS13-4 Repurpose of exendin-4 for the treatment of preterm neonatal brain injury  
**E. Rocha Ferreira**, A. Jonsdotter, M. Jinnai, L. Poupon, AL. Leverin, Y. Carlsson, A.A. Rahim, H. Hagberg (Sweden, United Kingdom)
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17:00-17:15 BS13-5 Neuroprotection with polynitroxylated PEGylated hemoglobin as a macromolecular superoxide dismutase/catalase mimetic drug for resuscitation after traumatic brain injury combined with hemorrhage shock
S. Seno, J. Wang, S. Cao, M. Saraswati, J. Simoni, L. Ma, B. Solty, C.J.C. Hsia, C.L. Robertson, R.C. Koehler (United States, Japan)

17:15-17:30 BS13-6 Blocking pro-inflammatory platelet-activating factor-receptors and activating cell-survival pathways: a novel therapeutic strategy in experimental ischemic stroke
L. Belayev, L. Khoutorova, A. Obenaus, N.A. Petasis, N.G. Bazan (United States)

16:00-17:30 BS14 5F, 502
Cerebral Ischemia: Reperfusion

Chair(s) M. Yenari (United States)
L. Schmitzer (Germany)

16:00-16:15 BS14-1 Using contrast-enhanced ultrasound to measure blood flow kinetics in the ischaemic brain
B.A. Sutherland, D. Premilovac, C.J. Ramsay, M.A. Keske, D.W. Howells (Australia)

16:15-16:30 BS14-2 Reversible mitochondrial stabilisation with mitochondrial-targeted S-nitrosothiol (MitoSNO) acutely at reperfusion as a possible neuroprotective therapy in transient ischaemic stroke
T.M. Hietamies, A. Logan, R.C. Hartley, C. McCabe, T.J. Quinn, J.D. McClure, M.P. Murphy, L.M. Work (United Kingdom)

16:30-16:45 BS14-3 Phosphorylation of heat shock protein 27 leads to activation of pentose phosphate pathway and protection from cerebral ischemia-reperfusion injury

16:45-17:00 BS14-4 Watershed areas in patients with asymptomatic unilateral internal carotid-artery stenosis: stable spatial extent after revascularization therapy
L. Schmitzer, S. Kaczmarz, N. Sollmann, C. Zimmer, C. Preibisch, J. Goettler (Germany, United States)
17:00-17:15  BS14-5  Towards in silico experiments on ischaemic stroke in humans
T.I. Józsa, S.J. Payne (United Kingdom)

17:15-17:30  BS14-6  The predictive value of THRIVE score for outcomes of patients
with acute basilar artery occlusion treated by thrombectomy
B. Chen, L. Yang, H. Yu (China)