

AN INCOMPLETE LIST GRANTS AWARDED TO THE LABORATORY OF THEORETICAL GENETICS SINCE 2000

INTAS-International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union.

Computer and theoretical analysis of hybridization of antisense oligonucleotides with tRNA INTAS-95-IN-RU-653

INTAS-International Association for the promotion of co-operation with scientists from the New Independent States

INTAS Project No. 21-2382 "Involvement of Epstein-Barr virus encoded proteins in signal transduction in virally transformed and in EBV-carrying malignant B cells" (2002-2004).

International Collaboration

Development of a system for modeling E. coli gene networks, under the agreement with Ajinomoto Co., Inc.

International Science Foundation.

Knowledge Based Biological Modeling Information System 5-R01-RR04026-09

Department of Energy USA

The Department of Energy Subgrant "Information Management Infrastructure for Systemic Annotation of Vertebrate Genomes" No. 535228 CFDA 81.049 (1999-2002)

The Department of Energy USA Grant "Information management infrastructure for the Systematic Annotation of Vertebrate Genomes" DE-FG02-00ER62893

National Institute of Health, U.S.A.

NIH/NCHGR USA grant (No. R01-HG-01539-03) " Information management infrastructure for the systematic annotation of vertebrate genomes"- "High-Throughput Annotation of Genomic DNA Sequence"

National Institutes of Health Grant "High Throughput Annotation of Genomic DNA Sequence" No.2 R01-HG-01539-04A2 (2000-2004)

North Atlantic Treaty Organization.

NATO SCIENCE PROGRAMME, COLLABORATIVE LINKAGE GRANT PDD(CP)-(LST.CLG 979815) "Development of an Integrative Approach for Transcription Regularity Rule Extraction" (2003-2005)

NATO SCIENCE PROGRAMME, COLLABORATIVE LINKAGE GRANT PDD № LST.CLG.979816 "Gene Networks of Co-Expressed Genes: Modeling and 5'-UTR Sequence Analysis" (2003-2005)

U.S. Civilian R&D Foundation for the Independent States of the Former Soviet Union

Grant Y1-B-08-20 from U.S. Civilian R&D Foundation (CRDF) and the Ministry of Education and Science of the Russian Federation under the "Fundamental Research and Higher Education" program.

Grants REC-008 and No. Y2-B-08-02 from U.S. Civilian R&D Foundation (CRDF) for the Independent States of the Former Soviet Union and the Ministry of Education and Science of the Russian Federation under the "Fundamental Research and Higher Education" program.

CRDF PROJECT NUMBER RB0-1276 Developing Cancer Immunome Database. 2001-2002

CRDF BRHE program NO-008-X1 Molecular design and ecologically safe technologies. 2004-2005

CRDF Rup2-2629-NO-04 Protein Folding: A Kinetic Approach to the Mechanism. 2005-2006

US National Science Foundation

US National Science Foundation FIBR PR 03-106 "Developing modeling and bioinformatics" (2003-2007)

Ministry of Industry, Science and Technology of Russian Federation and Russian Federal Agency for Science and Technology

Development of software for analysis of the structure–function properties of human genome (2002-2004)

Contract No. 38/2004 with the Engelhardt Institute of Molecular Biology RAS (Moscow) under the state contract No. 43.073.1.1.2508 of January 31, 2002 under the project “Detection of Specific Features of the Human Genome” under the federal target research program “Studies and Developments in Priority Directions of Science and Technologies”, block 1 “Oriented Basic Research”, section “Technologies of Living Systems”, subsection “Biology” (2002-2004)

Contract No. 37/2004 with the Institute of Zoology RAS “Informational System on Biodiversity” under the state contract No. 43.073.1.1.2510 of January 21, 2002 under the federal target research program “Studies and Developments in Priority Directions of Science and Technologies” for 2002–2006, block 2 “Basic and applied research and development” for 2002–2006, section “Technologies of Living Systems”, subsection “Biology” (2002-2004)

Development of new computer technologies and data bases for theoretical investigation of human, plant and animal genomes,

Contract with the Institute of Molecular Genetics RAS “Development of Mathematical Model of Cell Cycle Regulation in the Yeast Cell” within the problem “Development of Mathematical Model of the Eukaryotic Cell” under the federal target research program “Development of New Directions in Biotechnology and Provision of Biosafety” (2004-2005)

Subproject «Computer analysis of structure-function organization of human and other eukaryotic genomes»

the Russian Ministry of Education and Science Project no. 8274 Development of the Scientific Potential Capacity of the Higher School (2005)

State contract “Dynamics of Gene Pools of Plants, animals, and humans” (2004-2005)

Grant N4224 from the Russian Ministry of Education and Science "Development of the Scientific Potential Capacity of the Higher School"

Development of the database on transcription regulatory regions of humans and higher eukaryotes

Theoretical investigation of genomic nucleotide sequences based on new informational and computer technologies

Program «Russian Universities» Development of computer methods for predicting possible changes in gene expression in response to the effect of environmental factors,

Program «Russian Universities» «Mutational variability in human hemopoiesis genes induced by anthropogenic environment pollution»

Grant No. 43.073.1.1.15012 from the Ministry of Industry, Science and Technology of the Russian Federation "Development of software programs for analysis of structural and functional sites of the human genome".

Russian State Committee of Science and Technical Policy. Program "Russian Universities" grant: Development of computer methods of prediction of possible changes in gene expressions

State contract №10002-251/П-24/154-270/290404-168 of 29.04.04 "Dynamics of plant, animal and human gene pools".

Fundamental Research Program № 10002-251/П-25/155-270/200404-082 "The evolution of molecular-genetic systems: computer analysis and modeling" from the Presidium of the Russian Academy of Sciences computer analysis and modeling"

State contract with the Federal Agency of Science and Innovations "Identification of Promising Targets for the Action of New Drugs Basing on Reconstruction of Gene Networks" under the priority direction "Living Systems" (2004-2005)

Governmental contract with Federal Agency for Science and Technology "Identification of potential targets for novel medicinal drugs based on reconstructed gene networks", priority direction "Living system" (2004-2006)

State contract № 01.106.11.0002 of 08.09.04 the most promising targets for novel medical drugs, including by reconstruction of gene networks for virus – host cell interactions" under the federal target research program "Development of New Directions in Biotechnology and Provision of Biosafety".

"Identification of potential targets for novel medicinal drugs based on reconstructed gene networks", LS-12.3/002, State contract N 02.434.11.3004 of 01 April 2005)

Russian Foundation for Basic Research

RFBR 99-04-49879-a, "Experimental and theoretical studies of the spatial structure and renaturation of protein molecules (1999 – 2001)

RFBR 99-07-90203-b Development of distributive object-oriented environment for bioinformatics research (1999-2001)

RFBR 00-04-49229 Computer analysis of regulatory sequences controlling expressions of eukaryotic genes, (1999-2002). Young Scientists Fellowship 01-04-06243-mac (2001)

RFBR 00-04-49252-a "Quantitative analysis of structure-activity interactions in homologous protein series" (2000)

RFBR 00-04-49255 Development of knowledge base on plant gene expression regulation

RFBR 00-07-90337-b Database on transcription regulation of eukaryotic genes (TRRD) (2000 –2002)

RFBR 01-05-65380-a "Mathematical modeling of convection in the upper mantle with partial melting regions under the continental and oceanic lithosphere"

RFBR 01-07-90084 Methods and tools for development of subject mediators of heterogeneous information collections for the distributed digital libraries

RFBR 01-07-90376 Integrated Digital Library for 3D structures and function of DNA, RNA, Proteins and Gene nets, (1999-2002). Young Scientists Fellowship (for Project 01-07-90376) 03-07-06079-mac, 03-07-06078-mac, 03-07-06082-mac

RFBR 02-04-48802-a Development of theoretical and experimental approaches to design of genetic engineering systems for control of dynamic behavior of gene networks (2002-2004)

RFBR 02-04-49485-a Theoretical studies of in vitro protein evolution (2002 – 2003)

RFBR 02-04-59015-3 Participation in 'Workshop on Genomic Signal Processing and Statistics (GENSIPS)' (2002)

RFBR 02-07-90355 Development of the software package Gene Discovery for creating knowledge bases at all levels of analysis and modeling of genomic DNA (2002-2004)

RFBR 02-07-90359 Software-informational support of studying complicated molecular-genetical systems (GeneNet system) (2002-2004).

RFBR 03-01-00328 Mathematical modeling and analysis of gene networks (2003)

RFBR 03-04-48469-a Investigation of transcription factor binding sites by experimental and theoretical approaches (2003-2005)

RFBR 03-04-48506 Research of structural-functional organization and evolution of gene networks: computer analysis and modeling (2003-2005)

RFBR 03-04-48555-a The integrated database of arrangement and characteristic of nucleosome formation sites of genome DNA sequences (2003-2005)

RFBR 03-04-48569-a "Haplotypic analysis of SNP markers in genes for resistance/sensitivity to infectious disease in various cattle and assessment of potential functional significance of polymorphic sites using bioinformatics approaches" (2003–2005)

RFBR 03-04-48829 Computer study of the efficiency of expression of genes depending on their nucleotide composition (2003-2005)

RFBR 03-07-90181-в System of computer-assisted support of experimental and theoretical research of transcription regulation mechanisms (2003-2005)

RFBR 03-07-96833 Supercomputer calculations in molecular biology and genetics (2003-2005)

RFBR 04-04-58044 in support of the 4th International Conference "Bioinformatics of Regulation and Genome Structure" (2004)

RFBR 05-04-49111-a, Computer analysis of DNA sites for nucleosome formation (2005-2007)

RFBR 05-04-49141-a, "Theoretical study of the features of protein evolution due to coordinated substitutions of amino acid residues" (2005-2007)

RFBR 05-04-49283-a, "Computer analysis of the organization and evolution of functional sites of globular proteins" 2005 – 2007

RFBR 05-07-90185-в, "Development of *Expert Discovery*, a R&D program package for analysis of genomic DNA structure" (2005-2006)

RFBR 06-04-49351-a, "Computer-assisted experimental study of mitochondrial genomes in higher plants" (2006-2008)

Grants from RFBR for "biodiversity":

RFBR 99-04-49275-a "Development of a methodology for assessing biodiversity and the spatial organization of vegetation in the southern part of West and Middle Siberia; their monographic characterization" (1999–2001)

RFBR 99-07-90222-в "Biodiversity of Siberian Animals and Plants: an Atlas" (as part of The Electronic Library of the Siberian Branch of the Russian Academy of Sciences) (1999–2001)

RFBR 03-04-49746-a "Modeling changes in phytocenotic and floral diversity in hemiboreal forests on the oceanic/continental climatic gradient in North Asia" (2003–2005)

RFBR 03-04-96025-р2003арктика_а "Development of a listing of rare and endangered plant communities in Yakutia" (The Green Book of Yakutia) (2003-2005)

RFBR 03-07-96837 Development of the geoinformational system “The Space–Time Dynamics of Biodiversity of Western Siberia and Northern Ural” (2003-2005)

RFBR 04-04-63079-к Organization of and doing expeditions for studying changes in phytocenotic and floral diversity in hemiboreal forests on the oceanic/continental climatic gradient in North Asia" (2004)

RFBR 05-07-98011-r_ob'_v Development of the software and informational tools for modeling ecosystems basing on GIS technologies and data of remote sensing (2005-2007)

RFBR 05-07-98012-r_ob'_v Development of computer portal on bioinformatics basing on GRID technologies (2005-2007)

Integrated projects of Siberian Branch of the Russian Academy of Sciences and others

Interdisciplinary Integration Project on basic research No. 65 SB RAS "The simulation of basic genetic processes and systems" (2000-2002)

Interdisciplinary Integration Project on basic research No. 66 SB RAS “Basic Problem in Biodiversity and Dynamics of Ecosystem” (2000-2002).

CREATION OF THE ASSESSMENT AND ANALYTICAL GEOINFORMATION SYSTEM "SPATIAL AND TEMPORAL CHANGES IN THE ECOSYSTEMS OF THE URALS AND SIBERIA", R&D Agreement 56/2001

R&D Agreement under State contract № 43.106.11.0026 of June 28, 2002, №. 43.106.11.0011 "Development of transgenic potato with resistance to viroids, viruses and bacterial infections".

Subcontract with V.A. Engelhardt Institute of Molecular Biology under the project "Identification of Specific Features of the Human Genome", № 28/2003

The project “Description and Analysis of Biodiversity of Dynamics of Siberian Ecosystems Using Informational Technologies” with the RAS Program on biodiversity (12.4) (2003-2005)

The project “Computer Modeling and Experimental Construction of Gene Networks” of the Program of the RAS Presidium on molecular–physicochemical biology (10.4) (2003-2005)

Interdisciplinary integration project of basic research of SB RAS “Self-organization, Catalysis, and Processes of Chemical Evolution in Gravitationally and thermodynamically Unstable Systems Modeling Early Stages of the Earth’s Formation” No. 148 (2003-2005)

Interdisciplinary Integration Project on basic research No. 119 SB RAS “Gene networks: theoretical analysis, computer simulation, and experimental construction” (2003-2005)

Interdisciplinary Integration Project on basic research No. 145 SB RAS “Biodiversity and ecosystem dynamics: informational technologies and simulation” (2003-2005)

Contract with the Institute of Molecular Genetics, RAS, “Development of a mathematical model for cell-cycle regulation of the yeast cell” as part of the Project “Development of a mathematical model of the eukaryotic cell” of the Federal Target Research and Development Program “Development of New Directions in Biotechnology and Provision of Biosafety”.

Contract with the Institute of Mathematics, SB, RAS under RFBR grant № 04-01-00458 "Limiting theorems in gene network theory".

Contract with the Institute of Mathematics, SB, RAS under RFBR grant №03-01-00328 “Mathematical modeling and analysis of gene networks”..

Contract № 47/2004 with Yugra R&D IT Institute (Khanty-Mansiysk) “Development of software for fast computational servers and parallel computational systems used in gene expression analysis practices”.

Contract № 60/2004 with the Institute of Mathematics, SB, RAS under RFBR grant № 04-01-00458 "Limiting theorems in gene network theory".

Contract № 61/2004 with the Institute of Mathematics, SB, RAS under RFBR grant № №03-01-00328 "Mathematical modeling and analysis of gene networks".

Contract № 83/2004 with the Institute of Molecular Genetics, RAS, "Development of a mathematical model for cell-cycle regulation of the yeast cell" as part of the Project "Development of a mathematical model of the eukaryotic cell" of the Federal Target Research and Development Program "Development of New Directions in Biotechnology and Provision of Biosafety".

Contract № 82/2004 with the Institute of Computational Technologies, SB, RAS "Providing informational and computational services".

Contract №56/2004 with the Institute of Paleontology of the RAS as part of State contract № 10002-251/II-25/155-270/200404-082 "Evolution of molecular-genetic systems" within the frameworks of subprogram 2 of the Fundamental Research Program of the RAN Presidium "Origin and Evolution of the Biosphere".

Grant under the RAS Presidium subprogram 2 of program 25 for basic research "Origin and Evolution of the Biosphere" (2004-2005)