

06 July, Monday

10.00–17.30	Plenary session <i>(Chairperson: Galina Orlova, scientific secretary of the Institute of Cytology and Genetics Novosibirsk, Russia)</i>
10.00–11.00	Greetings from the organizers of the conference BGRS/SB <i>Nikolay Kolchanov, academic adviser of the Institute of Cytology and Genetics Novosibirsk, Russia</i> <i>Alexey Kochetov, director of the Institute of Cytology and Genetics Novosibirsk, Russia</i> <i>Sergey Goncharov, director of the Sobolev Institute of Mathematics, SB RAS, Novosibirsk, Russia</i> <i>Mikhail Fedoruk, rector of the Novosibirsk State University, Novosibirsk, Russia</i>
11.00–11.45	Experimental investigation and computational modeling of the 3D-genome <i>Veniamin Fishman, Institute of Cytology and Genetics Novosibirsk, Russia; NSU, Novosibirsk, Russia</i>
11.45–12.30	Morphogenetic mechanisms of plant root development: systems biology approach <i>Victoria Mironova, Institute of Cytology and Genetics, SB RAS, Novosibirsk, Russia; NSU, Novosibirsk, Russia</i>
12.30–12.45	Actual approaches of genomic analysis by NGS methods <i>Dmirty Kwon, Helicon Company</i>
12.45–13.30	Extra chromosome in germ line and the mystery of songbird evolution <i>Anna Torgasheva, Lyubov Malinovskaya & Pavel Borodin, Institute of Cytology and Genetics, SB RAS, Novosibirsk, Russia</i>
13.30–14.30	Lunch
14.30–14:35	Greetings from the organizer of the conference BGRS/SB <i>Ralf Hofestädt</i>
14.35–15.20	Genetics and epigenetics of brain functions and pathologies <i>Evgeny Rogaev, University of Massachusetts, USA</i>
15.20–16.05	Mathematical modelling of the immune system <i>Gennady A. Bocharov, Marchuk Institute of Numerical Mathematics of the Russian Academy of Sciences</i>
16.05–16.50	Cyclin/Cdk-centered regulations are pivotal for autonomous cell cycle oscillator designs in yeast <i>Matteo Barberis, University of Amsterdam, Amsterdam, Netherlands</i>
16.50–17.05	Short break
17.05–17.50	Smart Nanomaterials. A total effect is greater than an arithmetic sum of the constituent agents. <i>Sergey Deyev, Shemyakin & Ovchinnikov Institute of Bioorganic Chemistry, Moscow, Russia</i>
17.50–18.35	Neuroscience Search for Meaning <i>Tatyana Chernigovskaya, St. Petersburg State University, St. Petersburg, Russia</i>

07 July, Tuesday

09.00- 09.30 **Plenary lecture (Chairperson: Galina Orlova, Institute of Cytology and Genetics Novosibirsk, Russia)**
Understanding heterozygous carrying of deleterious variants as a key for personalized longevity
Ancha Baranova, School of Systems Biology, George Mason University, Fairfax, VA

14.30-15.00 **Plenary lecture (Chairperson: Galina Orlova, Institute of Cytology and Genetics Novosibirsk, Russia)**
To be announced.
Ivo Grosse, Institute of Computer Science, Martin Luther University Halle-Wittenberg, Halle, Germany

08 July, Wednesday

09.00-09.30 **Plenary lecture (Chairperson: Galina Orlova, Institute of Cytology and Genetics Novosibirsk, Russia)**
Human Genome, Anesthesiology and Critical Care. 20 Years Later
Vladimir Zelman, Keck School of Medicine - USC

14.30-15.00 **Plenary lecture (Chairperson: Galina Orlova, Institute of Cytology and Genetics Novosibirsk, Russia)**
To be announced.

09 July, Thursday

09.00-09.30 **Plenary lecture (Chairperson: Vyacheslav Mordvinov, Institute of Cytology and Genetics Novosibirsk, Russia)**
Genetic Development of the Nociceptive System and the Epigenetics of the Experience of Pain
Jack M. Berger MS, MD, Ph.D., Professor Emeritus of Clinical Anesthesiology, Keck School of Medicine of USC, University of Southern California, Los Angeles, California, USA

14.30-15.00 **Plenary lecture (Chairperson: Vyacheslav Mordvinov, Institute of Cytology and Genetics Novosibirsk, Russia)**
Brain Asymmetries in the Cognitive Processing
Boris M. Velichkovsky, Corresponding Member of the Russian Academy of Science, Member of Academia Europaea

10 Friday, Monday

09.00-09.30 **Plenary lecture (Chairperson: Vyacheslav Mordvinov, Institute of Cytology and Genetics Novosibirsk, Russia)**
Mathematical problems driven by COVID-19
Sergey Kabanikhin, Novosibirsk State University, Novosibirsk, Russia

14.30-15.00 **Plenary lecture (Chairperson: Vyacheslav Mordvinov, Institute of Cytology and Genetics Novosibirsk, Russia)**
Epidemics: challenges and responses
Alexey Romanukha, Lomonosov Moscow State University