

IEEE International Symposium on Biomedical Imaging

#ISBI19



April 8-11, 2019 Hilton Molino Stucky, Venice Italy



IEEE Signal Processing Society

Monday April 8, 2019								
08:00 - 18:00	Registration (Foyer)							
9:00 - 10:30	<p>Clinical Day – Part I (Keynote Speakers: Dr. Suma Babu, Dr. Marcella Bellani) (Venetian Ballroom C)</p>	<p>Challenge: PALM: Pathological Myopia Detection from Retinal Images - Part I (Venetian Ballroom A)</p>	<p>Tutorial: Recent Advances in Acquisition and Reconstruction for Compressed Sensing MRI - Part I (Vivaldi+ Goldoni)</p>	<p>Challenge: Time-Lapse Cell Segmentation Benchmark - Part I (Venetian Ballroom B)</p>	<p>Tutorial: Geodesic Methods in Biomedical Image Analysis - Part I (Pisani + Bellini)</p>	<p>Challenge: Multi-Class Artefact Detection in Video Endoscopy - Part I (Venetian Ballroom D)</p>	<p>Tutorial: Optimal Transport for Machine Learning - Part I (Casanova)</p>	<p>Challenge: SegTHOR: Segmentation of Thoracic Organs at Risk in CT Images - Part I (Venetian Ballroom E)</p>
10:30 - 11:00	Coffee Break (Foyer)							
11:00 - 12:15	<p>Clinical Day – Part II (Keynote Speakers: Dr. Elisabeth Wilde, Dr. Alessandro Padovani) (Venetian Ballroom C)</p>	<p>Challenge: PALM: Pathological Myopia Detection from Retinal Images - Part II (Venetian Ballroom A)</p>	<p>Tutorial: Recent Advances in Acquisition and Reconstruction for Compressed Sensing MRI - Part II (Vivaldi+ Goldoni)</p>	<p>Challenge: Time-Lapse Cell Segmentation Benchmark - Part II (Venetian Ballroom B)</p>	<p>Tutorial: Geodesic Methods in Biomedical Image Analysis - Part II (Pisani + Bellini)</p>	<p>Challenge: Multi-Class Artefact Detection in Video Endoscopy - Part II (Venetian Ballroom D)</p>	<p>Tutorial: Optimal Transport for Machine Learning - Part II (Casanova)</p>	<p>Challenge: SegTHOR: Segmentation of Thoracic Organs at Risk in CT Images - Part II (Venetian Ballroom E)</p>
12:15 - 13:45	Lunch (On Your Own)							
13:45 - 14:00	<p>Opening Remarks (Venetian Ballroom)</p>							
14:00 - 15:00	<p>Plenary 1: Dr. Andres M. Lozano - Advances in Functional Neurosurgery (Venetian Ballroom)</p>							
15:00 - 16:00	<p>Poster Session 1 (Foyer)</p> <p>Brain Connectivity Analysis Image Segmentation I Microscopy Segmentation and Classification Endoscopy Image Analysis Neuroimaging I (Abstracts) Cardiac, Chest and Abdominal Image Analysis I (Abstracts)</p>							
16:00 - 16:30	Coffee Break (Foyer)							

16:30 – 18:00	<u>Clinical Day – Part III</u> 16:30 – 17:30 Panel Discussion: How can imaging technologies and medical image analysis help deliver better care to patients in neurology, psychiatry, and neurosurgery?	Special Session: Is Imaging Genetics the Frontier for Precision Medicine? (Venetian Ballroom A)	Oral Session: Lung Disease Detection and Classification (Venetian Ballroom B)	Oral Session: Computational Methods in Microscopy (Venetian Ballroom D)	Oral Session: Image Segmentation (Venetian Ballroom E)
	17:30 – 18:00 Dr. Behrouz Shabestari - Preparing Successful and Competitive NIH Grant Applications (Venetian Ballroom C)				
18:00 – 20:00	<u>Welcome Reception</u> (Stucky Garden & Arromi Terrace)				

Tuesday April 9, 2019					
08:00 -18:00	Registration (Foyer)				
09:00-10:00	<u>Plenary 2 – Prof. Satyajit Mayor - Photonics in Pursuit of the Structure, Dynamics and Organization of the Living Cell Membrane</u> (Venetian Ballroom)				
10:00-10:30	Coffee Break (Foyer)				
10:30-11:30	Poster Session 2 (Foyer) Brain Structure Learning – Poster Image segmentation II Microscopy Imaging Retinal imaging Bioimaging I (Abstracts) Interventional Imaging (Abstracts) Image Segmentation I (Abstracts)				
11:30-13:00	Special Session: <u>PET Imaging in the Era of Multi-Modality and Big Data</u> (Venetian Ballroom C)	Oral Session: Cardiac Image Analysis (Venetian Ballroom A)	Oral Session: Microscopy Image Analysis (Venetian Ballroom B)	Oral Session: Feature Detection and Image Segmentation (Venetian Ballroom DE)	
13:00-14:30	Lunch (On Your Own) / Lunch with leaders (Bellini+Pisan+Vivaldi+Goldoni)				
14:30-15:30	<u>Plenary 3 - Dr. Jeanette Schulz-Menger - Acquisition and Processing of Cardiovascular MR Images in Clinical Research and Clinical Practice</u> (Venetian Ballroom)				

15:30-16:30	<p>Poster Session 3 (Foyer)</p> <p>Brain Segmentation and Characterization – Poster Cardiac and Vascular Image Analysis Computer-aided detection and diagnosis (CAD) Histological Image Analysis – Poster Reconstruction and Image Quality I (Abstracts) Cardiac, Chest and Abdominal Image Analysis II (Abstracts) Ultrasound (Abstracts)</p>			
16:30-17:00	Coffee Break (Foyer)			
17:00-18:30	<p>Special Session:</p> <p>Geometry-Based Methods in Biomedical Image Analysis: Junior Researchers</p> <p>(Venetian Ballroom C)</p>	<p>Oral Session:</p> <p>Fetal and Pediatric Image Analysis</p> <p>(Venetian Ballroom A)</p>	<p>Oral Session:</p> <p>Cell Image Segmentation</p> <p>(Venetian Ballroom B)</p>	<p>Oral Session:</p> <p>Longitudinal Brain Analysis</p> <p>(Venetian Ballroom DE)</p>
20:00 – 22:30	<p>Optional Offsite Dinner (with Jam Session)</p> <p>(Laguna Libre)</p>			

Wednesday April 10, 2019				
08:00 -18:00	Registration (Foyer)			
09:00 – 10:00	<p>Plenary 4 - Prof. Monique M.B. Breteler - Challenges and Opportunities in Population Imaging in the Context of Ageing and Development of Neurodegenerative Diseases</p> <p>(Venetian Ballroom)</p>			
10:00 – 10:30	Coffee Break (Foyer)			
10:30 – 11:30	<p>Poster Session 4 (Foyer)</p> <p>Breast Image Analysis Image synthesis Image based surgery and treatment Musculoskeletal Image Analysis Lung Image Analysis – Poster Pattern Recognition and Classification – Poster Cancer Imaging and Analysis Reconstruction and Image Quality II (Abstracts) Bioimaging II (Abstracts) Optical Image Analysis (Abstracts)</p>			
11:30 – 13:00	<p>Special Session:</p> <p>Pediatric Brain Imaging</p> <p>(Venetian Ballroom A)</p>	<p>Oral Session:</p> <p>Lung Image Analysis</p> <p>(Venetian Ballroom B)</p>	<p>Oral Session:</p> <p>Microscopy Reconstruction and Image Quality</p> <p>(Venetian Ballroom C)</p>	<p>Oral Session:</p> <p>Data Integration and Fusion</p> <p>(Venetian Ballroom DE)</p>
13:00 – 14:30	Lunch (On Your Own) / Lunch with leaders (Bellini+Pisan+Vivaldi+Goldoni)			
14:30-16:00	<p>Special Session:</p> <p>Global Health: Imaging in Developing Countries</p> <p>(Venetian Ballroom A)</p>	<p>Oral Session:</p> <p>Eye Image Analysis</p> <p>(Venetian Ballroom B)</p>	<p>Oral Session:</p> <p>Xray/ CT Imaging and Reconstruction</p> <p>(Venetian Ballroom C)</p>	<p>Oral Session:</p> <p>Connectivity Analysis - DWI/DTI</p> <p>(Venetian Ballroom DE)</p>
16:00 – 16:30	Coffee Break (Foyer)			

16:30 – 18:00	<p>Oral Session:</p> <p>Shape Modeling and Analysis</p> <p>(Venetian Ballroom A)</p>	<p>Oral Session:</p> <p>Segmentation and Tracking in Microscopy</p> <p>(Venetian Ballroom B)</p>	<p>Oral Session:</p> <p>MR Imaging and Reconstruction</p> <p>(Venetian Ballroom C)</p>	<p>Oral Session:</p> <p>Brain Structure Learning</p> <p>(Venetian Ballroom DE)</p>
19:30 – 21:00	<p>Cultural event (with concert)</p> <p>(SS Giovanni and Paolo Church)</p>			

Thursday April 11, 2019							
08:00 – 18:00	Registration (Foyer)						
09:00 – 10:00	<p>Plenary 5 - Dr. Stephan Saalfeld - Scalable Methods and Tools for Large 3D Light and Electron Microscopy</p> <p>(Venetian Ballroom)</p>						
10:00 – 10:30	<p>Award Ceremony/Closing remarks/ISBI 2020</p> <p>(Venetian Ballroom)</p>						
10:30 – 11:00	Coffee Break (Foyer)						
11:00-12:00	<p>Poster Session 5 (Foyer)</p> <p>Functional Brain Analysis Image Reconstruction and Restoration Ultrasound Imaging and Analysis Dynamic and Functional Imaging Bioimaging III (Abstracts) Image Segmentation II (Abstracts) Neuroimaging II (Abstracts)</p>						
12:00 - 13:30	<p>Special Session:</p> <p>Spline Models in Biomedical Imaging</p> <p>(Venetian Ballroom C)</p>	<p>Oral Session:</p> <p>Histological Image Analysis</p> <p>(Venetian Ballroom A)</p>	<p>Oral Session:</p> <p>Brain Segmentation and Characterization</p> <p>(Venetian Ballroom B)</p>	<p>Oral Session:</p> <p>Pattern Recognition and Classification</p> <p>(Venetian Ballroom DE)</p>			
13:30 – 14:45	Lunch (On Your Own)						
14:45-16:00	<p>Challenge:</p> <p>Classification of Normal versus Malignant Cells in B-ALL White Blood Cancer Microscopic Images - Part I</p> <p>(Venetian Ballroom A)</p>	<p>Tutorial:</p> <p>Deep Learning for Biomedical Image Reconstruction - Part I</p> <p>(Venetian Ballroom C)</p>	<p>Challenge:</p> <p>Automatic Non-Rigid Histological Image Registration (ANHIR) - Part I</p> <p>(Venetian Ballroom B)</p>	<p>Tutorial:</p> <p>Breaking the Boundaries of Conventional Ultrasonography: Ultrasound Elastography and Photoacoustic Imaging for Characterization of Tissue Biomechanics, Function, and Molecular Compositions - Part I</p> <p>(Pisani+Bellini)</p>	<p>Challenge:</p> <p>MRI White Matter Reconstruction Challenge (MEMENTO) - Part I</p> <p>(Venetian Ballroom D)</p>	<p>Challenge:</p> <p>Automatic Cancer Detection and Classification in Whole-Slide Lung Histopathology (ACDC@LungHP) - Part I</p> <p>(Venetian Ballroom E)</p>	<p>Challenge:</p> <p>CHAOS : Combined (CT-MR) Healthy Abdominal Organ Segmentation - Part I</p> <p>(Casanova)</p>
16:00 – 16:30	Coffee Break (Foyer)						

16:30-18:00	<p>Challenge: Classification of Normal versus Malignant Cells in B-ALL White Blood Cancer Microscopic Images - Part II</p> <p>(Venetian Ballroom A)</p>	<p>Tutorial: Deep Learning for Biomedical Image Reconstruction - Part II</p> <p>(Venetian Ballroom C)</p>	<p>Challenge: Automatic Non-Rigid Histological Image Registration (ANHIR) - Part II</p> <p>(Venetian Ballroom B)</p>	<p>Tutorial: Breaking the Boundaries of Conventional Ultrasonography: Ultrasound Elastography and Photoacoustic Imaging for Characterization of Tissue Biomechanics, Function, and Molecular Compositions - Part II</p> <p>(Pisani+Bellini)</p>	<p>Challenge: MRI White Matter Reconstruction Challenge (MEMENTO) - Part II</p> <p>(Venetian Ballroom D)</p>	<p>Challenge: Automatic Cancer Detection and Classification in Whole-Slide Lung Histopathology (ACDC@LungHP) - Part II</p> <p>(Venetian Ballroom E)</p>	<p>Challenge: CHAOS : Combined (CT-MR) Healthy Abdominal Organ Segmentation - Part I</p> <p>(Casanova)</p>
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