**Program of the Workshop-Conference**

**“Biosafety principles in microbiological laboratories”**

(for virologists, microbiologists, epidemiologists and public health workers of CIS countries,

October 14-18, 2013**)**

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|  | **Monday (Day 1)** |
| 8 30 a.m. | Registration of participants |
| 9 00 a.m. | **Opening of the Workshop**  **Glenn Schweitzer**, Director of the Office for Central Europe and Eurasia, NAS, USA  **David Franz**, Consultant and Professor, University of Kansas  **Mamedyar Azayev,** Head of Biosafety Educational Unit at the SRC VB “Vector”  **Sergey Netesov**, Vice-Rector (Research) at the Novosibirsk State University |
| 9 15 a.m. | **Sergey Netesov**. Classification of infectious microorganisms by risk groups. The differences between the classification recommended by the WHO and that accepted in Russia. The concept of laboratories biosafety; description of biosafety levels. |
| 11 00 a.m. | Coffee break. |
| 11 30 a.m. | **Larissa Uryutova**. Biosafety Level 3 (design features, laboratory equipment, personnel access and protection, medical monitoring and health surveillance). |
| 12 30 p.m. | Lunch |
| 2 00 p.m. | **Larissa Uryutova**. Biosafety Levels 1 and 2 (requirements for laboratory furniture and laboratory equipment, personnel access and protection, medical monitoring and health surveillance). |
| 3 00 – 4 30 p.m. | **Alexandr Boldyrev**. PCR diagnostics of hemorrhagic fevers. |
| 4 30 – 4 50 p.m. | Coffee break |
| 4 50 – 6 40 p.m. | Brief reports of participants from Central Asian countries on outbreaks of infectious diseases and other instructive cases from practice. |
|  | **Tuesday (Day 2)** |
| 8 30 a.m. | **Alexandra Dadaeva, Natalya Zubavichene**. Standard precautions when working with blood, other body fluids, organs, and tissues.  **Natalya Zubavichene, Ekaterina Genina**. The use of PPE when working at different Biosafety levels (theory and practice). |
| 10 00 a.m. | Coffee break. |
| 10 30 a.m. | **Alexandra Dadaeva, Natalya Zubavichene**. The reporting of accidents and emergencies. Plans and procedures for emergency situations. Dividing to 4-5 groups and work with groups. Solving situational problems to ensure biosafety. Moderators: M.Azayev, T.Ilyicheva, D.Franz, S. Netesov, J.Leduc, J.Silva |
| 12 30 p.m. | Lunch. |
| 2 00 – 4 30 p.m. | Dividing to 3 groups and work with groups. Discussions and solving situational problems to ensure biosafety. Moderators: **M.Azayev, T.Ilyicheva, D.Franz, S.Netesov** |
| 4 30 – 4 50 p.m. | Coffee break |
| 4 50 – 6 40 p.m. | Brief reports of participants from Central Asian countries on outbreaks of relevant diseases and other instructive cases from practice. |
|  | **Wednesday (Day 3)** |
| 8 30 a.m. | Group 1. RT-PCR procedure: preparation of samples and RNA extraction.  RT-PCR method for detection of influenza virus RNA. **V.A. Ternovoy, A.N. Shikov, T.N. Ilyicheva (theory and practice).**  Group 2. Excursion to the Vivarium of the Institute of Cytology and Genetics.  Group 3. Epidemiological exercise. |
| 11 00 a.m. | Coffee break. |
| 11 30 a.m. | Group 2. RT-PCR procedure: preparation of samples and RNA extraction.  RT-PCR method for detection of influenza virus RNA. **V.A. Ternovoy, T.N. Ilyicheva, A.N.Shikov (theory and practice).**  Group 3. Excursion to the Vivarium of the Institute of Cytology and Genetics.  Group 1. Epidemiological exercise. |
| 1 30 p.m. | Lunch. |
| 2 30 – 4 00 p.m. | Group 1. Excursion to the Vivarium of the Institute of Cytology and Genetics.  Group 2. Epidemiological exercise.  Group 3. RT-PCR procedure: preparation of samples and RNA extraction. RT-PCR method for detection of influenza virus RNA. **V.A. Ternovoy, T.N. Ilyicheva, A.N.Shikov (theory and practice).** |
| 400 – 5 00 p.m. | **Vladimir Ternovoy, Alexandr Shikov**. Registration and interpretation of results of RT-PCR for detection of influenza virus RNA: the experience of the WHO laboratory network. |
| 500 – 6 00 p.m. | **Stanislav Sorochenko**. Disinfection and sterilization. Decontamination of biological safety cabinets and the vivarium. Chemical and thermal disinfection and sterilization. Waste disposal. Incineration. |
|  | **Thursday (Day 4)** |
| 8 30 a.m. | **David Franz**. “Integration of Biosafety/Biosecurity with Responsibility of Researchers in Life Sciences” |
| 930 a.m. | Roundtable discussion: biosafety problems in clinical, laboratory and scientific practice. Specialist from the USA, Russia and Central Asian countries.  **Moderators: Sergey Netesov and David Franz** |
| 10 30 a.m. | **Coffee break** |
| 11 00 a.m. | **Lyudmila Bakulina**. Main principles of transportation of infectious materials. International transportation regulations. Basics of triple packaging. Procedures for inactivation of spilt material. |
| 11 30 a.m. | Assessment of conformity of laboratory room layouts with biosafety regulations (attendees analyze the location of the laboratory rooms in their laboratories) **Moderators: Nadezda Yun, David Franz, Sergey Netesov** |
| 12 30 p.m. | Lunch. |
| 2 00 – 3 30 p.m. | **Valery Loktev**. The problems of imported zoonotic infections. Emerging infections in the Central Asia countries. |
| 3 30 – 4 40 p.m. | **Tatyana Ilyicheva**. Orthomyxoviruses (epidemiology and diagnostics). |
| 4 40 – 5 10 p.m. | Coffee break |
| 5 10 – 530 p.m. | **Mamedyar Azayev**. Training in biosafety: Educational activities of SRC VB Vector. |
| 5 10 – 530 p.m. | Summing up the Workshop activities. Delivery of certificates.  **David Franz**, Consultant and Professor, University of Kansas  **Mamedyar Azayev,** Head of Biosafety Education Unit at the SRC VB “Vector”  **Sergey Netesov**, Vice-Rector (Research) at NSU |
| 7 p.m. | Farewell Lunch |
|  | **Friday (Day 5)** |
| 800 - 9 00 a.m. | Breakfast |
| 1000 a.m. | Excursions and departure |

The following normative documents were used to develop the Program:

* “Laboratory Biosafety Manual”, WHO, 3rd Edition, Geneva, 2004.
* Sanitary and Epidemiological Rules “Safety of work with microorganisms of 1-2 groups of pathogenicity (danger)”. SR 1.3.1285-03.
* Sanitary Rules “Safety of work with microorganisms of 3-4 groups of pathogenicity and helminths”. SR 1.3.2322-08.
* “The procedure for registration, storage, transfer and transport of microorganisms of 1-4 pathogenicity groups”. SR 1.2.036-95.