SSBE 2023 Annual Meeting

Department of Biomedical Engineering, University of Basel, Hegenheimermattweg 167 B, Allschwil, BL

September 13, 2023

9:15 Welcome coffee, registration, placing posters

9:45 **Welcome address** by SSBE president **Philippe Büchler**

9:50 **Keynote, chaired by Bert Müller**

Philipp Schneider, Bioengineering Science Research Group, University of Southampton, Southampton, UK; High-Performance Vision Systems, AIT Austrian Institute of Technology, Vienna, Austria: **Quantitative three-dimensional X-ray imaging**

10:35 **Oral presentations - Imaging and image analysis, chaired by Daniel Baumgartner**

Pezhman Eghbali, Ecole Polytechnique Fédérale de Lausanne: **Preoperative glenoid bone mineral density effect on postoperative glenoid component loosening**

Mattia Humbel, University of Basel: **A virtual slice through the entire human brain with micrometer resolution**

Paulo Sampaio, University of Bern: **Müller matrix polarimetry for pancreatic tissue characterization**

11:20 Refreshments and light lunch at posters

13:00 **Generally assembly**

13:30 **Oral presentations – General topics in biomedical engineering, chaired by Erik Schkommodau**

Silje E. Jahren, University of Bern: **In vivo validation of a novel soft aortic counter pulsation device based on dielectric elastomer actuators**

Tobias Ruff, ETH Zurich: **A living biohybrid neural interface for synaptic deep brain stimulation of the visual thalamus**

Barbara Postolka, KU Leuven: **A combined in vivo and in silico approach to estimate articular hindfoot mechanics**

14:15 **Short-listed finalist presentations for Student Award, chaired by Philippe Büchler**

Michael Chan, Ecole Polytechnique Fédérale de Lausanne: **Reorganization of brain functional gradients during film watching**

Jonathan Muheim, Ecole Polytechnique Fédérale de Lausanne: **The MiniTouch: a system to restore real-time thermal sensation for arm amputee individuals**

14:45 Refreshments at posters

15:30 **Keynote, chaired by Christine Tanner**

Judith Müller, Executive Director, Head of AI and Genomics at Merck & Co, USA: **Boosting real-world data for clinical development employing artificial intelligence and machine learning**

16:15 **Short-listed finalist presentations for Research Award, chaired by George Kouvas**

Julia Wolleb, University of Basel: **Automatic detection of pathological regions in medical images**

Philipp Aebischer, University of Bern: **SMART insertions for cochlear implant electrode arrays**

16:45 **Closing remarks** by host **Bert Müller**

17:00 **Coming together** with local fresh lemonade & beer, pretzels & pizza at https://www.kitchenbrew.ch/