MEDICAL UNIVERSITY OF VIENNA

Agenda for the MIC Festival 2020

Date: 10-DEC-2020 | 12.00 – 16:00 | www.meduniwien.ac.at/micfestival

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The Poster-Sessions start simultaneously at 14:00

Development of Imaging Probes and Preclinical Imaging (Chair: Markus Mitterhauser)

- 14:05-14:10: Cecile Philippe
  ED-B Fibronectin as a potential marker for tumour microenvironment and fibrosis
- 14:10-14:15: Karsten Bamminger
  Development of small molecule PET-tracers targeting PD-L1
- 14:15-14:20: Jonas Aronow
  Design, computational evaluation and synthesis of 4,4'-difluorobenzhydrol carbamates as potential imaging agents for muscarinic acetylcholine receptors.
- 14:25-14:30: Marius Ozenil
  Hydrobenzoin esters of arecaidine as potential PET tracers for muscarinic acetylcholine receptors: synthesis, characterization and docking experiments.
- 14:30-14:35: Irena Pashkunova-Martic
  Polymer-based colloidal nanoparticles as contrast agents for Magnetic Resonance Imaging (MRI) with the potential of drug delivery systems
- 14:35-14:40: Irene Hernández Lozano
  Measurement of P-glycoprotein activity at the lung epithelial barrier using positron emission tomography
- 14:40-14:45: Kornelia Schuetzenberger
  Optical Coherence Tomography and High-frequency Ultrasound for Skin Imaging-Multimodal Imaging on the Rise

Quantitative Clinical Imaging (Chair: Andreas Hahn)

- 14:05-14:10: Arkadiusz Komorowski
  TCF4 and MEF2C regulate gene expression patterns of genes associated with depressive disorders and reward processing
- 14:10-14:15: Matej Murgaš
  Topological Comparison of Receptor Densities and mRNA Expression in the Cerebral Cortex

- 14:15-14:20: Peter Stöhrmann
  Surface-based Smoothing of Brain Imaging Data in Voxel Space
- 14:25-14:30: Gregor O Dovjak
  Superresolution MRI based brainstem visualization in vivo and in utero
- 14:30-14:35: Victoria Caic
  A potential second feedback loop in fMRI neurofeedback with emotional feedback
- 14:35-14:40: Murray B Reed
  Neuroplastic effects of SSRIs evaluated with learning tasks and fMRI
- 14:40-14:45: Leo R Silberbauer
  Imaging the pharmacological effect of acute ketamine challenge using resting-state fMRI co-activation patterns and gene expression data

Microscopy and Advanced Optical Imaging (Chair: Stefan Geyer)

- 14:05-14:10: Fabian Placzek
  Multimodal morpho-molecular early stage bladder cancer assessment using endoscopic optical coherence tomography and Raman spectroscopy
- 14:10-14:15: Andreas Berg
  Phantoms for the Quantification of spatial Resolution in multimodal Microscopy, Magnetic Resonance and Optical Coherence Tomography (OCT)
- 14:15-14:20: Dmitrii Lachinov
  Weakly Supervised Segmentation of Geographic Atrophy on SD-OCT scans
- 14:25-14:30: Florian Katsch
  Analysis of image classification, object detection and instance segmentation in terms of robustness to artefacts in pigmented skin lesion classification
- 14:30-14:35: Martin Pfister
  Deep Learning Classification of Diabetes in Mice using Optical Coherence Tomography Angiography Images of the Pinna
- 14:35-14:40: Johanna Gesperger
  Investigation of tissue samples from brain tumor surgery using a combined optical coherence microscopy and florescence imaging setup
- 14:40-14:45: Elisabet A. Rank
  OCT on a Chip: In vivo three-dimensional Swept Source and Spectral Domain Optical Coherence Tomography and angiography using Photonic Integrated Circuits

Image Computing, Analysis and Visualisation (Chair: Georg Langs)

- 14:05-14:10: Bianca Burger
  Disentangling cortical function and its spatial topography reveals divergent roles of genes and learning

- 14:10-14:15: Philipp Aichinger
  Fitting synthetic to clinical kymographic images for deriving kinematic vocal fold parameters: Application to left-right vibratory phase differences
- 14:15-14:20: Vinod Devaraj
  Synthesis and Classification of Amplitude Modulated Vocal Fry GAWs
- 14:25-14:30: Matthias Perkonigg
  Dynamic memory to alleviate catastrophic forgetting in continuous learning settings
- 14:30-14:35: Denis Krajnc
  Identification of aggressive breast cancer lesions with [18F]-FDG-PET/CT in combination with machine learning and data pre-processing
- 14:35-14:40: Clemens P Spielvogel
  Predictive modelling for prognostic stratification of head and neck cancer patients using multi-omics data
- 14:40-14:45: Athena Taymourtash
  Voxel-wise Nuisance Regression for Suppressing the Residual Motionin Resting state in-utero fMRI

Image Guided Therapy and Theranostics (Chair: Peter Kuess)

- 14:00-14:05: Lena Nohava
  Flexible multi-turn multi-gap coaxial RF coils (MTMG-CCs) for 3 and 7 Tesla MRI
- 14:05-14:10: Michael Obermann
  Optimization and miniaturization of Rx-only coaxial coil interfacing
- 14:10-14:15: Rene Werkmeister
  Anatomy and physiology of the anterior eye segment
- 14:15-14:20: Hannes Stegmann
  Automatic segmentation and parameter estimation of the lower tear meniscus
- 14:25-14:30: Stefan Ecker
  Evaluating CNNs for image upsampling of anisotropic MRIs in radiation oncology
- 14:30-14:35: Ingo Gulyas
  Influence of bone suppression on accuracy and robustness of tumor motion monitoring using intensity-based 2D/3D registration
- 14:35-14:40: Philipp Lazen
  Creating an RF Pulse Simulation Model for Whole Brain MRSI at 7 T
- 14:40-14:45: Benjamin Bancher
  Improved Mask R-CNN for nuclei segmentation in histologic images