

4/25/97

# INTERNATIONAL SYMPOSIUM

Cosponsored by ISTC & NAS USA

Host organization:

Volgo-Vyatski State Scientific Center of Applied Biotechnology

## SEVERE INFECTIOUS DISEASES:

Epidemiology, Express-Diagnostics, and Prevention.

Preliminary Agenda

Kirov region, June 16-20, 1997

**Monday, June 16**

9.00. -12.00. Arrival and registration of participants in Kirov.

12.00. Tour of city.

19.00. Welcoming reception.

**Tuesday, June 17. Plenary Meeting: 8.50.-19.30.**

**Chairmen:** G. M. Tulyankin, Director of the Volgo-Vyatski State Scientific Center of Applied Biotechnology, Kirov region, Academician D. L'vov, D.I. Ivanovsky Institute of Virology of RAS, Moscow, Foreign Representative.

8.50.-9.00. Welcome by G. M. Tulyankin, Director of the Volgo-Vyatski State Scientific Center of Applied Biotechnology, Kirov region

9.00-9.10. Welcome by Foreign Representative.

9.10-9.20. Welcome by ISTC Representative, Moscow.

**9.20-9.50. *Up-to-date Problems with Prohylaxis of Severe Infectious Diseases***

Academician A.A. Vorob'ev, MMA, Prof. B. Cherkassky, Central Research Institute of Epidemiology, Moscow, Dr. A. Stepanov, State Scientific Center "Applied Microbiology", Obolensk, A. Kyuregan, Anti-Plague Center of Ministry of Health of Russian Federation, Moscow.

**9.50-10.20. *Landscape and Geographical Regularities of Spreading Natural Sites of Arboviral Infections in Northern Eurasia.***

Academician D. L'vov, D.I. Ivanovsky Institute of Virology of RAS, Moscow.

**10.20.-10.50. *The Role of Zooanthroponoses in the Current Status of Infectious Diseases and Their Environmental Effects (Plague, Cholera, Ebola Haemorrhagic Fever, Anthrax, Smallpox, Foot and Mouth Disease, Rabies, Rift Valley Fever).***

Dr. S. Afanas'ev, Institute of Immunology, Lyubuchany.

10.50.-11.10. Coffee break.

**11.10.-11.40. *Optimization of Strategy of Monitoring for Natural Sites of Plague and Other Severe Infectious Diseases***

Profs. A. Naumov, A. Kokushkin, Russian State Research Institute "Microb", Saratov

**11.40.-12.10. *Current Epidemiological Status of Anthrax Prophylaxis in Russia***

Prof. B. Cherkassky, Central Research Institute of Epidemiology, Moscow

**12.10.-12.40. *Conventional Diseases: Status and Readiness of the Convention Member-States to Undertake Preventive Measures Against Zoonoses***

Acad. G. Safonov, the Pokrov Plant of Biopreparations, Pokrov.

**12.40.-13.10. *Experiences with Zoonoses and High-Level Pathogens in Europe.***

Dr. Jack Melling, CAMR

13.10.-14.00. Lunch.

**14.00.-14.30. *International Perspectives on Collaboration on the Control of Zoonoses and Other Diseases Caused by High Level Pathogens.***

Representative of the United States

**14.30.-15.00. *Prevention and Control of Cholera and Plague in Kazakhstan***

Dr. V. Dobritsa, Director of the Kazak Anti-Plague Institute, Almaty.

**15.00.-15.30. *The Study of Prevalence, Genotype Distribution and Molecular Variability of Isolates of Hepatitis C in the West Siberian Part of Russia.***

Prof. S. Netesov, Institute of Molecular Biology, SRC VB "Vector", Koltsovo.

**15.30.-16.00. *Glanders and Melioidosis: Current Situation and Promising Diagnostics, Treatment and Prophylaxis.***

Dr. V. Ilyukhin, Anti-Plague Scientific Research Institute, Volgograd.

**16.00.-16.30. *Lung Forms of Experimental Glanders and Melioidosis: Peculiarities of Pathogenesis and Diagnostics.***

Dr. Alekseev, Anti-Plague Scientific Research Institute, Volgograd.

16.30.-16.50. Coffee break.

**16.50.-17.20. *Monitoring of Severe Infectious Diseases in Subjects of the State Scientific Center "Applied Microbiology", Obolensk.***

Dr. A. Stepanov, State Scientific Center, Obolensk.

**17.20.-17.50. *Ecological Characteristics and Virulent Factors of Agents of Severe Mycosis.***

Dr. A. Lipnizkyi, Anti-Plague Scientific Research Institute,  
Volgograd.

**17.50.-18.20. *New Approaches to Epidemiological Monitoring for Agents of Natural Sites and Other Severe Infectious Diseases.***

Prof. V. Efremenko, Director of Anti-Plague Scientific Research  
Institute, Stavropol.

**18.20.-18.50. *Monitoring of Quantitative and Qualitative Parameters of Especially Dangerous Infections Based on Natural Plague Foci in the Republic of Kazakstan (ISTC Project #K-159).***

Prof. A. Ashimov, Institute of Informative and Control Problems  
of Academy of Sciences of the Republic of Kazakstan, Almaty.

18.50.-19.30. Round-table discussion.

19.30. Dinner. Meetings with partners.

**Wednesday, June 18. Work in Sessions.**

**Session 1**

**(In parallel with Section 2).**

**Problems of Prophylaxis of Severe Diseases,**

**Test-Systems for Early Diagnosis.**

**Cochairmen:** Dr. A. Makhelai; Prof. V. Zav'yalov, Institute of Immunology, Lyubuchany.

**9.00.-9.30. *Alternative Approaches to Anthrax Prevention and Control.***

Prof. V. Gavrilov, Director of the Pokrov Plant of Biopreparations, Pokrov.

**9.30.-10.00. *New Vaccine for Anthrax Prophylaxis in Humans.***

Dr. I. Kravez.

**10.00.-10.30. *Development of a New Generation of Preparations for Diagnostics, Treatment and Prophylaxis of Yersinia Using the Latest Discoveries in the Study of Molecular Mechanisms of their Immunopathogenicity.***

Prof. V. Zav'yalov, Institute of Immunology, Lyubuchany.

**10.30.-11.00. *Molecular Diagnostics of Severe Infections.***

Drs. V. Drygin, V. Andreev, A. Lomakin, VNIIZZH, Vladimir.

**11.00.-11.20. Coffee break.**

**11.20.-11.50. *Problems of Optimization of Diagnostics and Prophylaxis of *Emirhiosa 0-157, H-7****

Prof. B. Cherkassky, Central Research Institute of Epidemiology, Moscow

**11.50.-12.20. *Investigation of the Problem Relating to Development of Preventive and Medicinal Agents Against Ebola Haemorrhagic Fever.***

Drs. A. Makhelai, V. Mikhailov, I. Borisevich

**12.20.-12.50. Optimization of Cytokines' Administration the Treatment of Infectious Diseases.**

Prof. S.S. Afanas'ev, Prof. Yu.T. Kalinin, Drs. G.Ya. Scherbakov, L.A. Denisov, O.V. Rubal'skyi, S.Yu. Pchelincev, JSC "Biopreparat", Moscow.

**12.50.-13.10. Modern Immunodiagnostical Methods for Identification of Glanders and Melioidosis Agents.**

Dr. N. Khrapova, Anti-Plague Scientific Research Institute, Volgograd.

13.10.-14.00. Lunch.

**14.00.-14.30. New Approaches to Immunoprophylaxis and Treatment of Tularemia on the Basis of Molecular Immunological Studies.**

Dr. V. Abramov, Institute of Immunology, Lyubuchany.

**14.30.-16.30. Opportunities and Possibilities of the Joint Stock Company "Omutninsky Scientific, Experimental and Industrial Base".**

Prof. Yu. Mironenko, Director of the Joint Stock Company "Omutninsky Scientific, Experimental and Industrial Base", Omutninsk.

16.30.-16.50. Coffee break.

**16.50.-17.20. Elaboration of Drug Preparations with Direct Action for Treatment of Severe Infectious Diseases.**

Prof. V. Efremenko, Anti-Plague Scientific Research Institute, Stavropol.

**17.20.-17.50. Development of New Reagents for Immunological Analysis.**

Dr. A. Chudinov, GosNII of Biological Instrument Making, Moscow.

**17.50.-18.20. Development of an Amplification Test-System and Equipment for Express-Diagnostics of Diphtheria by Using a Polymerase Chain Reaction (ISTC Project #506).**

Dr. B. Sokov, Scientific Research Center for Toxicology and Sanitary Certification of Biopreparations, Moscow Region.

**18.20.-18.50. Development of New Ways and Technical Means for SI Identification on the Basis of Immunological Analysis**

Dr. N. Osin, GosNII of Biological Instrument Making, Moscow.

19.00. Dinner. Meetings with partners. Conclusions of Work Session.

**Wednesday, June 18.**

**Session 2**

**(In parallel with Section 1).**

**Technology for Development and Administration of  
Medicinal Forms and Biopreparations**

**Cochairmen:** Dr. N. Vasil'ev; Dr. E. Sventitskiy, Director of the GosNII of Extrapure Biopreparations, St. Petersburg,  
Prof. N. Medunitsyn, Director of RGISK, Moscow.

**9.00.-9.30. *System of the State Surveillance (Gosnadzor) over MIBP Quality During their Development and Production in the Russian Federation.***

Prof. N. Medunitsyn, Director of RGISK, Moscow.

**9.30.-10.00. *Practical Aspects of Procedures in Trials.***

Dr. P. Olin, Swedish Institute for Infectious Diseases Control.

**10.00.-10.30. *Basic Methods for Evaluation and Quality Control of Biopreparations in RF.***

Prof. T. Bakhtimirov, RGISK, Moscow.

**10.30.-11.00. *Non-Viral Biopreparations on the Basis of Synthetic Peptides.***

Dr. S. Rybakov, VNIIZZH, Vladimir.

**11.00.-11.20. Coffee break.**

**11.20.-11.50. *Evaluation of Effectiveness of a Combined Anti-Anthrax Vaccine.***

Drs. V. Kozhukhov, I. Kravets, N. Sadovoy, V. Seroglazov.

**11.50.-12.20. *Immunology of Revaccination***

Drs. S.Yu. Pchelinsev, G.Ya. Scherbakov, Academician N.N. Karpischenko, Prof. S.S. Afanas'ev, SSC "Intermedpharm" RAMN, JSC "Biopreparat", Moscow.



**12.20.-12.50. *Development of Efficient and Safe Technologies in the Production of Anti-Anthrax Preparations on the Basis of Vaccine Strains.***

Dr. A. Manichev, VGNKI of Vetpreparations, Vladimir.

13.00.-14.00. Lunch.

**14.00.-14.30. *Production of Diagnostic and Vaccine Anti-Plague Preparations.***

Drs. I. Tikhonov, A. Kovtun

**14.30.-16.30. *Opportunities and Possibilities of the Joint Stock Company "Omutninskiy Scientific, Experimental and Industrial Base".***

Prof. Yu. Mironenko, Director of the Joint Stock Company  
"Omutninsky Scientific, Experimental and Industrial Base",  
Omutninsk.

16.30.-16.50. Coffee break.

**16.50.-17.20. *Modern Equipment for Complex Optimization and Mechanization of Biotechnology Processes.***

Prof. A. Samuilenko, Dr. E. Ruban, VNIi and TIBP.

17.20.-19.00. Round Table Discussions.

19.00. Working dinner. Individual meetings with potential partners.

During the dinner, chairmen of the Sections will exchange opinions of the results of the sections activities.

Thursday, June 19.

Session 1.

(Continuation of Work Session in parallel with Section 2).

**Problems of Prophylaxis of Severe Diseases,  
Test-Systems for Early Diagnosis.**

Co-chairmen: Dr. E. Pimenov; Prof. V. Efremenko, Scientific  
Research Institute of Plague, Stavropol.

- 9.00-9.30. ***Molecular and Biological Investigation of Orthopoxviruses Pathogenic for Humans (Monkeypox Virus, Cowpox Virus).***  
Dr. S. Shelkunov. SSC VB "Vector", Koltsovo.
- 9.30.-10.00. ***Immunodiagnosics of the Opisthorchiasis.***  
Dr. V. Loktev. SSC VB "Vector", Koltsovo.
- 10.00.-10.30. ***Cloning of Specific Nucleotide Sequences of Pseudomonas pseudomallei for Application in Elaboration of Diagnostic Preparations.***  
Dr. I. Abaev, SSC "Applied Microbiology", Obolensk.
- 10.30.-11.00. ***Stress Reaction of Bacteria - Agents in Immuno- and Pathogenesis of Severe Infectious Diseases.***  
Dr. C. Biketov, SSC "Applied Microbiology", Obolensk.
- 11.00.-11.20. Coffee break.
- 11.20.-11.50. ***Molecular-Biological and Immunochemical Analysis of Clinical Strains of Tuberculosis and Mycobacteriosis.***  
Dr. I. Schemyakin, SSC "Applied Microbiology", Obolensk.
- 11.50.-12.20. ***Evaluation of Therapeutic Activity of Quinolone Group Preparations in the Treatment of Severe Infections.***  
Drs. N. Vasil'ev, V. Levchuk, V. Kalininskiy, S. Kuznetsov
- 12.20.-12.50. ***Experimental Justification of Chemotherapeutical Methods for Plague Treatment at the Stage of Endotoxic Shock.***  
Drs. N. Vasil'ev, V. Romanov, B. Shabalin
- 13.00.-14.00. Lunch.

**14.00.-14.30. *Indication of Aboviruses and Specific Diagnostics of Particularly Dangerous Arbovirus Infections by Time-Resolved Fluoroimmunoassay (ISTC Project #624).***

Dr. V. Pomelova, State Research Institute of Biological Engineering, Moscow.

**14.30.-15.00. *Elaboration of Treatment of Chronic Meliodosis Using Specific Immunogenes of Pseudomonas.***

Dr. I. Kalachev, SSC "Applied Microbiology", Obolensk.

**15.00.-15.30. *Development of Express-Diagnostics for Identification of Legionella in the Surrounding Environment and in Clinical Materials.***

Dr. N. Starisyn, SSC "Applied Microbiology", Obolensk.

15.30.-16.00. Speech of EU Representatives.

16.00.-16.20. Coffee break.

**16.20.-16.50. *Elaboration of High Sensitive Test-System on the Basis of Polymerase Chain Reaction (PCR) for Rapid DNA Detection of Plague, Tuberculosis and Cholera.***

Drs. S. Gordeev, A. Glukhov, All Russian Scientific Center of Molecular Diagnostics and Treatment, Moscow.

**16.50.-17.20. *Elaboration of a Highly Sensitive Test-System on the Basis of Reverse Transcription and PCR for Detection of Rotoviruses.***

Dr. A. Voronov, All Russian Scientific Center of Molecular Diagnostics and Treatment, Moscow.

**17.20.-17.50. *Development of Express-Diagnostics Systems for Detection of Infectious Diseases of the Base of Immunofiltration.***

Prof. P. Sveshnikov, All Russian Scientific Center of Molecular Diagnostics and Treatment, Moscow.

**17.50.-18.20. *Elaboration of Approach for Diagnostic of Latent Forms of Virus Infections on the Basis of Activation of Virus Sequences Induced in the Human Genome.***

Dr. Yu. Plyashkevich, All Russian Scientific Center of Molecular Diagnostics and Treatment, Moscow.

18.20.-19.00. Final round table discussion.

19.00. Reception. Meetings with partners.

Thursday, June 19.

Session 2.

(Continuation of Work Session in parallel with Section 1).

**Technology for Development and Administration of  
Medicinal Forms and Biopreparations**

**Cochairmen:** Dr. N. Vasil'ev; Dr. E. Sventitskiy, Director of the GosNII of Extrapure Biopreparations, St. Petersburg,  
Prof. N. Medunitsyn, Director of RGISK, Moscow.

**9.00.-9.30. *Characteristic Features of Biopreparation Production for Prevention of Severe Infections.***

Prof. A. Panin, Director of VGNKI of Vetpreparations.

**9.30.-10.00. *New Systems for Drug Delivery and Related Technologies***

Dr. E. Sventitskiy, GosNII of Extrapure Biopreparations, St. Petersburg.

**10.00.-10.30. *Liposaccharides of Yersinia pestis: Data on Immuno- and Fagotyping.***

Dr. T. Gremyakova, SSC "Applied Microbiology", Obolensk.

**10.30.-11.00. *Application of Different Delivery Systems of Protective Protein Antibodies in the Construction of Anthrax Vaccines.***

Dr. T. Gremyakova, SSC "Applied Microbiology", Obolensk.

11.00.-11.20. Coffee break.

**11.20.-11.50. *Construction and Expression of Recombinant Genes of Diphtheria Toxins.***

Dr. N. Vologansev, SSC "Applied Microbiology", Obolensk.

**11.50.-12.20. *Development of Recombinant Vaccine Biopreparations Against Severe Infections.***

Dr. I. Perevozchikova, VNIIZZH, Vladimir.

**12.20.-12.50. *Nonviral biopreparations on the Basis of Synthetic Peptides.***

Dr. C. Rybakov, VNIIZG, Vladimir.

13.00.-14.00. Lunch

**14.00.-14.30. *Vaccine Strains of the Anthrax Microbe - A New Bacterial Vector for Elaboration of Vaccines Against Zoonoses and Unique Recipients for Production of Biologically Active Substances.***

Dr. A. Noskov, SSC "Applied Microbiology", Obolensk.

**14.30.-15.00. *Elaboration of Live Recombinant Vaccine Against Legionellosis.***

Dr. V. Pavlov, SSC "Applied Microbiology", Obolensk.

15.00.-16.00. Speech of US & EU Representatives.

16.00.-16.20. Coffee break.

**16.20.-16.50. *Study of Mechanisms of Vaccine Action on the BAR cell.***

Prof. A. Rubin, Drs. B. Turovezky, A. Andreev, Biological Department of Moscow State University, Moscow.

**16.50.-17.20. *Application of Receptor-Dependent Transgenes for Creation of Animal-Bioreactors.***

Prof. A. Sobolev, Biological Department of Moscow State University and VNIIB Agricultural Biotechnology, Moscow.

17.20.-19.00. Final discussion around the table.

19.00. Reception.

**Friday, June 20.**

9.00. Optional tour to Omutninsk.