

21.05.2018 (Tuesday)			
08:30-09:00	Registration		
Hall	Pirogov Hall, 2nd floor		
09:30-11:00	Plenary session		
09:00-09:30	An Overview on Austrian Cluster for Tissue Regeneration <i>Heinz Redl, Professor, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology in the AUVA trauma research center, Austrian Cluster for Tissue Regeneration, Austria</i>		
09:30-10:00	Additive Manufacturing for Medical Research: opportunities and challenges <i>Francesco Moscato, PhD, Associate Professor, Medical University of Vienna, Austria</i>		
10:00-10:30	The research Group "MITI": A model of a new type of collaboration between basic research / engineering and surgery <i>Hubertus Feußner, TUM, Germany</i>		
10:30-11:00	Correlation between wall shear stress and wall rupture properties in ascending thoracic aortic aneurysms <i>Stéphane Avril, PhD, Professor, Director of the CIS centre for Biomedical and Healthcare Engineering, national Higher Education Institute Mines Saint-Étienne, Deputy Director of INSERM, France</i>		
11:00-12:00	Coffee Break. Poster session		
12:00-13:30	Sectional sessions		
Halls	Pirogov Hall, 2nd floor	Abrikosov Hall, 2nd floor	
12:00-13:30	Sectional session "Bio-engineering and regenerative medicine"		Sectional session "Translational and personalized medicine"
	Applied Bioengineering and Biosensors I		Mathematical modeling of cardiovascular system
	Chairman: Francesco Moscato, PhD, Associate Professor, Medical University of Vienna, Austria		Chairmen: Stéphane Avril, PhD, Professor, Director of the CIS centre for Biomedical and Healthcare Engineering, national Higher Education Institute Mines Saint-Étienne, Deputy Director of INSERM, Saint-Étienne, France Yuri Vassilevski, PhD, Professor, I.M. Sechenov First Moscow State Medical University (Sechenov University), INM RAS, MIPT, Russia
	12:00-12:25	From femtosecond laser chemistry to laser biochemistry: controlled modification of biomolecules by ultrashort laser pulses in polar liquids for biomedical applications <i>Vitaly Gruzdev, Department of Mechanical and Aerospace Engineering, University of Missouri, Columbia, USA</i>	12:00-12:30 Keynote lecture: Development and application of quasi-one-dimensional models of blood flow for solution of problems in physiology and medicine <i>Sergey Mukhin, PhD, Professor, Department of Computational Methods, M.V. Lomonosov Moscow State University, Russia</i>
	12:25-12:50	The future of interventional visceral medicine <i>Alissa Jell, Department of Surgery, Klinikum rechts der Isar, Technical University Munich, German</i>	12:30-13:00 Modelling the respiratory gases transported in the body during intense physical exercise and laparoscopic surgery <i>Sergey Simakov, PhD, Moscow Institute of Physics and Technology, I.M. Sechenov First Moscow State Medical University (Sechenov University), INM RAS, Russia</i>
	12:50-13:10	Virtual fitting and numerical simulation in the approval process of medical device <i>Simon Sonntag, Virtonomy.io / vyson GmbH, Munich, Germany</i>	13:00-13:30 3D hemodynamics in time-dependent domains: are fluid-structure interaction simulations inevitable? <i>Yuri Vassilevski, PhD, Professor, I.M. Sechenov First Moscow State Medical University (Sechenov University), INM RAS, MIPT, Russia</i>
	13:10-13:30	Carbon nanomaterials-based biosensors for on-site health analysis <i>Ivan Bobrinetskiy, Biosense Institute, University of Novi Sad, Serbia</i>	
13:30-14:30	Break		
14:30-16:10	Sectional sessions		
14:30-16:10	Applied Bioengineering and Biosensors II		Molecular Oncology
	Chairman: Hubertus Feußner, TUM, Germany		Chairman: Anton Buzdin, PhD, I.M. Sechenov First Moscow State Medical University (Sechenov University), Russia Yuriy Orlov, PhD, DrSci, Professor of the RAS, Institute of Digital Medicine, I.M. Sechenov First Moscow State Medical University (Sechenov University), and Genome Institute of Singapore, A-STAR, Singapore
	14:30-14:50	Arterial thrombosis on a chip: bringing new insights using ex vivo and in silico models <i>Dmitry Nechipurenko, Faculty of Physics, M.V. Lomonosov Moscow State University, Russia</i>	14:30-14:50 Estrogen receptor β role in tumor suppression of triple negative breast cancer <i>Elena Alexandrova, PhD, Genomix4Life srl, Group Leader, Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana", University of Salerno, Italy</i>
	14:50-15:10	New technologies relevant for abdominal surgery <i>Daniel Ostler, M. Sc., TUM, Germany</i>	14:50-15:10 Remote patient monitoring in oncology <i>Elena Gogvadze, PhD, CEO, Symsights AG, Switzerland</i>
	15:10-15:30	Microfluidic Devices for Stem Cell Culture Analysis and Personalised Health <i>Nicolas Szita, Professor, UCL Innovation and Enterprise, London, United Kingdom</i>	15:10-15:30 Plasma exosomes stimulate breast cancer metastasis through surface interactions and activation of FAK signaling <i>Anastasia Malek, PhD, MD, N.N. Petrov National Medical Research Center of Oncology, Head of Laboratory for Endocrinology, Russia</i>
	15:30-15:50	Laser structuring of biocompatible composites based on carbon nanoparticles <i>Alexander Gerasimenko, I.M. Sechenov First Moscow State Medical University (Sechenov University), MIET, Russia</i>	15:30-15:50 Pathway instability is an effective new mutation-based type of cancer biomarkers <i>Anton Buzdin, PhD, I.M. Sechenov First Moscow State Medical University (Sechenov University), Head of Laboratory for Clinical and Genomic Bioinformatics, Russia</i>
	15:50-16:10	Genome Editing - a Key Step for the Future of Personalized Medicine <i>Natalia Novozhilova, Thermo Fisher Scientific, Russia</i>	15:50-16:10 Analysis of chromatin modifications effects on estrogen receptor alpha binding using ChIP-seq and ChIA-PET technologies <i>Yuriy Orlov, PhD, DrSci, Professor of the RAS, Institute of Digital Medicine, I.M. Sechenov First Moscow State Medical University (Sechenov University), and Genome Institute of Singapore, A-STAR, Singapore</i>
16:10-16:30	Coffee Break. Poster session		
16:30-18:00	Sectional sessions		

16:30-18:00	Trends in Clinical Bioengineering		Molecular dietetics	
	Chairman: Dmitry Telyshev, PhD, Director of the Institute for bionic technologies and engineering, I.M. Sechenov First Moscow State Medical University (Sechenov University), Russia		Chairmen: Anatoly Skalny, MD, PhD, UNESCO Vice-President of the Institute of Micronutrients, France, Director Institute of Bioelementology, Orenburg State University, Russia	
	16:30-16:50	Tandem organic electrolytic photocapacitors for high-performance optoelectronic stimulation of cells Alexander Markov, I.M. Sechenov First Moscow State Medical University (Sechenov University), Russia	16:30-16:50	Trace elements in neurodevelopmental disorders Anatoly Skalny, MD, PhD, UNESCO Vice-President of the Institute of Micronutrients, France, Director Institute of Bioelementology, Orenburg State University, Russia
	16:50-17:10	3D Cell Culture Tools - Key to Disease Modeling Nataliya Bezzabotnova, Thermo Fisher Scientific, Russia	16:50-17:10	Cobalt supplementation - new insights into iron metabolism Yordanka Gluhcheva, Associate Professor, PhD, Department of Experimental Morphology Institute of Experimental Morphology, Pathology and Anthropology with Museum Bulgarian Academy of Sciences, Bulgaria
	17:10-17:30	3D SEM and Correlative Workflow Vasily Balashov, OPTEC ZEISS Group	17:10-17:30	Assessment of toxic and essential trace elements content in Parkinson's disease patients Olga Ajsuvakova, PhD, I.M. Sechenov First Moscow State Medical University (Sechenov University), RUDN University, Russia
	17:30-17:50	Investigation and comparison of sorbent-type and electrolysis-type dialysate regeneration for a wearable artificial kidney Nikolay Bazaev, I.M. Sechenov First Moscow State Medical University (Sechenov University), MIET, Russia	17:30-17:50	The search for biomarkers of manganese deficiency Margarita Skalnaya, MD, PhD, DSc, Prof, RUDN University, Russia
17:50-18:10	Application of neuronets in insulin pumps for individualized treatment Yu. Filippov, Endocrinology research Centre, Russia	17:50-18:10	Molecular mechanisms involving chromium, vanadium, and zinc dyshomeostasis in metabolic syndrome Alexey Tinkov, MD, PhD, Yaroslavl State University, Yaroslavl Russia	
Hall	Pirogov Hall, 2nd floor			
18:10-18:30	Closing ceremony			