ASMUS 2021 – Full Program

TIME (UTC)	SESSION	SPEAKER(S)	CHAIR(S)
09:00 – 09:15	Opening Remarks & Introductions	Alison Noble	
09:15 – 09:50	Keynote		Stephen Aylward
	"MONAI & Nvidia AGX powered speed of light research prototyping and product development"	Prerna Dogra	
09:50 – 10:50	Presentation 1		Andy King Bernhard Kainz
	"An Efficient Tracker for Thyroid Nodule Detection and Tracking during Ultrasound Scanning"	Ting Liu	
	"Towards Scale and Position Invariant Task Classification using Normalised Visual Scanpaths in Clinical Fetal Ultrasound"	Clare Teng	
	"Adaptable image quality assessment using meta-reinforcement learning of task amenability"	Shaheer Saeed	
	"Endoscopic ultrasound image synthesis using a cycle-consistent adversarial network"	Alex Grimwood	
	"Realistic Ultrasound Image Synthesis for Improved Classification of Liver Disease"	Ilker Hacihaliloglu	
	"TransBridge: A lightweight transformer for left ventricle segmentation in echocardiography"	Kaizhong Deng	
	"Contrastive Learning for View Classification of Echocardiograms"	Agisilaos Chartsias	
10:50 – 11:00	Break		
11:00 – 11:35	Keynote		Wolfgang Wein
	"Towards clinical applications of artificial intelligence in ultrasound imaging"	Ali Kamen	

11:35 – 12:05	Demonstration 1		Zachary Baum Ana Namburete
	"3D localization of 2D freehand fetal brain ultrasound images"	Hugo Yeung	
	"AutoDVT – Automatic detection of deep vein thrombosis"	Fouad Al-Noor	
	"ITKPOCUS – Getting POCUS data into your AI"	Brad Moore	
12:05 – 12:15	Break		
12:15 – 13:15	Presentation 2		Alex Grimwood Thomas van den Heuvel
	"Automatic tomographic ultrasound imaging sequence extraction of the anal sphincter"	Helena Williams	
	"Pruning MobileNetV2 for Efficient Implementation of Minimum Variance Beamforming"	Sobhan Goudarzi	
	"Efficient Echocardiogram View Classification with Sampling-Free Uncertainty Estimation"	Ang Nan Gu	
	"Adversarial Affine Registration for Real-time Intraoperative Registration of 3-D US-US for Brain Shift Correction"	Marek Wodzinski	
	"Application potential of robot-guided ultrasound during CT-guided interventions"	Josefine Schreiter	
	"Pose Estimation of 2D Ultrasound Probe from Ultrasound Image Sequences Using CNN and RNN"	Kanta Miura	
	"Development and evaluation of intraoperative ultrasound segmentation with negative image frames and multiple observer labels"	Liam Chalcroft	
13:15 – 14:00	Break		
14:00 – 14:15	Q&A – Prerna Dogra	Prerna Dogra	Parvin Mousavi
14:15 – 14:50	Keynote		Parvin Mousavi
	"Ultrasound image formation in the deep learning age"	Muyinatu Bell	
14:50 – 15:20	Demonstration 2		Zachary Baum Ekaterina Zilonova
	"Real-time segmentation of breast tumors to improve surgical navigation"	Tamas Ungi	

	"ADAPTS (Artificial intelligence Diagnostic And Prognostic Tools for Sonography) for real-time ultrasound assessment and COVID-19 diagnosis"	Zachary Baum	
15:20 – 16:20	Presentation 3		Zhe Min Emad Boctor
	"Deep Video Networks for Automatic Assessment of Aortic Stenosis in Echocardiography"	Tom Ginsberg	
	"Automatic ultrasound vessel segmentation with deep spatiotemporal context learning"	Baichuan Jiang	
	"Evaluation of low-cost hardware alternatives for 3D freehand ultrasound reconstruction in image-guided neurosurgery"	Étienne Léger	
	"Imaging Biomarker Knowledge Transfer for Attention-based Diagnosis of COVID-19 in Lung Ultrasound Videos"	Tyler Lum	
	"Lung Ultrasound Segmentation and Adaptation between COVID-19 and Community-Acquired Pneumonia"	Zachary Baum	
	"Automatic fetal gestational age estimation from first trimester scans"	Sevim Cengiz	
	"Multimodal continual learning with sonographer eye-tracking in fetal ultrasound"	Arijit Patra	
	"Robust ultrasound-to-ultrasound registration for intra-operative brain shift correction with a Siamese neural network"	Amir Pirhadi	
16:20 – 16:30	Break		
16:30 – 17:00	Closing Remarks & Prizes	Stephen Aylward	