

Thursday, 27 February  
**HUMANS**  
 Chaired by Alexej Abyzov

10:10–11:00	<b>Alexej Abyzov</b> <i>Mayo Clinic, Rochester, USA</i>	Strategies, challenges, and approaches in mosaic variants discovery
11:20–12:10	<b>Ryan Mills</b> <i>University of Michigan, Ann Arbor, USA</i>	Identification and characterization of structural variations in human genomes
12:30–13:20	<b>Michiel de Hoon</b> <i>RIKEN Center for Integrative Medical Sciences, Yokohama, Japan</i>	FANTOM: Functional annotation of the mammalian genome
14:30–15:30	<b>Alex Maslov</b> <i>Albert Einstein College of Medicine, New York, USA</i>	Single cell genomics
15:30–15:45	<b>Artem Demidenko</b> <i>GE Healthcare Life Sciences</i>	Viral vectors for transient and stable transformation of human and other eukaryotic cells in different therapies
15:45–16:00	<b>Artem Bogomolov</b> <i>Beckman Coulter</i>	What changes does acoustics do to the liquid handling
16:00–16:10	Skoltech	TBA
16:20–18:00	Group work: finals Closing ceremony	
20:00–21:30	Final evening	



Winter School

Future Biotech Winter Retreat

2020

February 22–27, Novosibirsk, Russia

## PROGRAMME

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### Each day

08:00–09:00	Breakfast	09:00–10:00	Transfer from the hotel
11:00–11:20	Coffee	18:00–19:00	Transfer to the hotel
13:20–14:30	Lunch		
19:00–20:00	Dinner		



<div>Saturday, 22 February</div> <div>VIRUSES</div> <div>Chaired by Peter Lidsky</div>				<div>Monday, 24 February</div> <div>PLANTS</div> <div>Chaired by Sergey Bruskin</div>							
10:10–11:00	Registration			10:10–11:00	Sergey Nuzhdin <i>University of Southern California, Los Angeles, USA</i>			Genomics of local adaptation and diversification in agriculture and aquaculture			
11:00–11:20	Opening ceremony			11:20–12:10	Eric Bishop-von Wettberg <i>University of Vermont, USA and Peter the Great St. Petersburg Polytechnic University, Russia</i>			The Vavilovian Series in the genomic era: comparative approaches to domestication of legume crops			
11:20–12:10	Raul Andino <i>University of California, San Francisco, USA</i>			Evolutionary paths to virulence for a rational design of live-attenuated viral vaccines							
12:30–13:20	Simone Bianco <i>IBM Almaden Research Center, San Jose, USA</i>			Advances in computer-aided synthetic biology			Modeling as a tool in crops research				
14:30–15:20	Santiago Elena <i>CSIC-University of Valencia, Spain</i>			Integrative systems biology approaches to characterize the evolution of plant-virus interactions			Epigenetic variation in Arabidopsis				
15:40–16:30	Adolfo Garcia-Sastre <i>Icahn School of Medicine at Mount Sinai, New York, USA</i>			Phenotypic diversity of the NS1 of influenza A viruses							
16:50–17:40	Ilya Yasny <i>Inbio Ventures</i>			Sources of funding for biotech projects							
20:00–21:30	Group work										
<div>Sunday, 23 February</div> <div>MICROBES</div> <div>Chaired by Andrey Mardanov</div>				<div>Tuesday, 25 February</div> <div>EXCURSION DAY</div> <div></div>							
10:10–11:00	Mikhail Gelfand <i>Skolkovo Institute of Science and Technology, Russia</i>			Evolution of bacterial genomes							
11:20–12:10	Evgeny Andronov <i>All-Russia Research Institute for Agricultural Microbiology, St. Petersburg</i>			Evolutionary processes in Legume-Rhizobia symbiotic systems							
12:30–13:20	Marina Kalyuzhnaya <i>San Diego State University, USA</i>			Single carbon biotech: the key drivers, prospects, and challenges							
14:30–15:20	Francisco Rodriguez-Valera <i>Miguel Hernández University of Elche, Spain</i>			Next generation Microbiology and Metagenomics							
15:40–16:30	Rohit Ghai			Exploring the uncultured freshwater microbial world using metagenomics							
16:50–17:40	Dmitry Poteryaev <i>IBC Generium</i>			Use of molecular genetic tests as basis and companion diagnostics for biologics and biotech therapies							
20:00–21:00	Peter Lidsky <i>University of California, San Francisco, USA</i>			TBA							
21:00–21:30	Group work										
								<div>Wednesday, 26 February</div> <div>ANIMALS</div> <div>Chaired by Denis Larkin</div>			
				10:10–11:00				Emma Teeling <i>University College Dublin, Ireland</i>		The genomics of bats and what this can reveal about longevity, immunity, flight and echolocation	
				11:20–12:10				Mike Bruford <i>Cardiff University, UK</i>		Landscape genomics: how studies of wild species can inform livestock and vice versa	
				12:30–13:20				Juha Kantanen <i>Natural Resources Institute, Helsinki, Finland</i>		Genome sequence and comparative analysis of reindeer ( <i>Rangifer tarandus</i> ) in Northern Eurasia	
				14:30–15:20				Denis Larkin <i>Saint Petersburg State University, Russia</i>		Adaptation to cold climates in the nothernmost (Russian) cattle and ruminat genome evolution	
				16:00–16:15				Alexey Pazilin <i>Thermo Fisher Scientific</i>		Thermo Fisher Scientific: over 20 years of innovations in genomics	
				16:15–16:30				Mariya Perepelkina <i>BIOCAD</i>		Using viruses for treating human diseases	
				16:50–17:40				Alexander Panchin <i>Institute for Information Transmission Problems, Moscow, Russian Academy of Sciences</i>		Pseudo-scientific viruses and their adaptations	
				20:00–21:30				Group work			