

Program

Conference schedule

Dear participants, please note that the time indicated in the program is local (Novosibirsk). It corresponds to Greenwich Mean Time (GMT) as **+ 7 hours** (the difference with Moscow is **+4 hours**).

CONFERENCE VENUE: Novosibirsk, Akademgorodok, 2 Pirogova str., Main Building of Novosibirsk State University (NSU), 3rd floor, room No. 311 named after academician A.I. Maltsev. The parallel session will be held in the auditorium No. 313.

PLACE AND TIME OF REGISTRATION: The Main building of the NSU, hall on the 1st floor, June 14 from 12-00 pm to 1-00 pm.

PLACE AND TIME OF THE POSTER SESSION: The Main building of the NSU, the left side of the building, the hall on the 4th floor, all days of the conference that means from June 14 to June 17.

PLANTGEN2021

June 14, Monday

NSU, auditorium № 311

1-00 pm – 1-30 pm – OPENING CEREMONY

1-30 pm – 3-20 pm – PLENARY LECTURES

Chairpersons Alexey Kochetov and Elena Salina

▪ **1-30 pm – 2-00 pm**

GENTZBITTEL Laurent (Skoltech, Moscow Region, RUSSIA) Gene function validation and genomic breeding – cases for legumes – 30 min

▪ **2-00 pm – 2-30 pm**

KRUTOVSKY Konstantin V. (Georg August University of Göttingen, Göttingen, GERMANY) Forest genomics: main achievements and future prospects – 30 min

▪ **2-30 pm – 3-00 pm**

KORZUN Viktor (KWS SAAT SE & Co. KGaA, Einbeck, GERMANY) Molecular Breeding in Cereals – current achievements and perspectives – 30 min

▪ **3-00 pm – 3-20 pm**

PORTNOVA Irina (SkyGen, Moscow, RUSSIA) Plant research with nanopore sequencing technology – 20 min

3-20 pm – 3-45 pm – COFFEE BREAK

3-45 pm – 5-35 pm – ORAL PRESENTATIONS

Chairpersons Laurent Gentzbittel and Olesya Shoeva

Секция 1. Генетика развития и стрессоустойчивость

Session 1. Genetics of development and stress tolerance

▪ **3-45 pm – 4-05 pm**

KHLESTKINA Elena (VIR, St. Petersburg, RUSSIA) Synteny and convergence: insight to the Vavilov's Law after 100 years – 20 min

▪ **4-05 pm – 4-25 pm**

AFANASENKO Olga (VIZR, St. Petersburg, RUSSIA) Horizontal transfer of potato viroid PSTVd by Phytophthora infestans to and from host plants – 20 min.

▪ **4-25 pm – 4-45 pm**

BELIMOV Andrey (ARRIAM, St. Petersburg, RUSSIA) The relationship between root exudation, accumulation of heavy metals and symbiotrophy in peas (*Pisum sativum* L.) – 20 min

▪ **4-45 pm – 5-00 pm**

SERDYUKOV Yuriy (BIOGEN-ANALYTICA LLC, Moscow, RUSSIA) New optical technologies in quantitative phase microscopy – 15 мин

▪ **5-00 pm – 5-20 pm**

SHOEVA Olesya (ICG SB RAS, Novosibirsk, RUSSIA) Ant13 encodes the WD40 regulatory factor controlling anthocyanin and proanthocyanidin synthesis in barley (*Hordeum vulgare* L.) – 20 min

▪ **5-20 pm – 5-35 pm**

DOROSHENKO Anastasia (IPP RAS, Moscow, RUSSIA) Involvement of the red light receptors phytochrome A and phytochrome B in the regulation of gene expression of the plastid transcription apparatus by cytokinin during de-etiolation of *A.thaliana* – 15 min

5-35 pm – 6-00 pm – COFFEE BREAK

6-00 pm – 8-00 pm – ORAL PRESENTATIONS

Chairpersons Olga Baranova and Ekaterina Sergeeva

Секция 1. Генетика развития и стрессоустойчивость (продолжение)
Session 1. Genetics of development and stress tolerance (continuation)

- **6-00 pm – 6-20 pm**
BARANOVA Olga (VIZR, St. Petersburg, RUSSIA) Resistance of spring bread wheat lines developed by ARISER to abiotic stress and rust pathogens – 20 min
- **6-20 pm – 6-40 pm**
BALASHOVA Irina (Federal Scientific Vegetable Center, Moscow region, RUSSIA) The heritability of carrot resistance to fungal diseases of *Alternaria* and *Fusarium* genus – 20 min
- **6-40 pm – 7-00 pm**
GARNIK Elena (SIFIBR SB RAS, Irkutsk, RUSSIA) The dark-induced senescence disruption in *Arabidopsis thaliana* glutamate dehydrogenase knockout mutant *gdh1gdh2* – 20 min
- **7-00 pm – 7-20 pm**
SANAMYAN Marina (National University of Uzbekistan, Tashkent, UZBEKISTAN) Features of crossing and setting of hybrid seeds in hybrid cotton plants with replacement of substitution chromosomes – 20 min
- **7-20 pm – 7-40 pm**
STRYGINA Ksenia (VIR, St. Petersburg, Russia) Genes determining dwarfism of watermelon *Citrullus lanatus* (Thunb.) Matsum. & Nakai – 20 min
- **7-40 pm – 8-00 pm**
RSALIYEV Aralbek (Research Institute for Biological Safety Problems, Gvardeisky, KAZAKHSTAN) The pathotype structure of the causative agent *Puccinia striiformis* f.sp. *tritici* in Kazakhstan – 20 min

8-00 pm – GUIDED TOUR THROUGH THE AKADEMGORODOK

June 15, Tuesday

NSU, auditorium № 311

10-00 am – 12-00 pm – ORAL PRESENTATIONS

Chairpersons Rumik Davoyan and Natalia Trubacheeva

Секция 1. Генетика развития и стрессоустойчивость (продолжение)
Session 1. Genetics of development and stress tolerance (continuation)

- **10-00 am – 10-20 am**
DAVOYAN Rumik (Lukyanenko National Grain Centre, Krasnodar, RUSSIA) Using synthetic forms of RS5 and RS7 to expand the genetic diversity of common wheat for disease resistance – 20 min **(in Russian)**
- **10-20 am – 10-40 am**
LAPOCHKINA Inna (FRC “Nemchinovka”, Odintsovo, RUSSIA) Complex resistance of spring bread wheat lines to biotic and abiotic stress – 20 min
- **10-40 am – 10-55 am**
BYCHKOV Ivan (IPP RAS, Moscow, RUSSIA) Effect of melatonin deficiency and disruption of its receptor signaling pathway on photosynthetic parameters and expression of chloroplast genes in plants of *Arabidopsis thaliana* under photooxidative stress – 15 min **(in Russian)**
- **10-55 am – 11-10 am**
POROTNIKOV Igor (VIR, St. Petersburg RUSSIA) Molecular markers of the SKr gene in the evaluation of bread wheat genotypes with different crossability with rye – 15 min **(in Russian)**
- **11-10 am – 11-30 am**
RUMYANTSEV Sergey (IBG UFRC RAS, Ufa, RUSSIA) The mechanism of the additive action of bacterial compositions *Bacillus* spp. in the defense response of common wheat against greenbug aphid *Schizaphis graminum* – 20 min
- **11-30 am – 11-45 am**
PERFILIEV Roman (NSU; ICG SB RAS, Novosibirsk, RUSSIA) Development of a marker panel for genotyping of soybean cultivars by genes controlling the flowering time and response to the photoperiod – 15 min
- **11-45 am – 12-00 pm**
GRITSENKO Dilyara (IPBB, Almaty, KAZAKHSTAN) SSR profiling of potato cultivars resistant to pathogens – 15 min

12-00 pm – 1-15 pm – LUNCH (VISIT TO THE GEOLOGICAL MUSEUM)

1-15 pm – 3-40 pm – ORAL PRESENTATIONS

Chairpersons Pavel Kostylev and Irina Leonova

Секция 1. Генетика развития и стрессоустойчивость (продолжение)
Session 1. Genetics of development and stress tolerance (continuation)

- **1-15 pm – 1-35 pm**
KOSTYLEV Pavel (Agricultural research center “Donskoy”, Zernograd, RUSSIA) Transfer of rice resistance genes to blast using DNA markers – 20 min
- **1-35 pm – 1-55 pm**
KULAEVA Olga (ARRIAM, St. Petersburg, RUSSIA) Comprehensive analysis of *Pisum sativum* (L.) microRNAs – 20 min
- **1-55 pm – 2-15 pm**
KIBALNIK Oksana (ItossorgoRosNIISK, Saratov, RUSSIA) Stress immunity of CMS lines of *Sorghum bicolor* (L.) Moench at the basis of different cytoplasmic sterility types – 20 min **(in Russian)**
- **2-15 pm – 2-35 pm**
LEBEDEVA Maria (SPbU, St. Petersburg, Russia) Nitrate-activated CLE genes in *Medicago truncatula* symbiotic nodule development – 20 min
- **2-35 pm – 2-55 pm**
CHEKUNOVA Elena (SPbU, St. Petersburg, RUSSIA) Role of GATA-family transcription factors in the regulation of chlorophyll biosynthesis in green unicellular algae *Chlamydomonas reinhardtii* – 20 min
- **2-55 pm – 3-10 pm**
ANISIMOVA Olga (FRC “Fundamentals of Biotechnology” of the RAS, Moscow, RUSSIA) Identification and characterization of the thaumatin-like genes in garlic – 15 min
- **3-10 pm – 3-25 pm**
ZELENOVA Natalya (SkyGen, Moscow, RUSSIA) Rapid nucleic acid extraction based on thermophilic enzymes: technology overview and downstream applications – 15 min
- **3-25 pm – 3-40 pm**
CHEMERIS Dmitriy (PhD, Life Science Product Manager, Maxim Medikal LLC, Moscow, RUSSIA) Integrated portfolio of high-quality tools for plant genomics from LGC Biosearch Technologies: collaboration invitation – 15 min

3-40 pm – 4-05 pm – COFFEE BREAK

4-05 pm – 6-25 pm – PLENARY LECTURES

Chairpersons Dmitry Afonnikov and Elena Salina

- **4-05 pm – 4-25 pm**
PATRIN Maxim (Chief Technology Officer (CTO), PHENOMIKA LLC, Moscow, RUSSIA) High throughput phenotyping an essential step in crop breeding process: current techniques and applications – 20 min
- **4-25 pm – 4-55 pm**
BÖRNER Andreas (IPK, Gatersleben, GERMANY) Plant genetic resources for improving stress tolerance – examples for cereals – 30 min
- **4-55 pm – 5-25 pm**
KUMLEHN Jochen (IPK, Gatersleben, GERMANY) Site-specific genetic engineering in cereals – principles and applications – 30 min
- **5-25 pm – 5-55 pm**
STEIN Nils (IPK, Gatersleben, GERMANY) Pan-genomes of the Triticeae – 30 min
- **5-55 pm – 6-25 pm**
MORGUNOV Alexey (FAO Technical Adviser, Riyadh, SAUDI ARABIA) Food security and utilization of cereals genetic resources – 30 min

7-00 pm – 10-00 pm – WELCOME BUFFET (SCIENTIST’S HOUSE)

June 16, Wednesday

NSU, room № 311

10-00 am – 12-00 pm – ORAL PRESENTATIONS

Chairpersons Mira Ponomareva and Gennady Borovskii

Секция 1. Генетика развития и стрессоустойчивость (продолжение)

Session 1. Genetics of development and stress tolerance (continuation)

- **10-00 am – 10-20 am**
GRABELNYCH Olga (SIFIBR SB RAS, Irkutsk, RUSSIA) Genetic transformation with GOX gene from *Penicillium funiculosum* as a mean for the increase of potato resistance to the extremal temperatures – 20 min
- **10-20 am – 10-35 am**
GLAGOLEVA Anastasia (ICG SB RAS, Novosibirsk, RUSSIA) Association mapping of the gene controlling melanin synthesis in barley grain using plant genetic resources collections – 15 min

- **10-35 am – 10-50 am**
SHEIN Mikhail (IBG UFRC RAS, Ufa, RUSSIA) The bacterial impact on the transcriptional activity of DCL2 and DCL4 genes in wheat plants infected with *Stagonospora nodorum* – 15 min
- **10-50 am – 11-10 am**
VESELOV Dmitry (UIB UFRC RAS, Ufa, RUSSIA) Hormonal control of root growth and development in ABA deficient barley mutant – 20 min
- **11-10 am – 11-25 am**
TOROPOVA Elena (NSAU, Novosibirsk; VNIIF, Moscow region, RUSSIA) Spring wheat varieties resistance to biotic stressors – 15 min (**in Russian**)
- **11-25 am – 11-40 am**
BURKHANOVA Guzel (IBG UFRC RAS, Ufa, RUSSIA) Endophytic bacteria of the *Bacillus* induce resistance of potato plants to viruses – 15 min
- **11-40 am – 11-55 am**
UTEBAYEV Maral (Barayev Research and Production Centre for Grain Farming, Shortandy-1, KAZAKHSTAN) Allelic diversity of gliadin-coding loci of common wheat (*Triticum aestivum* L.) of Siberian and Kazakh breeding – 15 min

12-00 pm – 1-15 pm – LUNCH (VISIT TO THE GEOLOGICAL MUSEUM)

1-15 pm – 3-20 pm – ORAL PRESENTATIONS

Chairpersons Irina Mitrofanova and Alexander Solovyov

Секция 3. Биотехнология растений в постгеномную эпоху

Session 3. Plant biotechnology in the post-genome era

- **1-15 pm – 1-35 pm**
MITROFANOVA Irina (Nikita Botanical Gardens, Yalta, RUSSIA) Biotechnology of Horticultural Plants and Rare Endangered Species: Recent Research and Their Use – 20 min
- **1-35 pm – 1-55 pm**
MIROSHNICHENKO Dmitry (KGC – ARRIAB, Moscow, Russia) CRISPR/Cas9-mediated genome editing of bread wheat to modulate heading time – 20 min
- **1-55 pm – 2-15 pm**
GERASIMOVA Sophia V. (KGC ICG SB RAS, Novosibirsk, RUSSIA) Cas9/gRNA-mediated modifications of the barley genome for fundamental and applied research – 20 min
- **2-15 pm – 2-35 pm**
CHUMAKOV Mikhail (IBPPM RAS, Saratov, Russia) Analysis and editing the maize gamete interactions and fusion genes – 20 min
- **2-35 pm – 2-50 pm**
PAVLICHENKO Vasily (SIFIBR of SB RAS, Irkutsk, RUSSIA) Transgenic poplar expressing AtGA2ox1 demonstrate fast growing phenotype – 15 min
- **2-50 pm – 3-05 pm**
TVOROGOVA Varvara (SPbU, St. Petersburg, RUSSIA) The search of somatic embryogenesis regulators in *Medicago truncatula* – 15 min
- **3-05 pm – 3-20 pm**
MIKHAYLOVA Elena (IBG UFRC RAS, Ufa, RUSSIA) The knockout of predicted MYB60 gene in *Eruca sativa* promotes anthocyanin accumulation – 15 min

3-20 pm – 3-45 pm – COFFEE BREAK

3-45 pm – 5-45 pm – ORAL PRESENTATIONS

Chairpersons Varvara Tvorogova and Alexander Solovyov

Секция 3. Биотехнология растений в постгеномную эпоху (продолжение)

Session 3. Plant biotechnology in the post-genome era (continuation)

- **3-45 pm – 4-05 pm**
DOLGOV Sergey (BIBCh, Pushchino, RUSSIA) Agrobacterium-Mediated Transformation of *Chrysanthemum* with Artemisinin Biosynthesis Pathway Genes – 20 min
- **4-05 pm – 4-25 pm**
ELKONIN Lev (Federal Agricultural Research Centre of South-East Region, Saratov, RUSSIA) Improvement of sorghum seed storage protein digestibility using RNA-interference and genome editing – 20 min
- **4-25 pm – 4-45 pm**
EGOROVA Anastasia (ICG SB RAS, Novosibirsk, RUSSIA) Developing potato varieties with decreased cold-induced sweetening – 20 min
- **4-45 pm – 5-05 pm**
BOROVSKII Gennady (SIFIBR SB RAS, Irkutsk, RUSSIA) The overexpression of the *Arabidopsis* NDB2 gene in tobacco plants affects the expression of genes encoding the alternative mitochondrial electron transport pathways and stress proteins – 20 min

- **5-05 pm – 5-25 pm**
TIMINA Olga (PSU named after T.G. Shevchenko, Tiraspol, Pridnestrovskaya MOLDAVSKAYA RESPUBLIKA) Hairy roots characteristics of vegetable pea's morphotype with modified leaf and offspring of the 89/16 sugar line transformant – 20 min
 - **5-25 pm – 5-45 pm**
KISELEVA Antonina (ICG SB RAS, Novosibirsk, RUSSIA) An integrated approach to study genetics of *Triticum aestivum* vegetation period – 20 min
- 5-45 pm – 6-10 pm – COFFEE BREAK**
- 6-10 pm – 7-25 pm – ORAL PRESENTATIONS**
- Chairperson** Sophia V. Gerasimova
- Секция 3. Биотехнология растений в постгеномную эпоху (продолжение)**
Session 3. Plant biotechnology in the post-genome era (continuation)
- **6-10 pm – 6-30 pm**
HERTIG Christian W. (IPK, Gatersleben, Stadt Seeland, GERMANY) Targeted mutagenesis of BRANCHED HEAD homoeoalleles causes alterations of wheat spike and root architecture – 20 min
 - **6-30 pm – 6-50 pm**
REZAEVA Barno (IPK, Ort, Gatersleben, GERMANY) Efficient formation of adventitious shoots from immature zygotic embryos of the oilseed crop camelina – 20 min
 - **6-50 pm – 7-10 pm**
SATPATHY Pooja (IPK, Gatersleben, GERMANY) Generation of haploidy inducers for Cas endonuclease-mediated mutagenesis in barley – 20 min
 - **7-10 pm – 7-25 pm**
IVANOV Nikolay (Philip Morris International, Neuchatel, SWITZERLAND) Alkaloid chemophenetics and transcriptomics of the *Nicotiana* genus – 15 min
- 7-25 pm – 7-55 pm – PLENARY LECTURE**
- **SVITASHEV Sergei** (Corteva Agriscience, Johnston, IA, USA) **Genome editing for crop improvement – 30 min**
- 8-00 pm – NOVOSIBIRSK NIGHT CITY TOUR**

PARALLEL SESSION

June 16, Wednesday

NSU, auditorium № 313

1-15 pm – 3-25 pm – ORAL PRESENTATIONS

Chairpersons Elena Potokina and Dmitry Afonnikov

Секция 2. Эволюционная и функциональная геномика

Session 2. Evolutionary and functional genomics

- **1-15 pm – 1-35 pm**
TURUSPEKOV Yerlan (IPBB, Almaty, KAZAKHSTAN) Application of SNP genotyping Illumina arrays in spring wheat projects for stress resistance in conditions of Kazakshtan – 20 min
- **1-35 pm – 1-55 pm**
POTOKINA Elena (SPbFTU, St. Petersburg, RUSSIA) Genomic introgressions of immune *V. rotundifolia* Michx into Russian grapevine germplasm revealed by RADseq genotyping – 20 min
- **1-55 pm – 2-15 pm**
KIROV Ilya (ARRIAB, Moscow, RUSSIA) Breakthroughs in plant retrotranscriptome and mobilome characterization enabled by Nanopore sequencing – 20 min
- **2-15 pm – 2-35 pm**
GORSHKOVA Tatyana (KIBB FRC KazSC RAS, Kazan, RUSSIA) Plant cell wall as a target for functional genomics – 20 min
- **2-35 pm – 2-55 pm**
YURKOV Andrey (ARRIAM, St. Petersburg, RUSSIA) Arbuscular mycorrhizal fungi of the North Caucasus and the Gorny Altai: biodiversity and role in plant-microbial interactions – 20 min
- **2-55 pm – 3-10 pm**
RAIKO Mikhail (SPbU, St. Petersburg, RUSSIA) Fungal metagenome of Chernevaya Taiga soils: taxonomic composition, differential abundance and factors related to plant gigantism – 15 min
- **3-10 pm – 3-25 pm**
EFREMOV Gleb (Research Center of Biotechnology RAS, Moscow, RUSSIA) Z-ISO: a catching up step towards formation of colored carotenoids in tomatoes – 15 min

3-25 pm – 3-45 pm – COFFEE BREAK

3-45 pm – 5-45 pm – ORAL PRESENTATIONS

Chairpersons Elena Potokina and Dmitry Afonnikov

Секция 2. Эволюционная и функциональная геномика (продолжение)

Session 2. Evolutionary and functional genomics (continuation)

- **3-45 pm – 4-05 pm**
SHCHERBAN Andrey (ICG SB RAS, Novosibirsk, RUSSIA) Structural analysis of the candidate gene that controls awn length in common wheat *Triticum aestivum* L. – 20 min
- **4-05 pm – 4-25 pm**
BADAEVA Ekaterina (VIGG RAS, Moscow, RUSSIA) Genetic diversity of *T. araraticum* assessed using cytogenetics – 20 min
- **4-25 pm – 4-45 pm**
KHIUTTI Alexander (VIZR, St. Petersburg, RUSSIA) Tolerance of potato cultivars to potato spindle tuber viroid PSTVd – 20 min
- **4-45 pm – 5-05 pm**
SAMSONOVA Maria (SPbPU, St. Petersburg, RUSSIA) Genomic signatures of flax diversification and improvement – 20 min
- **5-05 pm – 5-25 pm**
SINIAUSKSYA Marina (IGC NAS of Belarus, Minsk, BELARUS) The variability of organelle genomes in barley – 20 min
- **5-25 pm – 5-45 pm**
TSVETKOVA Natalia (SPbU, St. Petersburg, RUSSIA) Molecular-genetic analysis of genome incompatibility in wheat-rye hybrids – 20 min

5-45 pm – 6-10 pm – COFFEE BREAK

8-00 pm – NOVOSIBIRSK NIGHT CITY TOUR

June 17, Thursday

NSU, auditorium № 311

10-00 am – 12-00 pm – ORAL PRESENTATIONS

Chairpersons Tatyana Gorshkova and Nikolay P. Goncharov

Секция 3. Биотехнология растений в постгеномную эпоху (продолжение)

Session 3. Plant biotechnology in the post-genome era (continuation)

- **10-00 am – 10-20 am**
PONOMAREVA Mira (FRC KazSC RAS, Kazan, RUSSIA) Progress of breeding strategies in winter rye: from mass selection to genomic selection – 20 min
- **10-20 am – 10-40 am**
PERSHINA Lydia (ICG SB RAS, Novosibirsk, RUSSIA) Alloplasmic Lines (*H. vulgare*) – *T. aestivum* with Completed Cytonuclear Compatibility Are the Sources of Introgression DH lines for Wheat Breeding – 20 min
- **10-40 am – 11-00 am**
ADONINA Irina (ICG SB RAS, Novosibirsk, RUSSIA) The studying genetic regulation of the vaviloid type of spike branching in hybrid lines of hexaploid wheat – 20 min
- **11-00 am – 11-20 am**
BELAN Igor (Omsk Agricultural Scientific Center, Omsk, RUSSIA) Development of varieties of spring bread wheat using DH lines in Western Siberia – 20 min
- **11-20 am – 11-40 am**
ILYUSHKO Marina (FSC of Agriculture Biotechnology of the Far East, Ussuriisk, RUSSIA) Intra-callus variability of *Oryza sativa* L. androgenic doubled haploids – 20 min
- **11-40 am – 12-00 pm**
SARKISYAN Karen (Planta, Moscow, RUSSIA) Substrate-free luminescence imaging in plants – 15 min

12-00 pm – 1-15 pm – LUNCH

1-15 pm – 3-20 pm – ORAL PRESENTATIONS

Chairpersons Maria Logacheva and Aleksey Penin

Секция 4. Биоинформатика, системная биология растений и цифровое фенотипирование

Session 4. Bioinformatics, plant systems biology and digital phenotyping

- **1-15 pm – 1-35 pm**
ZEMLYANSKAYA Elena (ICG SB RAS, Novosibirsk, RUSSIA) Structural and functional characterization of transcription factor binding sites: from bioinformatics to hormone biosensors – 20 min

- **1-35 pm – 1-55 pm**
GUBAEV Rim (Skoltech, Moscow, RUSSIA) Genetic map construction and QTL mapping of oil-related traits in sunflower from VNIIMK collection – 20 min
- **1-55 pm – 2-15 pm**
KASIANOV Artem (IITP RAS, Moscow, RUSSIA) Novel method for isoform-centered analysis of alternative splicing using a combination of long and short-read sequencing data – 20 min
- **2-15 pm – 2-35 pm**
KLEPIKOVA Anna (IITP RAS, Moscow, RUSSIA) Gene expression stability at high evolutionary distances – 20 min
- **2-35 pm – 2-50 pm**
ANIKIN Grigory (MGI Tech Co., Ltd / HELICON COMPANY, Moscow, RUSSIA) Whole genome sequencing – new perspectives in plant breeding – 15 min
- **2-50 pm – 3-05 pm**
GRIGOREVA Elizaveta (SPbFTU, St. Petersburg, RUSSIA) De novo guar genome assembly and application of “omics” technologies to speed up guar (*Cyamopsis tetragonoloba* (L.) Taub.) breeding in Russia – 15 min
- **3-05 pm – 3-20 pm**
GENAEV Mikhail (ICG SB RAS, Novosibirsk, RUSSIA) Automatic identification of wheat fungi diseases using a convolutional neural network – 15 min

3-20 pm – 3-45 pm – COFFEE BREAK

3-45 pm – 5-40 pm – ORAL PRESENTATIONS

Chairpersons Dmitry Afonnikov and Elena Zemlyanskaya

Секция 4. Биоинформатика, системная биология растений и цифровое фенотипирование (продолжение)

Session 4. Bioinformatics, plant systems biology and digital phenotyping (continuation)

- **3-45 pm – 4-05 pm**
LOGACHEVA Maria (Skoltech, Moscow, RUSSIA) Investigation of genetic control of agriculturally important traits in common buckwheat using a combination of genetic mapping and transcriptome analysis – 20 min
- **4-05 pm – 4-25 pm**
TKACHENKO Alexander (ITMO, St. Petersburg, RUSSIA) Methylome profiling of guar isogenic lines (*Cyamopsis tetragonoloba* (L.) Taub) in different growing conditions using ONT technology – 20 min
- **4-25 pm – 4-45 pm**
VOLKOVA Polina (RIRAE, Obninsk, RUSSIA) Transcriptomics of plants in the Chernobyl exclusion zone: a step closer to understand the adaptation to chronic radiation exposure – 20 min
- **4-45 pm – 5-05 pm**
KOZLOV Konstantin (SPbPU, St. Petersburg, Russia) Modeling of flowering time in mungbean with Approximate Bayesian Computation – 20 min
- **5-05 pm – 5-25 pm**
BRAGINA Maria (ICG SB RAS, Novosibirsk, RUSSIA) Functional characterization of genes with circadian expression patterns in common wheat – 20 min
- **5-25 pm – 5-40 pm**
SHMAKOV Nikolay (ICG SB RAS, Novosibirsk, RUSSIA) Pan-transcriptomic analysis of *Solanum tuberosum* NLR genes regulating resistance to *Phytophthora infestans* – 15 min

5-40 pm – 6-05 pm – COFFEE BREAK

6-05 pm – 8-00 pm – ORAL PRESENTATIONS

Chairpersons Elena Salina and Cécile Ben

Секция 5. Промышленная биотехнология

Session 5. Industrial biotechnology

- **6-05 pm – 6-25 pm**
BEN Cécile (Skoltech, Moscow, RUSSIA) Tomato endophytic bacteria bioactive compounds as potential agents for the postharvest biocontrol of gray mold disease – 20 min
- **6-25 pm – 6-40 pm**
MAZUROV Vladimir (GenScript Biotech (Netherlands) B.V., Leiden, NETHERLANDS) Gene Synthesis Accelerates Plant Biology Research – 15 min
- **6-40 pm – 6-55 pm**
KHANDY Maria (FSC East Asia Terrestrial Biodiversity, Vladivostok, RUSSIA) The Instrumental Cultivation of *Phlojodicarpus sibiricus* Cell Culture – 15 min

- **6-55 pm – 7-10 pm**
PETRUSHIN Ivan (SIFIBR of SB RAS, Irkutsk, RUSSIA) Genomic features of oil model compounds biodegradation by *Rhodococcus qingshengii* strain VKM Ac-2784D – 15 min
 - **7-10 pm – 7-25 pm**
VITOVTOV Anton (Thermo Fisher Scientific, QVADROS-BIO, Moscow, RUSSIA) Solutions for high-throughput marker-associated plant selection: overcoming issues with complex genomes – 15 мин
 - **7-25 pm – 7-40 pm**
RASSABINA Anna (KIBB FRC Kazan Scientific Center RAS, Kazan, RUSSIA) Melanin from the lichen *Lobaria pulmonaria*: physicochemical properties and biological activity – 15 min
 - **7-40 pm – 8-00 pm**
KOVALEVSKY Rostislav (Innovation center “Biruch-New Technologies”, Alekseevka, RUSSIA) The genetic basis of the Food of the Future – 20 min
- 8-00 pm – 8-30 pm – CLOSING CEREMONY OF THE CONFERENCE**

Poster Session

1. **ABEKOVA Alfiya** (KazRI of Agriculture and Plant growing, Almalybak village, KAZAKHSTAN) Molecular analysis of sugar beet samples using the RAPD method
2. **AGEEVA Elena** (SibRIPP&B – Branch of ICG SB RAS, Krasnoblak, RUSSIA) Study of the relationship between the conductive system of the internodes in spring bread wheat with lodging resistance and yield traits
3. **ALEKSEEV Valentin** (IBG UFRC RAS, Ufa, RUSSIA) Lipopeptide producing endophytic bacteria of the genus *Bacillus* in the regulation of the expression of genes involved in the defense response of wheat against greenbug aphid *Schizaphis graminum*
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