**Society for Image-Guided Neurointerventions (SIGN)**

**Scientific Program**

**Day 1, June 25, 2018**

**10:50 – 11:00** Welcome Address

**Jerzy Walecki** (Chair of Radiology Department and Medical Physics Committee, Polish Academy of Sciences, Warsaw, Poland)

**Session I**

**CURRENT STATUS AND APPLICATIONS OF IMAGE-GUIDED NEUROINTERVENTION IN LABORATORY AND CLICNIAL PRACTICE**

Chair: **Jerzy Walecki, Barbara Lukomska**

**11:00 – 11:20 Miroslaw Janowski** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*) – How it started: A Challenge of Stem Cell Delivery to the Brain

**11:20 – 11:40 Monica Pearl** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*) – Precise and Predictable Blood Brain Barrier Opening in Large Animal Models

**11:40 – 12:00 Piotr Walczak** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*)– Ultra-fast MRI using undersampled FLASH sequence to visualize the process of BBB opening in a canine model

**12:00 – 12:20 Michal Zawadzki** (*Central Clinical Hospital of Ministry of the Interior and Administration in Warsaw, Poland*) – First-in-human Real-Time MRI-Guided Intra-Arterial Neurointervention

**12:20 – 12:50** Coffee break

**Session II**

**ADDRESSING THE NEEDS OF MRI NEUROINTERVENTIONS**

Chair: **Wojciech Maksymowicz, Monica Pearl**

**12:50 – 13:10 Qin Qin** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*) – Magnetic Resonance Angiography as a Roadmap for Intra-Arterial NeuroInterventions

**13:10 – 13:30 Parag Karmarkar** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*) – A Landscape of MRI-compatible Catheters

**13:30 – 13:50 Rafi De Picciotto** (*Insightec*) – Focused ultrasound for MRI-guided blood brain barrier disruption

**13:50 – 14:10** Industry Silver Sponsor presentation (Philips Healthcare)

**14:10 – 15:00** Lunch break

**Session III**

**PERSPECTIVE FOR GROWTH AND FUTURE APLICATIONS**

Chair: **Tim Magnus, Maciej Szajner**

**15:00 – 15:20**  **Sean Savitz** *(University of Texas Health Sciences Center Houston, USA)* Intraarterial Cell Therapies in Stroke

**15:20 – 15:40 Vincent Costalat** *(Montpellier University Hospital, Montpellier, France) -* Selective destruction of brain parenchyma : the next Step for neurointervention

**15:40 – 16:00** Industry Bronze Sponsor presentation (Siemens Healthcare)

**16:00 – 18:00** Tour of the City

**19:00 – 22:00** Dinner

**Day 2, June 26, 2018**

 **9:00 – 9:20** Welcome Address

**Zdzislaw Gajewski** (Director, Warsaw University of Life Sciences, Poland)

**Session I**

**TECHNOLOGIES AND TOOLS AIDING NEUROINTERVENTION**

Chair: **Vincent Costalat, Piotr Walczak**

**9:20 – 9:40 Tim Magnus** *(University Medical Center Hamburg-Eppendorf, Germany)*-Neuroinflammation as a Therapeutic Target in Stroke

**9:40 – 10:00 Wojciech Lesniak** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*) – Positron emission tomography (PET) of intra-arterial delivery of radiolabeled drug

**10:00 – 10:20 Amnon Bar-Shir** (*Weizman Institute of Science, Rehovot, Israel*)– Molecular MRI and opportunities for NeuroInterventions

**10:20 – 10:40 Wieslaw Nowinski *(****University of Cardinal Stefan Wyszynski in Warsaw, Poland)*– Modeling of vasculature in interventional radiology simulation

**10:40 – 11:00 Rafael Guzman** *(University Hospital Basel, University of Basel, Switzerland)* **–** Expanding the window for mechanical thrombectomy

**11:00 – 11:20** Industry Gold Sponsor Presentation (GE Healthcare)

**11:20 – 11:50** Coffee break

**Experimental session: Modeling Stroke in Large Animal**

**11:50 – 12:10 Dominika Golubczyk** *(University of Warmia and Mazury, Olsztyn, Poland)* **–** Endovascular model of stroke in swine

**12:10 – 14:00 Induction of endovascular MRI-guided stroke model in pig**

**13:00 – 14:00** Lunch break

**Session II**

**PRECLINICAL STUDIES: APPLICATIONS**

Chair: **Michal Zawadzki, Miroslaw Janowski,**

**14:00 – 14:20 Peter Ludewig** *(University Medical Center Hamburg-Eppendorf, Germany)*–Diagnostic and Interventional Use of MPI for Stroke

**14:20 – 14:40 Izabela Malysz-Cymborska** *(University of Warmia and Mazury, Olsztyn, Poland)* **–** Intra-arterial delivery of glial progenitors in dogs suffering from degenerative myelopathy

**14:40 – 15:00 Chengyan Chu** (*The Johns Hopkins University School of Medicine, Baltimore, MD, USA*)– High-throughput Small Animal Platform for MRI-guided BBB opening

**15:00 – 15:20 Lukasz Kalkowski** *(University of Warmia and Mazury, Olsztyn, Poland)* – MRI-Guided Convection-enhanced delivery to the brain

**15:20 – 15:40 Miguel Oliveira** (*University of Minho, Guimaraes, Portugal*) – Biomaterials for image-guided drug delivery

**15:40** Conference wrap-up (Janowski, Pearl, Walczak, Zawadzki)