

German-Russian Forum Biotechnology

Program

**Novosibirsk
June 15th – 19th 2009**

PROGRAM COMMITTEE

Institute of Cytology and Genetics, RAS

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Department Bioinformatics, University of Bielefeld

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ORGANIZATION

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Dr. Alexey Kochetov (Chair)

Ms. Anna Onchukova

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Ms. Svetlana Zubova

ORGANIZERS

	<p>Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences</p>
	<p>German-Russian Cooperation Network for Biotechnology</p>
	<p>German/Russian Virtual Network of Bioinformatics "Computational Systems Biology"</p>
	<p>VBU Association of German Biotech Companies</p>
	<p>United Scientific Council of SB RAS on Biological Sciences</p>
	<p>Novosibirsk State University</p>
	<p>The Vavilov Society of Geneticists and Breeders</p>

FINANCIAL SUPPORT

	<p>Federal Ministry of Education and Research, Germany</p>
	<p>International Science and Technology Center</p>
	<p>Federal Agency for Science and Innovation, Russian Federation</p>
	<p>Russian Foundation for Basic Research</p>

German-Russian Forum Biotechnology

June 15th, 2009, Monday

Arrival, Registration, Town excursion

09:00 – 16:30

Hotel Zolotaya Dolina

Registration

16:00 – 17:30

Institute of Cytology and Genetics Entrance Hall

Opening

17:30 – 19:00

Institute of Cytology and Genetics Conference Hall

Chair: Vladimir Shumny, IC&G

Welcome speech

Prof. Dr. Nikolay Kolchanov, IC&G (5 min)

Dr. Gabriele Gorzka, OWWZ (5 min)

Dr. Uwe Mayer, German Moscow Embassy (15 min)

Prof. Dr. Valentin Vlassov, Vice Chairman of SB RAS (15 min)

Dr. Christian Patermann, BioEconomy Council of German Government (15 min)

Introduction of the host Institute of Cytology & Genetics

Prof. Dr. Nikolay Kolchanov, ICG (30 min)

Get Together (Welcome Party)

19:00 – 22:00

Hotel Zolotaya dolina

June 16th 2009, Tuesday

Plenary Session

09:00 – 13:30

Institute of Cytology and Genetics Conference Hall

German-Russian Forum Biotechnology – Perspectives of Bilateral and European collaboration

Chairs: Nikolay Kolchanov, Christian Patermann

German-Russian Cooperation Network Biotechnology

Dr. Gabriele Gorzka

East-West-Science Center, University of Kassel

The Activities of the German-Russian Cooperation Network Biotechnology – Best Practice Examples (15 min)

Dr. Annette Wandrowski

ZukunftsAgentur Brandenburg GmbH, Eberswalde

National Technology Platforms as Tools for Involvement of Researchers in R&D International Co-operation (15 min)

Dr. Irina Sharova

National Contact Point of Russia (Bio-NCP) A.N. Bakh Institute of Biochemistry, Moscow

National Technology Platforms as Tools for Involvement of Researchers in R&D International Co-operation (30 min)

Dr. Manfred Kircher

Cluster Industrial Biotechnology CLIB²⁰²¹, Düsseldorf

Industrial Biotechnology: Options for German / Russian Cooperation (30 min)

Coffee break (15 min)

Dr. Christian Patermann

Former Director of the European Commission, Member of the BioEconomy Council of the German Government, Bonn

The Knowledge-Based BioEconomy en route in Europe, Germany and NorthRhineWestphalia (30 min)

Dr. Elisabetta Balzi

European Commission, DG Research, Biotechnologies, Agriculture and Food Horizontal and Co-ordination Aspects, Brussels

Next Calls and the Opportunity of European and Russian Cooperation (30 min)

Dr. Hendrik Visser

International Science and Technology Center (ISTC), Senior Project Manager, Moscow

International Science and Technology Center (ISTC) – Advancing International Cooperation in Biotechnology and Lifesciences
(30 min)

13:30 – 15:00

Lunch Break

Presentations of SB RAS Institutes (15 min talks)

15:00 – 18:30

SB RAS Exhibition Center

Prof. Dr. Valentin Vlassov (Institute of Chemical Biology & Fundamental Medicine, SB RAS, Novosibirsk);

Prof. Dr. Konstantin Baikov (Institute of Agrochemistry and Soil sciences, SB RAS, Novosibirsk);

Dr. Olga Dorogina (Central Siberian Botanic Garden, SB RAS, Novosibirsk)

Prof. Dr. Alexander Onuchin (The Institute of Forest, SB RAS, Krasnoyarsk)

Prof. Dr. Victor Voinikov (The Siberian Institute of Plant Physiology and Biochemistry, SB RAS, Irkutsk)

Prof. Dr. I.A. Graskova (The Siberian Institute of Plant Physiology and Biochemistry, SB RAS, Irkutsk)

16:45-17:00 Coffee break

Prof. Dr. Eugeny Vaganov (Siberian Federal University, Krasnoyarsk)

Prof. Dr. Stanislav Zagrebelny (Novosibirsk State University)

Dr. Dmitry Zharkov (Novosibirsk State University)

Prof. Dr. Sergei Netesov (Novosibirsk State University)

Prof. Dr. Tatyana Valova (Institute of Biophysics, SB RAS, Krasnoyarsk)

Prof. Dr. Victor Glupov (Institute of Systematics and Ecology of Animals, SB RAS, Novosibirsk)

Get together (SB RAS representatives and German delegation)

19:00-22:00

Hotel Zolotaya dolina Restaurant

June 17th 2009, Wednesday

Parallel Round Tables (15 min talks)

09:00 – 12.30

SB RAS Exhibition Center

Round Table 1

Agriculture and Forestry Biotechnology

Chairs: Dr. A. Börner / Dr. E. Salina

Bio-Composites with Grain By-Products

Dipl.-Ing. Karsten Erdmann

Institute of Materials Technology, University of Kassel

Bio-Composites Based on Wood- and other Natural Fibers

Dipl.-Ing. Markus Murr

Institute of Materials Technology, University of Kassel

Plant germplasm – Resources for future biological research

PD Dr. Andreas Börner

Leibniz-Institut für Pflanzengenetik und Kulturpflanzenforschung,
Gatersleben

Biotechnology application in animal breeding

Prof. Dr. Valeri Glazko

Russian State Agrarian University – MTAA, Moscow, Russia

Biotechnology for development of resistant wheat genotypes

Dr. Elena Salina

IC&G, Novosibirsk

10:30-10:45 Coffee break

Microsatellite mapping of genes for inflorescence architecture in wheat (*T. aestivum*) and rye (*S. cereale*)

Dr. Oxana Dobrovolskaya

IC&G, Novosibirsk

Haplotype analysis in multiple crosses of barley (*Hordeum vulgare* L.) to identify a qtl gene

Dr. Elena Potokina

Vavilov Institute of Plant Industry (VIR), St.Petersburg, Russia

Expression of $\Delta 9$ desaturase gene from *Cyanobacterium synechocystis sp. pcc 6803*

resulted in improvement both of cold and *Phytophthora infestans* resistance in transgenic potato plants

Dr. Svetlana Kirsanova

Russian Potato Research Institute by A.G. Lorkh, Moscow Region

Mapping of QTLs associated with the important agronomic traits using recombinant substitution dihaploid lines Saratovskaya 29 (Janetzki Probat 4d)

Dr. Tatyana A. Pshenichnikova

IC&G, Novosibirsk

Round Table 2

Molecular Biology, Medical Biotechnology, Nutrition and Food Biotechnology (together with ISTC session)

Chairs: Dr. H. Visser / Dr. V. Mordvinov

Nutrition and Disease Prevention

PD Dr. Reinhard Geßner

Leipzig University Medical School &

Berlin University of Technology

Supramolecular polymer complex as gel forming artificial vitreous body and drug delivery matrix

Prof. Dr. Lothar Heinrich

Institute of Biochemistry, University of Münster

Turning science into solution

Dr. Peter Holl

Sartorius Stedim Biotech SA, Göttingen

Heterogeneous biocatalysts for processing of renewable resources to commercially relevant food sweeteners (starch treacle, syrups)

Dr. Galina Kovalenko

Institute of Catalysis, SD RAS, Novosibirsk

MRI: from chemistry to biology and medicine

Dr. Igor Koptug

International Tomography Center SB RAS, Novosibirsk, Russia

10:30-10:45 Coffee break

The effects of allelic variation of bovine cytokine genes on susceptibility to infectious diseases

Dr. Nikolay Yudin

IC&G, SD RAS Novosibirsk

Development of novel carrot plant-based oral vaccine against hepatitis B

Dr. Elena Deineko

IC&G, SD RAS Novosibirsk

Development of whole-cell biosensors for an evaluation of mutagenic potential of bioavailable compounds

Dr. I. Lavrinenko

Institute of Biochemistry, SB RAMS

Opportunities to control ions and metabolites in Bioreactors

Dr. H. Zimmermann and Mr. J. Cottam

Abacus Analytical Systems GmbH, Berlin

Micro 24, ...24 mini Bioreactors in one run

Mr. S. Sukarev and Dr. H. Zimmermann

Abacus Analytical Systems GmbH, Berlin

Bioreaction engineering as prerequisite of efficient bioprocesses

Dipl.-Ing. Paul Bubenheim

Institute of Technical Biocatalysis, Hamburg University of Technology

Round Table 3

Bioinformatics and Systems Biology

Chairs: Dr. R. Hofestädt / Dr. D. Afonnikov

The Semi-automatic Construction of Large Scale Biological Networks

Prof. Dr. Ralf Hofestädt

Bioinformatics and Medical Informatics, Bielefeld University

Data management for systems biology

Dr. Olga Krebs

EML Research gGmbH, Stuttgart

Energy Metabolism of Yeast: A Systems Biology View

Dr. Maksim Zakhartsev

Institute of Biochemical Engineering, University of Stuttgart

Molecular modeling technologies in drug discovery

Dr. Germes Chilov

Moltech, Moscow

Complex computational analysis in UGENE bioinformatics suite

Dr. Mikhail Fursov

UniPro, Novosibirsk

10:30-10:45 Coffee break

Auxin regulated root patterning: the mathematical model and key genetic mechanisms

Dr. Vika Mironova

IC&G, SD RAS Novosibirsk

Mathematical model of the auxin metabolism in shoots of *Arabidopsis thaliana* L

Dr. Ilya Akberdin

IC&G, SD RAS Novosibirsk

Using the computer-based image processing technique in analysis of leaf hairiness in wheat

Dr. Dmitry Afonnikov

IC&G, SD RAS Novosibirsk

ANDCell and ANDNanobiotech: associative network discovery systems in systems biology and nanobiotechnology

Dr. Vladimir Ivanisenko

IC&G, SD RAS Novosibirsk

Cooperation in applied systems biology

Mr. Alexander Kel

BIOBASE GmbH, Wolfenbuettel

Poster Session

12:30 – 13:20

SB RAS Exhibition Center

13:20 – 14:30

Lunch Break

SB RAS Exhibition presentation

14:30 – 15:00

SB RAS Exhibition Center

Visit of the German delegation to Koltsovo Technopark and presentations of biotech innovation companies

15:30 – 17:30

Koltsovo

Institute of Cytology and Genetic SB RAS (host Institute) party for German delegation

19:00-22:00

Ob Lake shore

June 18th 2009, Thursday

Individual match-making meetings

10:00 – 13:00

Institute of Cytology and Genetics

Consulting: Dr. Gorzka – project funding, project management

German-Russian School for young researchers

“Biotechnology and Bioinformatics”

June 18th 2009, Thursday

10:00 – 17:45

Institute of Cytology and Genetics Conference Hall

10:00 – 10:55

Preservation and utilization of plant genetic resources in the biotechnology era

PD Dr. Andreas Börner

Leibniz-Institut für Pflanzengenetik und Kulturpflanzenforschung,
Gatersleben

10:55 – 11:50

Unraveling the physiological and pathologic function of LI-cadherin with methods in biochemistry, molecular and cellular biology

PD Dr. Reinhard Geßner

Laboratory of Molecular & Cellular Surgery,
Department of Abdominal, Thoracic, Vascular and Transplant Surgery,
Leipzig University Hospital

11:50-12:05

Coffee break

12:05-13:00

Systems biology of microorganisms in examples

Dr. Maksim Zakhartsev

Institute of Biochemical Engineering, University of Stuttgart

13:00-15:00

Lunch break

15:00-15:55

DAAD fellowships for scientists

Dr. Anna Hess,

Deutscher Akademischer Austauschdienst (DAAD)

DAAD-Informationszentrum (IC) an der Technischen Universität
Novosibirsk

15:55-16:50

Metabolic network analysis

Prof. Dr. Ralf Hofestädt

Bioinformatics and Medical Informatics, Bielefeld University

16:50-17:05
Coffee break

17:05 – 17:50

Managing systems biology data: the SysMO-DB approach

Dr. Olga Krebs

EML Research gGmbH, Stuttgart

June 19th 2009, Friday

10:00 – 15:55

Institute of Cytology and Genetics Conference Hall

10:00 – 10:55

Influence of the physico-chemical conditions on the substrate specificity of the enzymes

Prof. Dr. Stanislav Zagrebelny

Novosibirsk State University

10:55 – 11:50

Molecular-genetic mapping of the Gramineae chromosomes: basic and applied research

Dr. Elena Salina

IC&G, Novosibirsk

11:50-12:05
Coffee break

12:05-13:00

DNA reparation: from basic research to biotechnology and medicine

Dr. Dmitry Zharkov

Novosibirsk State University, Institute of Chemical Biology and Fundamental Medicine SB RAS, Novosibirsk

13:00-15:00
Lunch break

15:00-15:55

Bioinformatics of Network Biology

Dr. Igor Titov

IC&G, Novosibirsk