Sunday, 04.11.2018

18:00 onwards	**Welcoming meeting**

Monday, 05.11.2018

09:00 – 09:15	**Opening ceremony**		Prof. Piotr Ładyżyński
09:15 – 10:15	**Inaugural lectures**		Marcial Garcia-Rojo, MD, PhD
	09:15 – 09:40	*Understanding deep convolutional networks*	Prof. Anna Korzyńska
	09:45 – 10:10	*Digital phase pathology: concepts and prospects*	Prof. Małgorzata Kujawińska
10:15 – 10:45	**Coffee break**		
10:45 – 13:15	**1st Session**	***Introduction to Artificial Intelligence***	Prof. Domenec Puig
	10:45 – 11:30	*Introduction to neural networks and deep learning*	Łukasz Roszkowiak, MSE
	11:35 – 12:20	*Integrating automatic image analysis and next generation sequencing data in breast cancer*	Marcial Garcia-Rojo, MD, PhD
	12:25 – 13:10	*Deep learning methods for lymphocyte detection*	Żaneta Świderska-Chadaj, PhD
13:15 – 13:30	**Presentation**		COMTEGRA
13:30 – 14:15	**Lunch**		
14:15 – 14:30	**Coffee break**		
14:30 – 16:00	**2nd Session**	***What does pathology need from Artificial Intelligence?***	Marylene Lejeune, PhD
	14:30 – 14:55	*Tissue pathology, mining deeper with imaging and analytics*	Prof. Arvydes Laurinavicius
	15:00 – 15:25	*What pathologists expect from digital pathology?*	Michał Pyzlak, PhD, MD, Jarosław Wejman, PhD, MD
	15:30 – 15:55	*Comparisons of computer-aided image analysis procedures: agreement, reliability and predictive potential of microenvironment immune markers in triple negative breast cancer*	Carlos Lopez, PhD
16:00 – 16:30	**Coffee break**		
16:30 – 18:00	**3rd Session**	***Short reports from investigations***	Prof. Włodzimierz Klonowski
	16:30 – 16:55	*Diagnostic and surgical dilemmas in cancer therapy*	Prof. Jacek Zieliński
	17:00 – 17:15	*Spectra of input-output Jacobians in deep residual networks*	Wojciech Tarnowski, MSC
	17:20 – 17:35	*Nuclei detection in breast cancer cytology based on stochastic geometry and convolutional neural network*	Prof. Marek Kowal
	17:40 – 17:55	*Evaluation of morphological analysis in grain quality screening*	Marek Krótkiewicz, PhD
18:15 onwards	**Getting together – dinner**		

Tuesday, 06.11.2018

09:30 – 11:30	**4th Session**	***Supporting diagnosis with Artificial Intelligence***	Prof. Arvydes Laurinavicius
		09:30 – 09:55	*Personalized breast cancer treatment by determining the molecular subtype and modelling of relapse through computer digital image processing*	Prof. Domenec Puig
		10:00 – 10:25	*The latest results in diagnosis based on nonlinear analysis of brain neurodynamics*	Prof. Włodzisław Duch
		10:30 – 10:55	*Deep learning in pathology: two experiments with different outcome*	Prof. Vincenzo Della Mea
		11:00 – 11:25	*Glomerulus classification and detection based on convolutional neural networks*	Prof. Gloria Bueno
11:30 – 12:00	**Coffee break**	**Poster session**	Jakub Żak, MSE
		The proliferation index estimation with MetPiKi and QuPath software in neurohistological samples	Krzysztof Siemion, MD
		Assessing the impact of the techniques of suturing subcutaneous tissue on the course of healing of surgical site in patients over the age of 60 treated for gastrointestinal cancers	Prof. Jacek Zieliński
12:00 – 13:30	**Discussion panel**	***How to facilitate a flow of ideas between pathology and AI groups?***	Joanna Kinasiewicz, PhD
		Prof. Domenec Puig	
		Prof. Włodzisław Duch	
		Prof. Arvydes Laurinavicius	
		Marcial Garcia-Rojo, MD, PhD	
		Jan Poleszczuk, PhD	
13:30 – 15:00	**Lunch**		
15:00 – 16:30	**5th Session**	***Short reports from investigations***	Prof. Włodzisław Duch
		15:00 – 15:25	*Simple methods of computer-aided analysis of histopathological images for tumor diagnosis*	Prof. Włodzimierz Klonowski
		15:30 – 15:45	*Digital pathology-informed in silico screening of combinatorial therapies in cancer*	Jan Poleszczuk, PhD
		15:50 – 16:05	*Digital Holographic Microscopy – benefits and difficulties from the machine learning perspective*	Piotr Stępień, MSE
		16:10 – 16:25	*A novel approach of finding human teeth in panoramic dental radiographs*	Jakub Żak, MSE
16:30 – 16:45	**Closing ceremony**		Prof. Dorota Pijanowska
18:00 onwards	**Social event – Concert Hall**		