

**Formal Consultative Meeting of the States Parties
to the Convention on the Prohibition of the
Development, Production and Stockpiling
of Bacteriological (Biological) and
Toxin Weapons and on Their Destruction**

Distr.: General
6 September 2022

English only

2022 Meeting

Geneva, 26 August and 5-9 September 2022

Item 6 of the agenda

**Respective outstanding questions by the Russian Federation
to the United States and to Ukraine concerning the fulfilment
of their respective obligations under the Convention in the context
of the operation of biological laboratories in Ukraine**

**Ukraine Presentation. Biological and Toxin
Weapons Convention Article V Consultative
Meeting**

Submitted by Ukraine



Ukraine Presentation



**Biological and Toxin Weapons Convention
Article V Consultative Meeting**

Ukraine's compliance with obligations under the BTWC and engagement in BTRP activities

Position Statement

- Russian accusations will never justify its unprovoked attack against Ukraine
- Ukraine fully complies with its obligations under the BTWC
- Ukraine never developed weapons of mass destruction, including biological weapons
- Ukraine uses world's best practices in terms of biothreat reduction
- Ukraine consistently provides respective information within the CBM

Russian fakes about 'biolabs' from previous years



SECURITY SERVICE OF UKRAINE

СБУ закликає політиків не поширювати неправдиву інформацію про існування в Україні іноземних біологічних лабораторій

12:44, 8 травня 2020

Антифейк

COVID-19

Security Service of Ukraine had to debunk Russian fakes about biolabs in 2020

Source: <https://ssu.gov.ua/novyny/7573>



Made for minds.

NEWS

Russia claims US tested biological weapons in Georgia, killing 73

Date 04 10 2018

Author Louisa Wright, Ashutosh Pandey

Related Subjects Dmitry Medvedev, Russia, South Ossetia, Georgia, War in Ukraine

Similar fakes were produced about Georgia, for example, in 2018
Just like Ukraine, Georgia has parts of its territory occupied by

Russia

Source: Deutsche Welle

Public accessibility of agreements between the US and Ukraine

Agreement
between Ukraine and the United States of America
on providing assistance to Ukraine in the elimination
of strategic nuclear weapons,
as well as preventing
the proliferation of weapons of mass destruction

{ The agreement was approved by Resolution of the Cabinet of Ministers
N 1077 ([1077-93-p](#)) dated 12.31.93 }

In 1993, the Agreement between the United States and Ukraine on **elimination and prevention of proliferation** of weapons of mass destruction was signed.

This agreement provides **a framework** for cooperation in the indicated field.

The Agreement is **publicly available** at zakon.rada.gov.ua, reference number 840_007

Public accessibility of agreements between the US and Ukraine

Agreement
between the Ministry of
Health of Ukraine and the Ministry of Defense of the
United States of America regarding cooperation
in the field of preventing the spread of technologies,
pathogens and knowledge that can be used
in the development of biological weapons

Date of signing: 29.08.2005

Later, in 2005, an additional **implementation agreement** was signed.

Its scope **focuses on countering biological threats**.

The Agreement was aimed at, among other things, on **consolidation of strains**
and their management **in secure centralized laboratories**.

This Agreement is also **public**, available at zakon.rada.gov.ua, reference number 840_138.

Interim key points (1/3)

- ✓ Russia has a **long history of delusions** about biological weapons in its neighboring countries
(**especially after attacking them** and occupying parts of their territory).
- ✓ **Russia produces lies** about agreements that are publicly available, **deliberately misinterpreting** their text.
- ✓ Russia blames other countries for projects that **it carries out itself**, while knowing their **actual value for public health**.

Further cooperation with the US



Within the Memorandum between the Ministry of Health of Ukraine and Black & Veatch Special Projects Corp., Ukraine received an **electronic system for infectious disease reporting**.

EIDSS has various modules for disease surveillance using **One Health approach**.

The data within the system is controlled by the **host country** and cannot be accessed without permission.

Додаток до реєстраційної картки проекту від 07.08.2020 № 3253-10

№ п/п	Назва	код ЄДРПОУ
1.	Державна служба України з питань безпеки харчових продуктів та захисту споживачів	39924774
2.	Національна академія аграрних наук України	06024360
3.	Інститут ветеринарної медицини НААН	05510830
4.	Державний науково-дослідний інститут з лабораторної діагностики та ветеринарно-санітарної експертизи	00699690
5.	Державний науково-контрольний інститут біотехнології і питань мікроорганізмів	19024865
6.	Національний науковий центр «Інститут експериментальної і клінічної ветеринарної медицини» НААН України	00497087
7.	Дніпропетровська регіональна державна лабораторія Державної служби України з питань безпеки харчових продуктів та захисту споживачів	00693517

Another achievement of this Memorandum was the **modernization of key public health laboratories**

One health approach of the EIDSS



Strengthens and supports monitoring and disease prevention in the One World-One Health concept by integrating:

- Human disease cases
- Veterinary disease cases
- Threat vectors
- Laboratory data

EIDSS modules

- **Human Health Surveillance**
- **Veterinary Surveillance**
- **Vector Surveillance**
- **Disease Outbreaks**

**Laboratory
Data Analysis
System
Administration**

EIDSS in Ukraine



Sites:

- 📍 300+ Human sites
- 📍 550+ Veterinary sites

Potential integrations:

- ⋯ TB
- ⋯ E-Health
- ⋯ Bravosoft
- ⋯ National Tests DB
- ⋯ User DB

Official Reports:

- ✅ F1, F2 – to be generated by EIDSS
- 📍 058/O – to be modified to be printed from EIDSS

Certification/Attestation:

- 📍 Approval of CISS for EIDSS – obtaining certification/attestation status for EIDSS

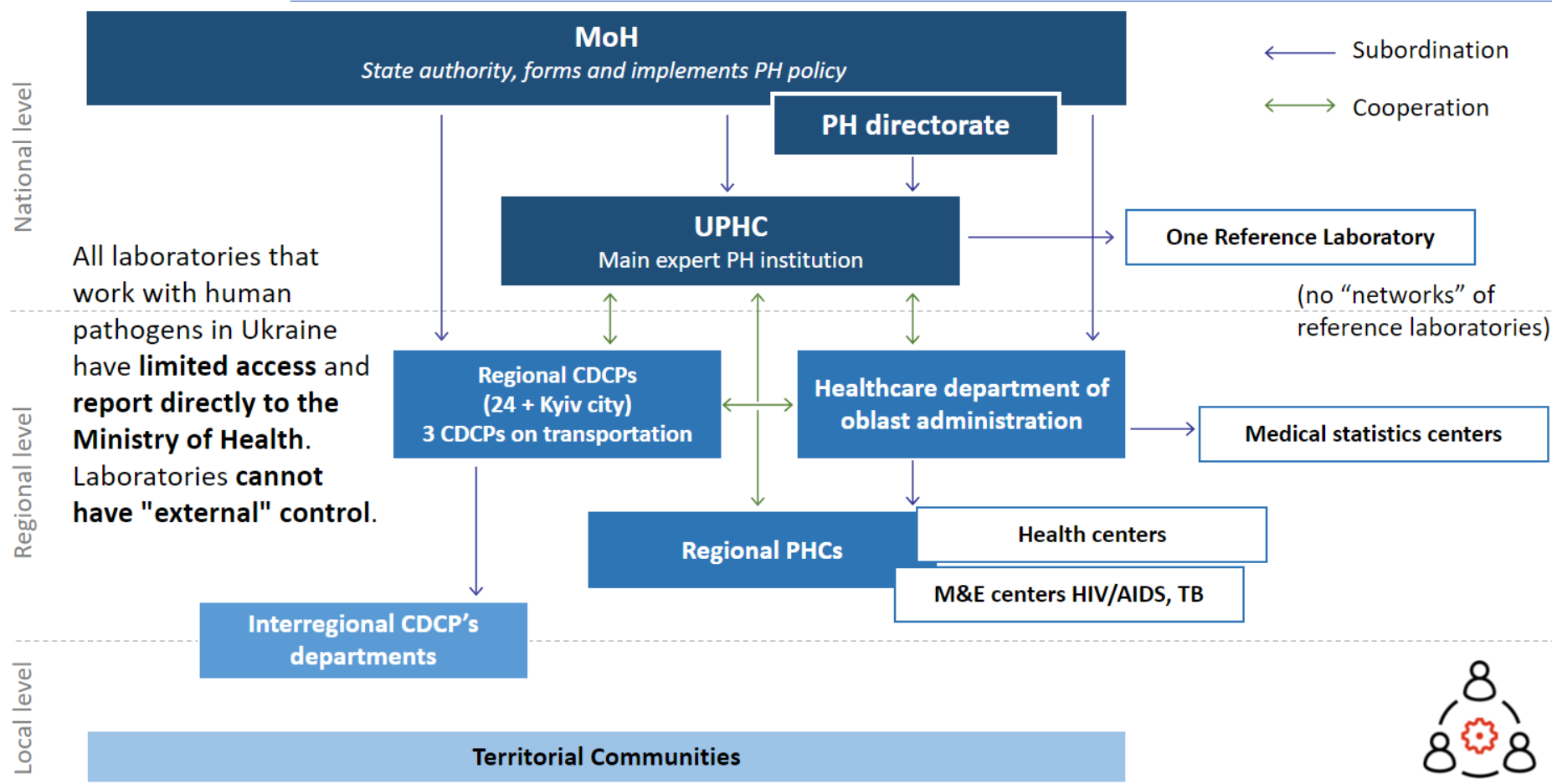


Modernization of key
public health laboratories



Modernization of key
public health laboratories

Current public health system



Centers for disease control and prevention functions (CDCPs)



Epidemiological surveillance and analysis



Risk analysis based on epi. surveillance



Response to public health emergencies



Investigate cases/outbreaks/events



Notifies UPHC on risks detected and health measures activated



Analyse effectiveness of reg. public health system execution & propose measures/activities for improvement



Analyse health determinants, their impact and health inequalities



Data collection and data management; submission data to public health Information Fund and provide data to local health authorities



Monitoring of health indicators



Health promotion activities

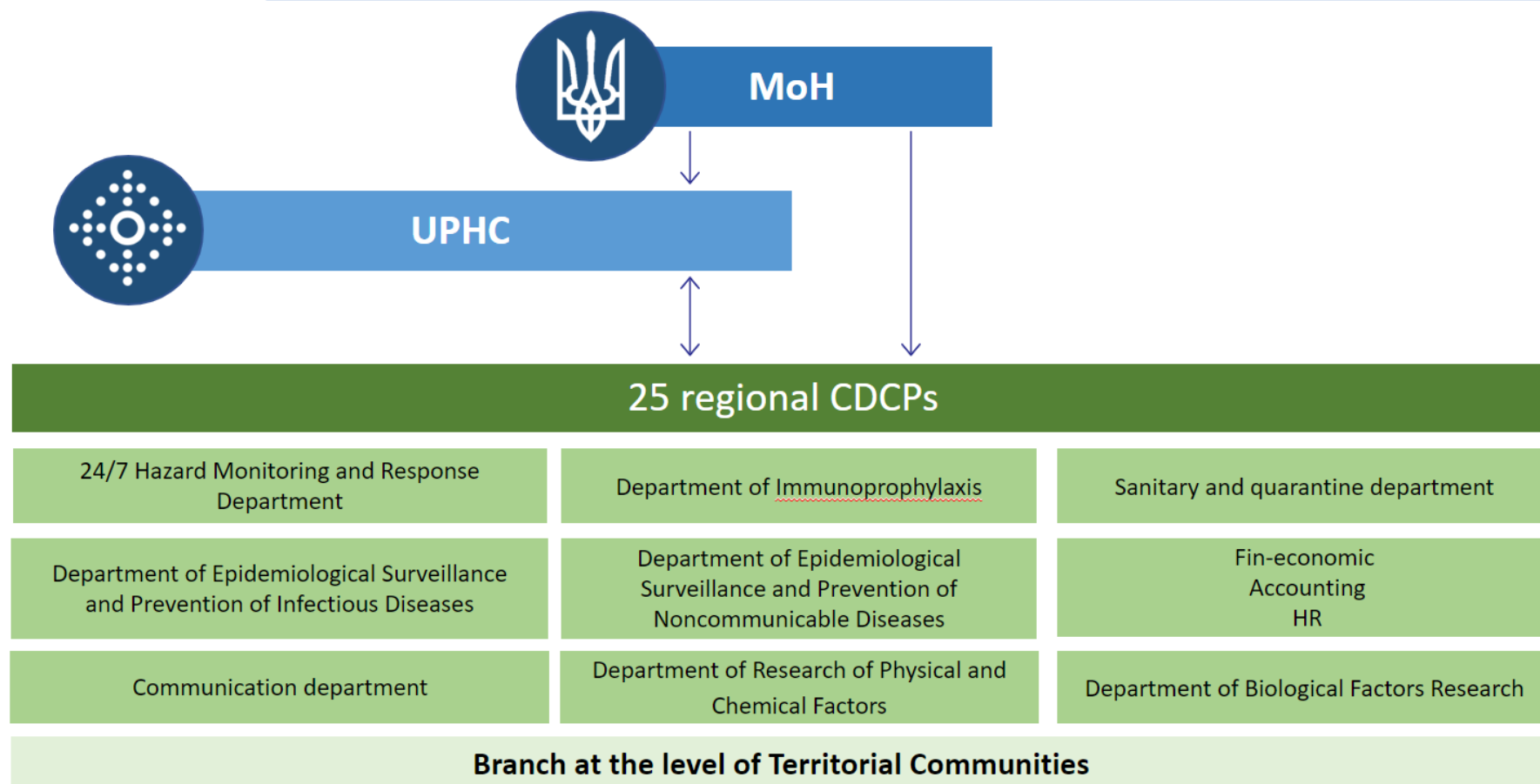


Periodical reports on health and epi. situation



Public health programs development and implementation

CDCP structure



Interim key points (2/3)

- ✓ The United States **support** Ukraine in building a strong public health system.

Strong Ukraine is the opposite of what Russia wants.

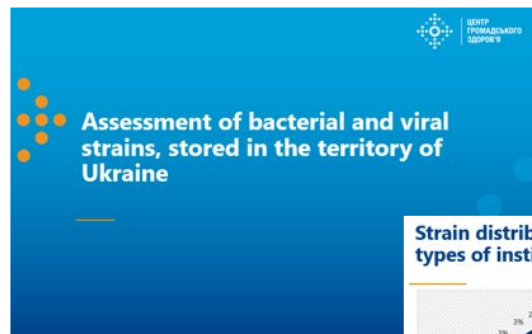
- ✓ The so-called “network of biolabs” is merely **a network of public health laboratories**, extremely helpful in times of COVID-19.
- ✓ Ukraine is building a strong public health system **to protect its citizens** from future pandemics.

I. I. Mechnykov Institute review report

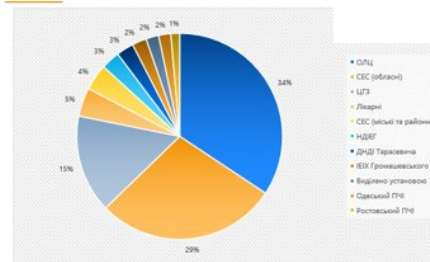
- ✓ The volume of material contained in test tubes is **not indicative of malign intent**.
- ✓ As the report indicates, it is **unclear** how many of the vials actually contain **viable** material.
- ✓ The report merely portrays **common laboratory management challenges**, especially in the setting of:
 - **limited financial resources**
 - **inheritance of collections** from other institutions in the **consolidation process**, and
 - a **complicated governance structure** as a result of organizational mergers
- ✓ The report **did criticize** the Institute and **made recommendations** for corrective action.
- ✓ Such monitoring and regulation are indicative of **appropriate national oversight** of biological facilities.

Assessment of strain collections in Ukraine

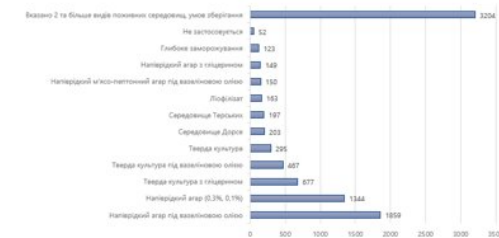
The report on I. I. Mechnykov Institute, provided by Russia, was **a part of a bigger project** conducted by the Ukrainian Public Health Centre



Strain distribution across different types of institutions



Storage conditions



It allowed Ukraine to **finalize its strategy of use** of available strain collections

Main purposes/uses of the stored strain collections

- **Laboratory quality control.** Comparative tests are needed in order to determine the reliability of the results. This is a top priority for public health labs.
- **Biotechnological processes, manufacturing of immunobiological preparations** for the purposes of treatment and diagnostics.
- **Fundamental scientific research.** The topic of the scientific research has to be approved by the Academy of Medical Sciences, the Ministry of Health, the National Academy of Sciences or the Ministry of Education and Science. **Ethical issues** in conducting research are to be **regulated by commissions** on bioethics, established at research institutes. **Main scientific directions:** **1)** study of evolutionary changes of pathogens; **2)** development of new methods of virulence determination; **3)** development of new diagnostic methods (test systems) for infection diagnostics; **4)** development of new nutrient media and standardization of diagnostics; **5)** studying the characteristics of strains used for diagnostics, vaccine production and drug manufacturing;
- **Strain depositing for the purpose of patent procedures.**
- **Quality control of medicinal products.**

Ukraine prioritizes non-proliferation of WMD

DECISIONS

COUNCIL DECISION (CFSP) 2019/1296

of 31 July 2019

in support of strengthening biological safety and security in Ukraine in line with the implementation of United Nations Security Council Resolution 1540 (2004) on non-proliferation of weapons of mass destruction and their means of delivery

- (6) Universal adherence to and full implementation of the Biological and Toxin Weapons Convention (BTWC) and UNSCR 1540 (2004) are among the main priorities of Ukraine in the area of non-proliferation of weapons of mass destruction.
- (7) On 21 March and 27 June 2014, the Union and Ukraine signed an Association Agreement ⁽³⁾ which provides, inter alia, for expedited harmonisation of Ukrainian national legislation with relevant Union legislation, including in relation to the elimination of any obstacles to the comprehensive implementation in Ukraine of UNSCR 1540 (2004). Parts of the EU-Ukraine Association Agreement have been provisionally applied since 1 November 2014. The EU-Ukraine Association Agreement entered into force on 1 September 2017.

Ukraine adheres to the BTWC.

Together with the EU, Ukraine works on harmonization of its national legislation.

Source: <https://eur-lex.europa.eu/eli/dec/2019/1296/oj>

Ukraine's strategy of biosafety and biosecurity

- Ukraine has a publicly available **strategy of biosafety and biosecurity**, aimed at building a strong BSS system.
- It includes the adoption of a **law on BSS** as well as a **mandatory audit** of strain collections stored across different institutions among other things.
- Source:
president.gov.ua/documents/6682021-40997

DECREE OF THE PRESIDENT OF UKRAINE No. 668/2021

On the decision of the National Security and Defense Council of Ukraine dated October 15, 2021 "On the Biosafety and Biosecurity Strategy"

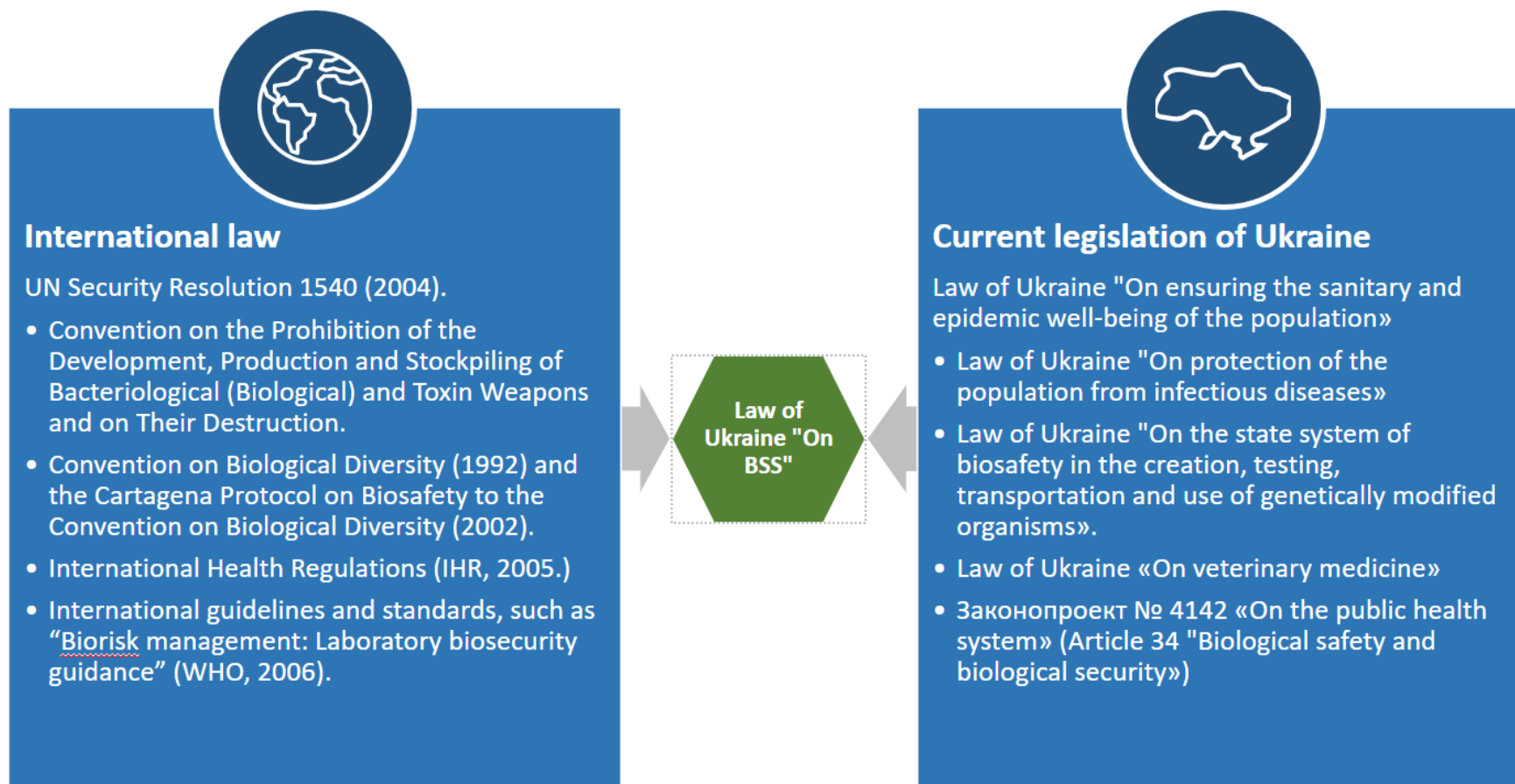
Ukraine actively builds a system of biosafety and security



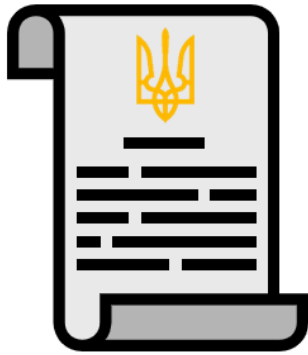
Currently, the Draft Law on Biosafety and Biosecurity is being amended jointly by our partners from WHO Country Office in Ukraine and the OSCE

Like everything else, the BSS system in Ukraine is being developed **by the Ukrainian experts,** **with the support** of our international partners, and **not** at their direction or under their leadership.

The Law of Ukraine "On BSS" takes into account the following

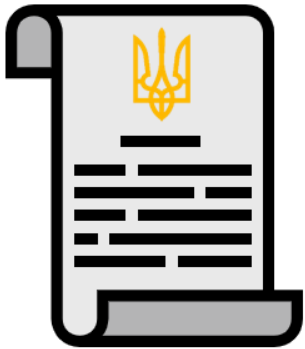


Law of Ukraine "On BSS": advantages and innovations



- **Outlines the BSS system** on the principle of "**One Health**", its operation and state control.
- Offers **modern terminology** harmonized with international and national norms.
- Introduces a **risk-oriented approach** to the field of BSS.
- Determines the **uniform conditions** of state registration, licensing and accreditation.
- Establishes **coordination of authorized bodies** through the Interdepartmental Commission on BSS, without creating a separate authorized body.
- Establishes **uniform requirements** for economic entities engaged in the circulation of biological agents.

Law of Ukraine "On BSS": advantages and innovations (continued)



- Introduces **the State Register** of items of increased biological threat.
- Lays the prerequisites for the **classification** of biological agents.
- **Sets requirements** for the regulation of collection activities.
- Implements mechanisms to **reduce the level of biological threats**, preparedness and response to emergencies and emergencies due to the action of hazardous biological factors.
- Establishes the preconditions for **strengthening** the personnel and scientific **support** of the BSS sphere.
- Establishes **liability for violations** in the field of BSS and introduces a mechanism of prosecution.

Interim key points (3/3)

- ✓ I. I. Mechnykov Institute review report only shows **appropriate national oversight**.
- ✓ The collected strains are used only in the purposes of **quality control, research** and test/vaccine/drug **manufacturing**.
- ✓ Ukraine is currently in the process of building an up-to-date system of biosafety and biosecurity **applying best international practices**.

Ukraine's laboratories are open for independent evaluation



Ukraine is open to international independent experts and has nothing to hide.
Pictures taken at the Reference Laboratory for high-threat pathogens at the Ukrainian Public Health Center, Kyiv.
Shot by CBS News in May, 2022

Source: <https://www.cbsnews.com/news/ukraine-news-russia-war-us-biological-weapons-lab-conspiracy-theory/>

Other absurd questions from Russia

So called Kherson SSU reports

- The world should be very suspicious about the authenticity of these reports.
- Russia uses this as an actual “proof” of U.S. subordination of Ukrainian laboratories, which is **utter nonsense**.
- The Russians conveniently “acquired” these alleged reports while searching for justification for full-scale war of aggression against Ukraine.

Bayraktar issue

- Ukraine does have a system in place to **track the potential for dual use**, for which companies have to specify their product characteristics.
- Some documents attached to the questionnaire posted by Russia are certainly **fake**, since Ukrainian governmental institutions **do not use Russian language** in official correspondence.

Conclusions

- Russian claims are nothing more than misinterpretations, blatant lies and utter nonsense.
- Documents spread by Russia confirm that Ukraine assesses biological threats and strives to reduce their presence on its territory.
- Ukraine cooperates with international partners and is eager to apply best practices. Our laboratories are open for international independent experts and have nothing to hide.



International collaboration

Animal disease surveillance projects in Ukraine



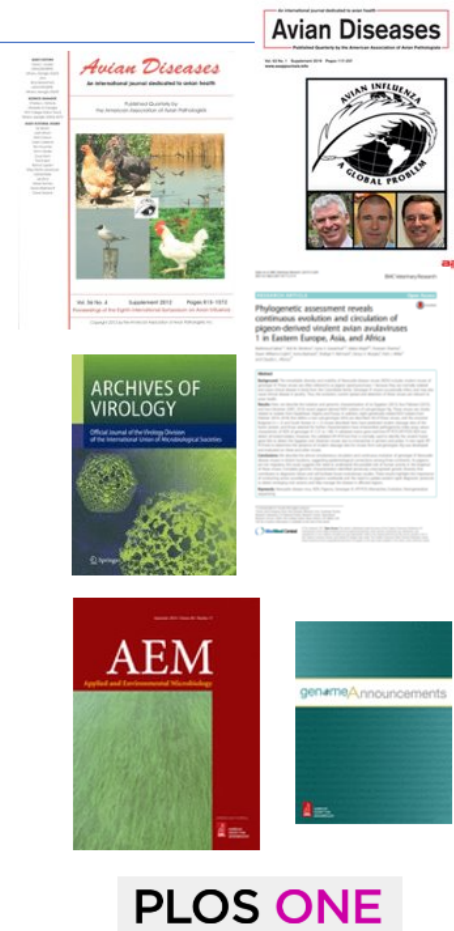
International Cooperative scientific research

- Cooperative international scientific research is a well-known international practice in many fields, including biological area.
- Today, most scientific research is conducted jointly by scientists from different countries (this practice is in Russian Federation). The practice of funding research from other countries is a common practice in scientific community.
- This especially applies to the study of zoonotic pathogens, natural sources of these pathogens, as well as disease prevention and control.
- Ukraine, like all other countries of the world, directs efforts to strengthen international scientific cooperation. The main purpose of which is to reduce the risk of outbreaks of dangerous infectious diseases.



Cooperative scientific research in Ukraine

- The statement that scientific projects in Ukraine (UP4, P781 and others) relate to illegal biological activity (“development of biological weapons”) **is not true**.
- These projects are **scientific surveillance projects** only.
- The main purpose of these projects is **surveillance** of pathogens in nature reservoirs of wildlife (wild birds, bats) in Europe for the prevention of these diseases, better understanding of the ecology of zoonotic pathogens. Such studies are an important part of national pathogen control programs in many countries, as well as international global infectious disease control programs of the World Health Organization and World Organization for Animal Health.
- The results of our research of migratory birds and bats in Ukraine (UP4, P781 projects and other projects) **have been published** in at least 10 publications in international peer-reviewed scientific journals. In addition, the results of these projects have been presented at several international scientific conferences around the World. Some of our results has been submitted for publication and will be published in the near future.
- In our opinion, publication in open scientific journals is evidence of the **openness and transparency** of collaboration of joint scientific research between Ukrainian, US and EU scientists.



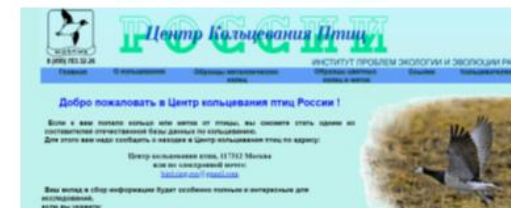


Research of migration of animals and birds

- The statement that migratory birds and animals “can be considered as delivery means (for biological weapons)” is a **complete absurdity**.
- Migration is the regular annual seasonal movement of birds or animals between breeding territory and wintering territory, which is caused by changing seasons, environmental and feed conditions. **They occur in two directions (“back and forth”)**. That means animals and birds return. This is also shown in our studies, in the presentation which were used for disinformation by Russian Federation.
- The study of migrations and ringing is an international world practice, including in the Russian Federation. There is a Bird Ringing Center in Ukraine, in Europe and in Russia as well.
- In the past, the ringing was main methods for study migration and movement of birds and animals. Now scientist have new instruments - GPS/GPRS trackers. The movement date usually downloads in international database (for example, Movebank). These data is open and free to use. Such studies are conducted in Ukraine, Russia and many other countries.
- Sharing of bird ringing data is also a normal international practice. **The data referred to by the Russian Federation were obtained by us from the Russian Federation Center of ringing birds.**



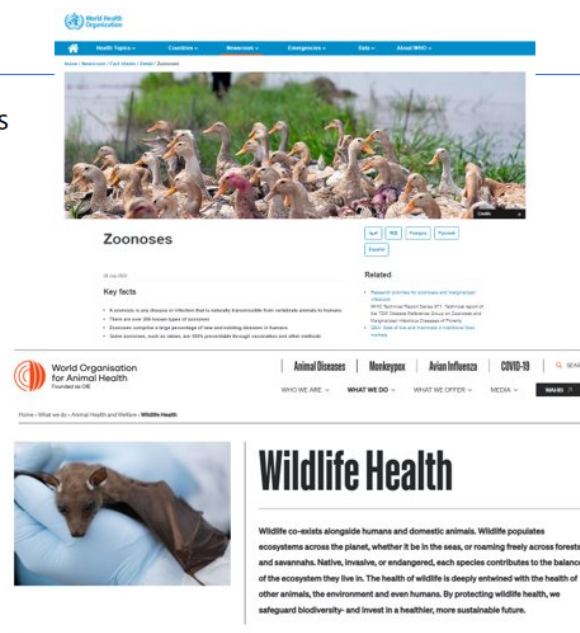
УКРАЇНСЬКИЙ ЦЕНТР КІЛЬЦЮВАННЯ ПТАХІВ





Research of pathogens in natural reservoir

- All scientific community knows – some birds, animals, insects can be as natural source and natural reservoirs of microorganisms. Almost all emerging infectious diseases are zoonotic – animal-borne, bird-borne pathogens that enter the human population, sometimes with catastrophic effect.
- International organizations such as WHO, WOAAH are paying attention to the study of natural reservoirs of pathogens (especial zoonotic pathogens). This activity is very important for diseases control, further disease prevention and preparedness for next pandemic.
- In this reason, the research of wildlife (migratory birds and animals) is crucial important for global health, for understanding of ecology.
- Scientific studies of wild animals and birds as a natural reservoir of pathogens, surveillance program conducted around of World on a systematic basis. **These studies are also being conducted in Ukraine and in the Russian Federation.**
- **It should also be noted that similar “biological research” in the Russian Federation is carried out** in different institution and organization, in framework of state programs, state grant programs of the Russian Federation, and jointly with foreign partners within the framework of international programs (including from the USA, Japan, EU).



Understanding Animal Disease Surveillance Systems

A well-designed animal disease surveillance system allows for the early detection of health threats. Preventive action and early reaction to outbreaks could contain dangerous diseases before they cause damage and serve to preserve the health of animals and humans alike.

In several countries, disease surveillance systems for domestic and wild animals are managed separately, even though microbes can jump from one to another. Having a more holistic approach, with real-time intelligence sharing for both types of animals in one surveillance system is key. By doing so, we could increase our understanding on how microbes move between species and ecosystems, and on how to determine and predict future outbreaks in animals.

Varied stakeholders at multiple levels can be involved in disease surveillance, which can be conducted in two primary ways.



Research of migratory wild birds in the Russian Federation as carriers of zoonotic pathogens (including HP influenza virus, Newcastle disease)

ФЕДЕРАЛЬНАЯ СЛУЖБА ПО ВЕТЕРИНАРНОМУ И ФИТОСАНИТАРНОМУ НАДЗОРУ (РОССИЙСКОЕ НАДЗОР)

Поиск по сайту

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ УЧРЕЖДЕНИЕ «ФЕДЕРАЛЬНЫЙ ЦЕНТР ОХРАНЫ ЗДОРОВЬЯ ЖИВОТНЫХ»

ФГБУ «ВНИИЗЖ» Научная деятельность Образование Научная библиотека Услуги Покупатели Фискал в РН Пресс-служб

Главная Научная деятельность Научно-исследовательская работа Тематика НИР

ТЕМАТИКА НИР

ТЕМАТИКА научных исследований ФГБУ «ВНИИЗЖ» в 2021 году

В рамках утвержденного государственного задания учреждение будет выполнять работы по следующим наг

1. Проведение прикладных научных исследований.

1.1. «Выявление и изучение молекулярно-биологических свойств возбудителей трансграничных заболеваний. Описание особенностей заноса и распространения болезней, возможных факторов передачи».

1.2. «Сбор и анализ эпизоотологических данных для оценки статусов благополучия субъектов Российской Ф

6. Выполнение экспериментальных научных разработок:

«Разработка вакцины ассоциированной против респираторного микоплазмоза и инфекционного синовита птиц инактивированной эмульгированной; разработка метода очистки антигенов вируса бешенства штамма RV-97; разработка тест-системы на основе ИФА для выявления антител к вирусу инфекционного ринотрахеита крупного рогатого скота; разработка набора для определения антител к вирусу АЧС в сыворотках крови свиней методом ИФА с использованием комплексного антигена; разработка метода выявления РНК вируса гриппа птиц подтипа N6 с помощью ПЦР в режиме реального времени».

7. Техническое сопровождение и эксплуатация, вывод из эксплуатации информационных систем и компонентов информационно-телекоммуникационной инфраструктуры.

8. Создание и развитие информационных систем и компонентов информационно-телекоммуникационной инфраструктуры.

9. Ведение и пополнение Всероссийской коллекции клеточных культур, штаммов вирусов, микробов и микопатогенов.

10. Организация и проведение межлабораторных слепых испытаний.

11. За счет средств учреждения ежегодно проводятся исследования по тематике «Разработка комплексной системы контроля инфекционных болезней животных и совершенствование методов исследования остатков запрещенных и вредных веществ в организме животных, кормах и продуктах животного происхождения».

В рамках международного сотрудничества проводится совместная работа с Международным агентством по атомной энергии МАГАТЭ по темам:

– «Использование образцов ткани от перелетных диких водоплавающих птиц для выявления вирусов гриппа птиц и одновременной идентификации видов птиц, а также образцов перьев для определения миграций птиц с использованием анализа устойчивых изотопов»;

– «Использование образцов в качестве экспресс-метода подтверждения подлинности молока и растительных жиров».

ФГБУ «ВНИИЗЖ» принимает участие в реализации межведомственных научных проектов:

– Комплексный план научных исследований «Диагностика и мониторинг особо опасных инфекций животных»;

– Комплексный план фундаментальных научных исследований «Разработка вакцины против африканской чумы свиней, в том числе для перорального применения для диких кабанов».

The Russian Federation is conducting identical work.



Research of migratory wild birds in the Russian Federation as carriers of zoonotic pathogens (including HP influenza virus, Newcastle disease)

Reference center for monitoring highly pathogenic avian influenza

The Russian Federation is conducting more of the exact same work

Information on the results in research areas under the Program of Fundamental Scientific Research of the State Academies of Sciences in 2020

Сведения о результатах по направлениям исследований в рамках Программы фундаментальных научных исследований государственных академий наук на 2013-2020 годы в 2020 году

ФГБНУ «Федеральный исследовательский центр фундаментальной и трансляционной медицины» (ФИЦ ФТМ)

Номер и наименование направления фундаментальных исследований (по Программе)	Полученные результаты (в привязке к ожидаемым результатам по Программе)
VIII Медицинские науки	

Раздел VIII. Медицинские науки
Направление исследований 119. Молекулярная эпидемиология, экология возбудителей инфекций

- Мониторинг за циркуляцией ортомиксовирусов (вирус гриппа) и парамиксовирусов у диких и домашних птиц, проводимый с целью выявления патогенных вариантов для человека и животных, позволил выделить 74 изолята вируса гриппа и парамиксовирусов различных типов. Проводится секвенирование полученных изолятов и их депонирование в виде штаммов вирусов в Государственную коллекцию вирусов. Выявлено 6 очагов циркуляции высокопатогенных вирусов гриппа H5N8 субтипа, обладающих реальным пандемическим потенциалом. Выделены изоляты вируса, изучены их биологические свойства, сделан секвенирование генома. Установлено, что на территории России циркулируют варианты высокопатогенных вирусов гриппа H5N8 субтипа, ранее выявленные на территориях Европы (Голландия, Болгария, Южная Германия).

- Полученные сведения о вирусах птичьего гриппа Евразии позволили идентифицировать большой набор реассортантов H5 NPA1. Выявлено 7 основных реассортантных вирусов H5, имеющих различные комбинации сегментов генов. Предложена филогеографическая схема реассортантных событий, связанных с географическими группами водоплавающих птиц и их миграционными путями.

- В составе международной группы (Россия, Япония, Вьетнам, Монголия, Аляска) осуществлен анализ более 40 тысяч лабораторно проанализированных полевых записей по выделению вирусов гриппа птиц в Азиатско-Тихоокеанском регионе; выбраны

Monitoring the circulation of orthomyxoviruses and paramyxoviruses in wild birds
..... international group of scientists (Russia, Japan, Vietnam, Mongolia, Alaska)



Research of migratory wild birds in the Russian Federation as carriers of zoonotic pathogens (including HP influenza virus, Newcastle disease)

Even MORE of the same work conducted between the Russia and China

Грантовая поддержка проектов и исследовательских программ

Проекты РФФИ 2018 – 2021 гг.

1 2018-2020 гг, конкурс е-Азия_а 2018

— Изучение широтной миграции и реассортации генов потенциально зоонозных вирусов птичьего гриппа в популяции диких птиц вдоль Восточноазиатского — Австралийского пролетного пути в Азиатско-Тихоокеанском регионе

Study of latitudinal migration and gene reassortment of potentially zoonotic avian influenza viruses in wild bird populations of the East Asian-Australian flyway in the Asia-Pacific region

— Изучение молекулярных эффектов радиотерапии на микроокружение опухоли при лечении глиобластомы

Руководитель — д.б.н. Григорьева Э.В.

2019-2020 гг, конкурс Китай_а 2019

— Циркуляция и распространение высокопатогенного вируса гриппа птиц А и других вирусов птиц между Россией и Китаем

Circulation and spread of highly pathogenic avian influenza A and other viruses between Russia and China



International projects by the ISTC

The Russian Federation accuses Ukraine that the "biological studies" were carried out within the framework of projects of Science and Technology Center in Ukraine (STCU), but in the period from 1994 to 2020 **Russian have got more than 897 million US dollars for projects via International Science and Technology Center (ISTC)**. Part of these funds was directed, among other things, to medical-biological and veterinary projects, as well as projects to create appropriate conditions in biological laboratories of the Russian Federation.



2020 Project Funding and Total Project Funding (1994-2020) - by Beneficiary Country

Country	Number of funded projects 2020	Allocated funds 2020 (USD)	Number of funded projects Total	Allocated Funds Total (USD)
Armenia	1	300,000	215	54,598,118
Belarus	-	0	125	32,005,277
Georgia	1	388,280	207	43,873,494
Kazakhstan	2	438,244	292	110,673,230
Kyrgyzstan	-	0	105	31,759,676
Russia	-	0	2,630	897,686,073
Tajikistan	-	0	72	26,992,226
Ukraine	-	0	1	64,296
Regional	6	16,598,841	16	39,368,914
Total	10	\$17,725,365	3,663	\$1,237,021,302

#3468	Viroid and Phytoplasmas	Phytopathology Research Institute	Partner	USA
#3681	Septorioses of Cereals In Russia	Phytopathology Research Institute	Partner	USA
#3745	Controlling fungi with new, safe approaches	Phytopathology Research Institute	Partner	USA
#3940	Control of Influenza A Virus Infection	Ivanovsky Institute of Virology	Partner	USA
#4071	Systemic acquired plant disease resistance	Phytopathology Research Institute	Partner	USA
#K-1896	Natural Base for Pesticides and Anti-Infective Agents	National Biotechnology Center of Kazakhstan / Institute of Plant Biology and Biotechnology	Partner	USA
#2618	Safety and Security System Upgrade at Pokrov Plant	Pokrov Plant of Biopreparations	Partner	USA
#3427	Security System at Institute of Animal Health	Federal Centre for Animal Health	Partner	USA
#4079	Isolated Wetlands of the Former Soviet Union	Institute of Monitoring of Climatic and Ecological Systems of SB RAS	Partner	USA
#A-1957	Probiotics growing on milk oligosaccharides	Scientific and Production Center "Amibiotechnology" NAS RA	Partner	USA
#B-488	Early Radiation Data for Chernobyl Accident	Center for Environmental Control and Radiation Monitoring	Partner	USA



International projects by the ISTC

Medicine			
#2734	Cholinesterase for Prophylactics of Poisoning by Organophosphorous Inhibitors	State Research Institute of Organic Chemistry and Technology, Moscow, Russia	France
#2879	Research Center for Tuberculosis Clinical Trials	Ministry of Health / The I.M. Sechenov First Moscow State Medical University / Research Institute of Phthisiopulmonology, Moscow, Russia	USA, Switzerland
#2893	Coherent Photonics and Computer Simulation in Dentistry	MIFI, Moscow, Russia	France, Germany
#3135	Molecular Diagnostics of Mixed Tick-Borne Infections	State Research Institute of Biological Instrument-Making, Moscow, Russia	USA
#3301	Prophylaxis and Treatment of Myocardial Infarction	Institute of Theoretical and Experimental Biophysics, Puschino, Moscow Region, Russia	France, Finland
#3426	Quorum Sensing Genes of Dangerous Pathogens	State Research Centre for Applied Microbiology and Biotechnology, Obolensk, Moscow Region, Russia	France
#3436	Influenza A viruses in Novosibirsk region	State Research Centre of Virology and Biotechnology VECTOR, Koltsovo, Novosibirsk Region, Russia	USA
#3505	Limited Efficacy of Antiherpetic Drugs	Gamalei Institute of Epidemiology and Microbiology, Moscow, Russia	Canada
#3563	Planning System for Proton Therapy	VNIITF, Snezhinsk, Chelyabinsk Region, Russia	
#3591	Cancer Therapy by Carbon Ions	ITEP (ITEP), Moscow, Russia	
#3808	Cell Therapy of Ischemia	Institute of Immunological Engineering, Lyubuchany, Moscow Region	
#B-1489	Diagnostics of Tumors in Children	National Academy of Sciences of the Republic of Belarus / Institute of Informatics Problems, Minsk, Belarus	
#G-1195	H.pylori Epidemiologic Studies	National Centre for Diseases Control, Tbilisi, Georgia	
#I-151	Upgrade of diagnostic radiopharmaceuticals facility in compliance with GMP standards	Khlopin Radium Institute, St Petersburg, Russia	

The Russian Federation accepted U.S. funding for multiple research projects on Avian Influenza, Newcastle Disease, and Tick-Borne infections in Russia

Detection of Newcastle Disease and Avian Influenza Viruses

Highly pathogenic avian influenza (HPAI) is an extremely infectious systemic viral disease of poultry that produces high mortality and necrotic, hemorrhagic or inflammatory lesions in multiple visceral organs, namely the brain and skin. The Type A influenza viruses can infect a wide variety of animals including wild ducks, chickens, turkeys, pigs, horses, mink, seals and humans. The virulence of AI viruses varies and should be tracked and analyzed in order to develop prevention, control and eradication strategies.

Project #3005 is studying isolates of Newcastle disease and avian influenza viruses over the territory of Russia using up-to-date diagnostic facilities as well as improved methods of isolation, identification, strain differentiation, serological diagnostics and typing.

The assessment of the pathogenicity of a newly isolated AI virus is critical to develop appropriate control strategies and to assess

its potential impact on human and animal health as well as international trade. Highly pathogenic avian influenza has been used as a legitimate trade barrier to protect countries or regions from exotic or foreign poultry disease, therefore monitoring and prevention of these diseases are important for the national economy.



Alexander Kassianov (right), Project Participant

Leading Institute	Science collaborators	Total funds allocated	Grants
Federal Centre for Animal Health, Vladimir, Russia (FCAH)	US Department of Agriculture, USA	\$650,000 (Partners)	\$257,100



International projects by the ISTC

- It should be noted that at least 10 projects were carried out on topics that completely coincide with the research of Ukrainian scientists "who are allegedly engaged in the development of biological weapons."
- These are ISTC projects (#3940, 2618, 3427, 2800, 4006, 3017, 3436, 3219, 2738, 3070) and many other projects.

We emphasize that all these projects are similar to the projects implemented in Ukraine.

18 Years Supporting International Scientific Cooperation

LIST OF PROJECTS COMPLETED IN 2012

No	Short title	Leading Institution	Funding Party	Collaborators
Agriculture				
#2625	GIS-Based Interactive Agricultural Atlas	St Petersburg State University / Geography and Geoecology Faculty, St Petersburg, Russia	Partners	
#2877	Ecotoxicological Risk Assessment of Transgenic Insecticidal Plants	Research Center of Toxicology and Hygienic Regulation of Biopreparations, Serpukhov, Moscow reg., Russia	Partners	USA
#3017	Isolation and Identification of Mycoplasmas	Federal Centre for Animal Health, Vladimir, Russia	Partners	USA
#3036	Wheat Diseases	Russian Research Institute of Biological Plant Protection, Krasnodar, Russia	Partners	USA
#3108	Bacteriophages and Lytic Bacterial Phages against Clostridium Perfringens to Control Clostridia	State Research Center for Applied Microbiology and Biotechnology, Obolensk, Moscow reg., Russia	Partners	USA
#3219.2	Tuberculosis Pathogen of Human and Animals	Federal Centre of Toxicological and Radiation Safety of Animals, Kazan, Tatarstan, Russia	Canada	Canada
#3551	Multi-Channel Immunosensor	Institute of General Physics named after A.M. Prokhorov RAS / Natural Sciences Center, Moscow, Russia	Partners	
#G-1599	Fertilizers of Prolonged Action	Georgian Academy of Sciences / P. Melikishvili Institute of Physical and Organic Chemistry, Tbilisi, Georgia	Canada	Canada
Medicine				
#2738	Lyme Borreliosis in Ukraine and Kirov Regions	State Research Center for Applied Microbiology, Obolensk, Moscow reg., Russia	Canada	Canada
#2981.2	Phago-Immunotherapy of anthrax	Institute of Immunological Engineering, Lyubochany, Moscow reg., Russia	Canada	Canada
#3070	Influenza Surveillance in Russia	RAMS / Research Institute of Influenza, St Petersburg, Russia	Partners	
#3139	Critical concentration of anti-TB drugs	State Research Center for Applied Microbiology, Obolensk, Moscow reg., Russia	Partners	USA
#3283	Center for New Drugs Development	Non-profit Partnership "Center for development of new potential Medicines" ORCHEMED", Moscow, Russia	Partners	USA

ISTC in Transition

LIST OF PROJECTS COMPLETED IN 2013

Project No.	Short title	Leading Institute	Funding Party	Collaborators
Agriculture				
#2777	Transmissible Spongiform Encephalopathies	Ivanovsky Institute of Virology / NARVAC, Moscow, Russia	Partners	USA
#3005	Newcastle Disease and Avian Influenza Viruses	Federal Centre for Animal Health, Vladimir, Vladimir reg., Russia	Partners	USA
#3460	Inactivated Vaccines against Avian Influenza	Federal Centre for Animal Health, Vladimir, Vladimir reg., Russia	Partners	USA
Medicine				
#2800	Influenza A Viruses of Birds and Pigs	Ivanovsky Institute of Virology, Moscow, Russia	Partners	USA
#3117	Microchip for Detection of Toxins	Institute of Bioorganic Chemistry, Moscow, Russia	Partners	
#3359	Detection of Bacteria in Blood	Research Center of Toxicology and Hygienic Regulation of Biopreparations, Serpukhov, Moscow reg., Russia	Partners	USA
#3701	Toxic Action of Nanopowders	VNIKHT (Chemical Technology), Moscow, Russia	EU	Germany, Italy
#3868	Clots in Blood Vessels	VNIIEF, Sarov, N. Novgorod reg., Russia	EU	Italy



International projects by the ISTC

It is necessary to pay attention to the DTRA-funded projects that were carried out in the Russian Federation to increase the level of biosafety in Russian laboratories that work with pathogens. An example of this is project #3427p. The question arises, **why then these projects were not associated with "illegal activities of biolaboratories"**?

18 Years Supporting International Scientific Cooperation

Partner – US Defense Threat Reduction Agency (DTRA)

PROJECT #3427P

Security System at Institute of Animal Health

Leading Institute:	All-Russian Research Institute of Animal Health (ARRIAH), Vladimir, Russia
Total funds allocated:	US \$3,789,800
Total Grants:	US \$173,337



Newly-built incinerator facility at ARRIAH

Main objectives and results:

Project #3427p was implemented as part of a larger program that DTRA is implementing through the ISTC in Russia, with a focus on cooperative research and upgrades in bio-security and bio-safety at institutes. The objective of this project is to study foot-and-mouth disease (FMD) strain characterization and enhance bio-safety at ARRIAH by enabling the institute to utilize on-site bio/medical waste according to Russian and international standards.

As part of the project, 35 FMD virus strains of the ARRIAH strain col-

lection (pigs and cows) were refreshed. These and an additional 18 strains were used for genetic characterization that might assist in the development of rapid diagnostics for FMD.

A new Incinerator Facility (IF) was designed, its location determined, and site preparations commenced in 2010. In 2012 the construction of the IF neared its completion, which will enable ARRIAH to incinerate bio/medical waste generated at the institute and also samples and livestock that they receive for further characterization and study from other veterinary stations and institutes in Russia.



Patenting of isolates and strains of pathogens

Patenting of isolates and strains of microorganisms for scientific research is also a global routine practice. Patenting is also carried out in Ukraine, EU and the Russian Federation.



(19)RU (11)2 647 566 (13) C1

(51) МПК C12N 7/00 (2006.01)

A61K 39/145 (2006.01)

Штамм A/goose/Kalmykia/813/16 H5N8 вируса гриппа птиц Influenza virus avicum типа A подтипа H5 для контроля антигенной и иммуногенной активности вакцин против гриппа птиц и для изготовления биопрепаратов для диагностики и специфической профилактики гриппа птиц типа A подтипа H5

(21) 2017119735

(22) 06.06.2017

(24) 06.06.2017

(45) 16.03.2018 Бюл. № 8

(72) Чвала Илья Александрович, Фролов Сергей Владимирович, Волков Михаил Сергеевич, Баркентин Андрей Владимирович, Сосипаторова Виктория Юрьевна, Алтунин Дмитрий Александрович, Андриясов Артем Валерьевич, Зиняков Николай Геннадьевич, Никонова Зоя Борисовна

(73) Федеральное государственное бюджетное учреждение "Федеральный центр охраны здоровья животных" (ФГБУ "ВНИИЗЖ")



Espacenet

RU2767359C1 STRAIN "A/CHICKEN/CHELYABINSK/314-1/2020 H9N2" OF AVIAN INFLUENZA VIRUS OF GENUS ALPHAINFLUENZAVIRUS OF SPECIES INFLUENZA A VIRUS SUBTYPE H9 FOR CONTROL OF ANTIGENIC AND IMMUNOGENIC ACTIVITY OF VACCINES AGAINST AVIAN INFLUENZA AND FOR PRODUCTION OF BIOPREPARATIONS FOR DIAGNOSIS AND SPECIFIC PREVENTION OF AVIAN INFLUENZA TYPE A SUBTYPE H9

Applicants: FED GOSUDARSTVENNOE BYUDZHEITNOE UCHREZHDENIE FED TSENTR OKHRANY ZDOROVYA ZHIVOTNYKH FGBU VNIIZZH [RU]

Inventors: OSIPOVA OLGA SERGEEVNA [RU], SOSIPATOROVA VIKTORIYA YUREVNA [RU], ZINYAKOV NIKOLAJ GENNADEVICH [RU], VOLKOVA MARINA ALEKSEEVNA [RU], ANDREJCHUK DMITRIJ BORISOVICH [RU], CHVALA IL'YA ALEKSANDROVICH [RU]

Classifications:

IPC C12N7/00;

CPC C12N7/00 (RU);

Priorities: RU2021113015A 2021-05-04

Application: RU2021113015A 2021-05-04



Espacenet

RU2323740C1 "NOVOSIBIRSKY" STRAIN OF BIRD FLU Influenzae virus avicum TO CONTROL IMMUNOGENIC AND ANTIGENIC ACTIVITY OF VACCINES AND TO MANUFACTURE BIOMEDICINES FOR DIAGNOSTICS AND SPECIFIC PREVENTION OF BIRD FLU

Applicants: FEDERAL NOE O UCHREZHDENIE FED [RU]

Inventors: BORISOV ALEKSANDR VLADIMIROVICH [RU], BORISOV VLADIMIR VLADIMIROVICH [RU], GRUZDEV KONSTANTIN NIKOLAEVICH [RU], DRYGIN VLADIMIR VIKTOROVICH [RU], MANIN TIMOFEEJ BORISOVICH [RU], NEPOKLONOV YEVGENIJ ANATOL EVICH [RU], STAROV SERGEJ KONSTANTINOVICH [RU], FROLOV SERGEJ VLADIMIROVICH [RU]

Classifications:

IPC A61K39/145; C12N7/00;

Priorities: RU2006130206A 2006-08-21

Application: RU2006130206A 2006-08-21

Publication: RU2323740C1 2008-05-10

Published as: RU2323740C1

"NOVOSIBIRSKY" STRAIN OF BIRD FLU Influenzae virus avicum TO CONTROL IMMUNOGENIC AND ANTIGENIC ACTIVITY OF VACCINES AND TO MANUFACTURE BIOMEDICINES FOR DIAGNOSTICS AND SPECIFIC PREVENTION OF BIRD FLU

Abstract

FIELD: medicine; veterinary. * SUBSTANCE: new industry strain of bird flu virus type A, subtype H5N1 is obtained and deposited in collection of FGBU "VGNKI", VNIIZZH registration N. 125 - deposition "Novosibirsky". * EFFECT: strain extends the strains of industrial strains of bird flu. A 30 Abst. 17 Ref. 11 av



Research of bats

- Today, in the world, a lot of attention is paid to new potential natural sources of dangerous pathogens.
- Bats are considered as one of the important natural reservoirs of pathogens. Thus, the study of these animals is an important element of global health and part of preparedness for the next pandemic.
- Such research is also conducted in Russia. It should be noted that some studies are aimed at using bat's tissues for preparation cell cultures and cultivation some pathogens. The question arises why?

Seidlova et al. BMC Veterinary Research (2020) 16:482
https://doi.org/10.1186/s12917-020-02702-y

BMC Veterinary Research

RESEARCH ARTICLE

Open Access

Active surveillance for antibodies confirms circulation of lyssaviruses in Palearctic bats

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Abstract

Background: Palearctic bats host a diversity of lyssaviruses, though not the classical rabies virus (RABV). As surveillance for bat rabies over the Palearctic area covering Central and Eastern Europe and Siberian regions of Russia has been irregular, we lack data on geographic and seasonal patterns of the infection.

Results: To address this, we undertook serological testing, using non-lethally sampled blood, on 1027 bats of 25 species in Bulgaria, the Czech Republic, Poland, Russia and Slovenia between 2014 and 2018. The indirect enzyme-linked immunosorbent assay (ELISA) detected rabies virus anti-glycoprotein antibodies in 33 bats.



Article

SARS-like Coronaviruses in Horseshoe Bats (*Rhinolophus* spp.) in Russia, 2020

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⁴ Federal State Budgetary Institution Sechi National Park of Ministry of Natural Resources and Environment of Russian Federation, 74 Kuznetsov Avenue, 354002 Sochi, Russia; romashin@sechi.ru
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Abstract: We found and genetically described two novel SARS-like coronaviruses in feces and oral swabs of the greater (*R. ferrugineus*) and the lesser (*R. hipposideros*) horseshoe bats in southern regions of Russia. The viruses, named Khosla-1 and Khosla-2, together with related viruses from Bulgaria and Kenya, form a separate phylogenetic lineage. We found evidence of recombination events in the evolutionary history of Khosla-1, which involved the acquisition of the structural proteins S, E, and M, as well as the nonstructural genes ORF3, ORF6, ORF7a, and ORF7b, from a

► *Vopr Virusol.* 2021 Mar 7;66(1):29–39. doi: 10.36233/0507-4088-12.

[Biological characteristics and permissiveness to viruses of diploid kidney cells strain from the bat *Nathusius' pipistrelle* (*Pipistrellus nathusii* Keyserling & Blasius, 1839; *Chiroptera: Microchiroptera: Vespertilionidae*)]

[Article in Russian]

O S Povolyaeva¹, S G Yurkov¹, O G Lapteva¹, O L Kolbasova¹, A A Chadaeva¹, A Yu Kol'tsov¹, I P Sindryakova¹, M E Vlasov¹, S P Zhivoderov¹, A V Lunitsin¹

Affiliations + expand

PMID: 33683063 DOI: 10.36233/0507-4088-12

Abstract



Conclusion

- The information referred by the Russian Federation is taken **out of context** and does not allow a full assessment of the content of the documents. At the same time, it allows **manipulation** of certain generally known scientific facts. The materials (descriptions of projects, presentation at a scientific conference) referred to by Russian Federation are in the **public access** and free.
- Scientific research in Ukraine, which Russia calls "activity in biological laboratories", has a **purely scientific purpose and does not contain any dual purpose**.
- **Completely similar studies are conducted in many Russian institutions.** These studies in Russia are financed both by the state budget and international funds.
- The study of migrations, as well as migratory birds and bats and its zoonotic pathogens, conducted in Ukraine is a generally accepted practice in the scientific community, which is **also conducted in Russia**.
- All scientific research in Ukraine is conducted in accordance with all the provisions of the Convention.

All of Russia's accusations are completely illegitimate and groundless.