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)

	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).**
4^{00} – 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.
5^{00} – 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"
9^{30} 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} – 5^{30} p.m.	**Mamedyar Azayev**. Training in biosafety: Educational activities of SRC VB Vector.
5 ^{10} – 5^{30} 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)
8^{00} - 9 ^{00} a.m.	Breakfast
10^{00} 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.