

# "Recent Advances in Computational Pathology and Microscopy" Special Session at MIUA 2024, Thursday 25th July, 09:00-10:30

Sponsored by Histofy Ltd.

## Programme

Chairs: Adam Shephard and Simon Graham

<b>Start</b>	<b>End</b>	<b>Type</b>	<b>Speaker</b>	<b>Title</b>
09:00	09:03	Introduction	Adam Shephard	Welcome and Introduction to Special Session
<b>Classification</b>				
09:03	09:18	Oral 1	Simon Graham	Streamlining Colon Biopsy Screening with Interpretable Machine Learning
09:18	09:21	Power Pitch 1	Craig Myles	Leveraging Foundation Models for Enhanced Detection of Colorectal Cancer Biomarkers in Small Datasets
09:21	09:24	Power Pitch 2	John Charlton	Whole Slide Image Classification of Salivary Gland Tumours
09:24	09:27	Power Pitch 3	Arwa AlRubaian	Self-Supervised Pre-Training Improves the Prediction of Gene Mutations and Tumor mutational burden in Lung Adenocarcinoma
<b>Segmentation</b>				
09:27	09:42	Oral 2	Dmitrii Kaplun	GRU-Net: Gaussian attention aided dense skip connection based multiResU-Net for Breast Histopathology Image Segmentation
09:42	09:45	Power Pitch 4	Wei-Ta Chu	Unsupervised Anomaly Detection on Histopathology Images Using Adversarial Learning and Simulated Anomaly
09:45	09:48	Power Pitch 5	Srijay Deshpande	SPADESegResNet: Harnessing Spatially-adaptive Normalization for Breast Cancer Semantic Segmentation
<b>Cellular Segmentation</b>				
09:48	10:03	Oral 3	Nabeel Khalid	Bounding Box is all you need: Learning to Segment Cells in 2D Microscopic Images via Box Annotations
10:03	10:06	Power Pitch 6	Nabeel Khalid	CellGenie: An end-to-end Pipeline for Synthetic Cellular Data Generation and Segmentation: A Use Case for Cell Segmentation in Microscopic Images
10:06	10:09	Power Pitch 7	Fabian Schmeiss	A Line Is All You Need: Weak Supervision For 2.5D Cell Segmentation
<b>Registration and Detection</b>				
10:09	10:24	Oral 4	Ruixiong Wang	RoTIR: Rotation-Equivariant Network and Transformers for Zebrafish Scale Image Registration
10:24	10:27	Power Pitch 8	Adith Jeyasagar	Nuclei-Location Based Point Set Registration of Multi-Stained Whole Slide Images
10:27	10:30	Power Pitch 9	Zhao Chen	A Histology-Informed Network for White Blood Cell Recognition at Subpixel Level