

OIE Collaborating Centres Reports Activities

Activities in 2021

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Title of collaborating centre:	Diagnosis and Control in Eastern Europe, Central Asia and Transcaucasia
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ToR: To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories

ToR: To identify and maintain existing expertise, in particular within its region

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by the OIE

Disease control	
Title of activity	Scope
Diagnostic activities for infectious diseases in the Russian Federation (RF)	Visits of the FGBI "ARRIAH" staff-members (31) to various the RF Subjects for providing consultative assistance in animal disease diagnosis, for sampling, for anti-epidemic measure organization and implementation
Diagnostic activities for infectious diseases in other countries	Visits of the FGBI "ARRIAH" staff-members to foreign countries: South Ossetia, Pakistan, Uzbekistan, Armenia for providing consultative assistance in animal disease diagnosis, anti-epidemic measure organization and implementation.
Zoonoses	
Title of activity	Scope
Monitoring activities for rabies	A total of 1,373 rabies tests of pathological materials from 16 RF Subjects were performed (fluorescent antibody technique (FAT) -696 tests, virus isolation in cell culture - 677 tests
Monitoring activities for BSE	A total of 21,647 ELISA tests of pathological materials from 76 RF Subjects for bovine spongiform encephalopathy were carried out
Avian diseases	
Title of activity	Scope
Monitoring activities for Newcastle disease	<p>A total of 40,352 tests of pathological materials from 72 RF Subjects for Newcastle disease were carried out (rt RT-PCR - 5,962, ELISA - 25,003, HI test - 9,331, virus isolation - 56)</p> <p>Five (5) diagnostic rt RT-PCR tests of pathological materials from the poultry farms located in Kazakhstan for Newcastle disease were carried out.</p>

Monitoring activities for avian influenza	<p>A total of 48,482 tests of pathological materials from 75 RF Subjects for avian influenza were carried out (rt RT-PCR - 7,373, ELISA - 32,779, Hi test - 8,052, virus isolation - 278).</p> <p>Seven (7) diagnostic rt RT-PCR tests of pathological materials from the poultry farms located in Kazakhstan for avian influenza were carried out.</p>
Aquatic animal diseases	
Title of activity	Scope
Diagnostic activities for spring viraemia of carp	A total of 365 tests of pathological materials from 22 RF Subjects were carried out (ELISA -165 tests, virus isolation -200 tests).
Diagnostic activities for infectious haematopoietic necrosis	A total of 323 tests of pathological materials from 10 RF Subjects were carried out (ELISA -113 tests, virus isolation -210 tests).
Diagnostic activities for viral haemorrhagic septicaemia	A total of 323 tests of pathological materials from 10 RF Subjects were carried out (ELISA -113 tests, virus isolation -210 tests).
Diagnostic activities for infectious pancreatic necrosis	A total of 323 tests of pathological materials from 10 RF Subjects were carried out (ELISA -113 tests, virus isolation -210 tests).
Diagnostic activities for infectious salmon anemia	A total of 51 PCR tests of pathological materials from 3 RF Subjects were performed.
Diagnostic activities for cyprinid herpesvirus 3 (CyHV-3)	A total of 40 PCR tests of pathological materials from 8 RF Subjects were carried out.
Diagnosis, biotechnology and laboratory	
Title of activity	Scope
Diagnostic activities for bluetongue	A total of 6,492 tests of pathological materials from 24 RF Subjects were carried out (ELISA - 5,542 tests, PCR- 950 tests).
Diagnostic activities for classical swine fever	A total 8,987 tests of pathological materials from 63 RF Subjects for classical swine fever were carried out (PCR- 3,547 tests, ELISA - 5,430 tests, virus isolation -10 tests).
Diagnostic activities for African swine fever	<p>A total of 22,167 tests of pathological materials from 69 RF Subjects for African swine fever were carried out (PCR- 11,565 tests; ELISA - 10,014- tests; virus isolation -588 tests).</p> <p>A total of 192 diagnostic tests of pathological materials submitted from South Ossetia for African swine fever were carried out (PCR - 162 tests; ELISA - 30 tests).</p>
Diagnostic activities for Schmallenberg disease	A total of 2,673 tests of pathological materials from 15 RF Subjects were carried out (ELISA - 148 tests; PCR - 2,525 tests).
Diagnostic activities for lumpy skin disease	A total of 5,788 PCR tests of pathological materials from 28 RF Subjects were carried out.

Diagnostic activities for FMD in the Russian Federation	<p>A total of 255,691 tests of pathological materials from 85 RF Subjects for foot-and-mouth disease were carried out with the following methods:</p> <p>Liquid-phase blocking indirect ELISA (LPB ELISA) - 176,188 tests</p> <p>Neutralization test (MNT) - 8,051 tests</p> <p>Indirect NSP-ELISA (ELISA-NSP) - 67,996 tests</p> <p>MNT-based antigenic matching - 18 tests</p> <p>Virus isolation in cell culture - 282 tests</p> <p>Indirect double sandwich ELISA - 282 tests</p> <p>CFT - 282 tests</p> <p>rt RT-PCR, 3D gene - 1,294 tests</p> <p>rt RT-PCR, 5'HTO gene -1,294 tests</p> <p>RT-PCR, VP1 gene - 2 tests</p> <p>VP1 gene sequencing-2 tests</p>
Diagnostic activities for peste des petits ruminants	A total of 20,495 tests of pathological materials from 83 RF Subjects were performed (ELISA - 20,255 tests;PCR-240 tests)
Diagnostic activities for sheep and goat pox	A total of 218 PCR tests of pathological materials from 11 RF Subjects were carried out.
Diagnostic activities for contagious bovine pleuropneumonia	A total of 24,551 ELISA tests of pathological materials from 83 RF Subjects were performed.

ToR : To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated specialty

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare

Proposal title	Scope/Content	Applicable area
Control of infectious avian diseases	The diagnostica and vaccines were supplied to Azerbaijan, Kazakhstan, Uzbekistan, Georgia, Bangladesh for early diagnosis and prevention of main infectious avian diseases.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare
Control of sheep and goat pox and peste des petits ruminants, lumpy skin disease	The diagnostica and vaccines were supplied to Afghanistan, Armenia, Georgia, Iraq, Tajikistan, Kazakhstan, Kuwait.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare

Control of porcine and bovine infectious diseases	Vaccines for prevention of PRRS, pasteurellosis in pigs, parvovirus disease in pigs, infectious bovine rhinotracheitis, parainfluenza 3 and bovine viral diarrhoea were supplied to the Republic of Belarus and Bulgaria.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare
FMD control	The diagnostica and vaccines were supplied to Armenia, Bangladesh, Georgia, Jordan, Iraq, Kazakhstan, Kyrgyzstan, Kuwait, Morocco, Mongolia, UAE, Pakistan, South Korea, Saudi Arabia, Syrian Arab Republic for early diagnosis and prevention.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare

ToR: To establish and maintain a network with other OIE Collaborating Centres designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines

ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations

3. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Animal and Plant Health Agency (APHA)	Great Britain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Sharing data on genome sequences of virulent Newcastle disease virus strains and analysis of their genetic properties
Institute for Animal Health	Pirbright, Great Britain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Disease control. training, Sharing FMD virus genome sequences in accordance with the Memorandum of Understanding for the OIE FAO FMD Reference Laboratory network
Institute of Experimental Veterinary Medicine named after S.N. Vysheslsky	Minsk, Republic of Belarus	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease control

Centro de Vigilancia Sanitaria Veterinaria (VISAVET), Facultad de Veterinaria HCV Planta sotano, Universidad Complutense de Madrid (USM)	Madrid, Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease control (ASF)
Finnish Food Safety Authority Evira	Finland	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease control
Institute for Veterinary Disease Control	Austria	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease diagnosis
GD Animal Health	Netherlands	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Avian diseases (international comparisons)
Community Reference Laboratory (CRL) for Rabies	France	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Zoonoses
Veterinary Specialized Institute "Kralevo"	Serbia	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease control
Scientific Veterinary Institute "Novi Sad"	Serbia	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease diagnosis
Veterinary Institute of Tajik Academy of Agricultural Sciences	Veterinary Institute of Tajik Academy of Agricultural Sciences	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal disease control

Centre for Animal Health Research of the National Centre for Agricultural and Food Research and Technology(CISA-INIA)	Madrid, Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Annual confirmation of the Laboratory competence through international comparisons (ASF)
University of Veterinary Medicine Hannover	Hannover, Germany	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Annual confirmation of the Laboratory competence through international comparisons (ASF)
European Research Executive Agency	Brussels, Belgium	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Scientific cooperation in ASF control
Beijing Vbiosci Inc. (scientific and production company)	Beijing, China	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Scientific cooperation in vaccine testing in animals
Technical University of Denmark National Institute for Aquatic Resources	Lyngby, Denmark	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	International comparisons (fish diseases)
Istituto Zooprofilattico Sperimentale della Venezia (IZSVE) (EU (OIE) Reference Laboratory for avian influenza and Newcastle disease)	Italy	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Avian disease control, currently important AIV and NDV isolate sharing and study
National Institute of Animal Health (NIAH)	Japan	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Avian disease control, currently important AIV and NDV isolate sharing and study
Global network of Reference Laboratories for peste des petits ruminants (PPR) created on the OIE initiative with support of existing OIE Reference Centres (CIRAD, Pirbright Institute, etc.)	France, Great Britain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	PPR Global Control and Eradication Strategy: disease prevention, detection and control

4. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres, Reference

laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
International Atomic Energy Agency (IAEA)	Austria	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research activities under the project "Infrared Spectroscopy as a Rapid Method to Verify the Authenticity of Milk and Vegetable Oils". Research activities purpose: development of rapid method for detection of non-milk animal impurities in raw drinking milk.
International Atomic Energy Agency (IAEA)	Austria	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Study of the virus ecology and birds migrations through testing biological materials from wild waterfowl for avian influenza virus detection and bird species genetic identification, and for determination of stable isotope content in feathers
International Atomic Energy Agency (IAEA)	Austria	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Tests of biological materials from birds naturally infected with avian influenza virus.

ToR: To place expert consultants at the disposal of the OIE.

5. Did your Collaborating Centre place expert consultants at the disposal of the OIE?

No

ToR: To provide, within the designated specialty, scientific and technical training to personnel from OIE Member Countries

6. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by the OIE, to personnel from OIE Member Countries?

Yes

- a) Technical visits: 3
- b) Seminars: 19
- c) Hands-on training courses: 8
- d) Internships (>1 month): 7

Type of technical training provided (a, b, c or d)	Content	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
a) technical visits	3 technical visits: Current FMD epidemiology, diagnosis, control and prevention measures	Uganda, Iraq, Democratic People's Republic of Korea (North Korea)	16
b) seminars	19 seminars: on highly dangerous animal disease diagnosis, monitoring and prevention (FMD, avian influenza, Newcastle disease, Rabies, LSD, Bovine leucosis, ASF, CBPP and PPR, BSE).	Pakistan, Russian Federation	1444
c) Hands-on training courses	8 hands-on training courses (automated system "Mercury", control of ASF and CSF, Transboundary animal diseases, tropical zoonoses) were provided	Russian Federation, Pakistan	191
d) Internships (>1 month)	7 Individual internships: detection of tetracycline, antibiotics in teeth and bone tissues with fluorescence technique, Raising awareness on laboratory testing of FMD (ELISA, Real-time PCR), Laboratory diagnosis of animals rabies, Serological testing in poultry production using hemagglutination inhibition	Russian Federation, Republic of Belarus	15

ToR: To organise and participate in scientific meetings and other activities on behalf of the OIE

7. Did your Collaborating Centre organise or participate in the organisation of scientific meetings on behalf of the OIE?

Yes

National/International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants
International	Online meeting on aquatic animal health protection in leading aquaculture producing countries organized by the FAO, OIE and Norwegian Veterinary Institute	OIE	June 2021	Oslo, Norway (online)	137

ToR: To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty

8. Publication and dissemination of any information within the remit of the mandate given by the OIE that may be useful to Member Countries of the OIE

a) Articles published in peer-reviewed journals: 44

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3. Alhussen, M.A., Kirpichenko, V.V., Yatsentyuk, S.P., Nesterov, A.A., Byadovskaya, O.P., Zhanova, T.V., Sprygin, A.V. *Mycoplasma bovis*, *M. bovis genitalium* and *M. dispar* as bovine pathogens: Brief characteristics of the pathogens (2021) *Sel'skokhozyaistvennaya Biologiya*, 56 (2), pp. 245-260.
4. Amelin, V.G., Bol'shakov, D.S. Identification and Determination of Nonionic Surfactants by Ultrahigh-Performance Liquid Chromatography-High-Resolution Mass Spectrometry (2021) *Journal of Analytical Chemistry*, 76 (2), pp. 226-242.
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8. Amelin, V.G., Shogah, Z.A.C., Bol'shakov, D.S. Solid-Phase Fluorimetric Determination of Tetracyclines in Medicinal Preparations on Cellulose Paper and in Thin-Layer Silica Gel Using a Smartphone (2021) *Pharmaceutical Chemistry Journal*.
9. Amelin, V.G., Shogah, Z.A.C., Bol'shakov, D.S. Using a Smartphone for Determining Tetracyclines in Water and Milk by the Sensitized Solid State Fluorescence of Europium on Its Hydroxide (2021) *Journal of Analytical Chemistry*, 76 (10), pp. 1211-1216.
10. Amelin, V.G., Shogah, Z.A.C., Bolshakov, D.S. Sorption-Fluorimetric Determination of Quinolones in Waste and Natural Waters with a Smartphone (2021) *Moscow University Chemistry Bulletin*, 76 (4), pp. 262-268.
11. Andrianova, E.N., Egorov, I.A., Pronin, V.V. Efficiency and physiological safety of peas in the diets for hens (*Gallus gallus* L.) of the parent flock during the late laying period (2021) *Sel'skokhozyaistvennaya Biologiya*, 55 (6), pp. 1245-1256.
12. Byadovskaya, O., Pestova, Y., Kononov, A., Shumilova, I., Kononova, S., Nesterov, A., Babiuk, S., Sprygin, A. Performance of the currently available DIVA real-time PCR assays in classical and recombinant lumpy skin disease viruses (2021) *Transboundary and Emerging Diseases*, 68 (6), pp. 3020-3024.
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33. Schettino, D.N., Korennoy, F.I., Perez, A.M. Risk of Introduction of Classical Swine Fever Into the State of Mato Grosso, Brazil (2021) *Frontiers in Veterinary Science*, 8, Paper № 647838.
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b) International conferences: 26

1. 10th Anniversary International Scientific and Practical Conference "Molecular Diagnostics - 2021" (Moscow-2021). Reports: - "Avian Influenza Epizootic Situation in the world and in the Russian Federation. Avian Influenza Control Measures" (Irza V.N.), Detection of avian influenza viruses in the Russian Federation in 2019-21 in RT-PCR (Andriyasov A.V.), Genetic analysis of Newcastle disease virus isolates of Genotype VI detected in the Russian Federation from 2018 to 2020 (Guseva N.A.), Genetic characteristics of avian influenza viruses of subtype H9 detected during epizootological monitoring (in the FGBl "ARRIAH", from 2018 to 2019) (Zinyakov N.G.), Detection of Newcastle disease virus virulent isolates of Genotype VII-L in the Russian Federation (Zinyakov N.G.), Detected cases of highly virulent avian influenza viruses of subtype H5N5 in Russia, from 2020 to 2021 (Andriyasov A.V.)

2. Fomina S.N. X International Veterinary Congress (April 20-22, 2021) Moscow Report: Epidemic situation in Russia and Central, East and Southeast Asian countries 2020-2021.

3. International Scientific and Practical Conference dedicated to the 100th Anniversary of the Armavir Biofactory "Scientific bases of production and quality assurance of biological preparations". Monitoring of a low-pathogenic strain of avian influenza subtype H9 / Osipova OS, Volkova MA, Andreychuk DB, Chvala IA (webinar presentation)// Materials of the Conference. - 2021. - p. 69-73.

4. Irza V.N. / A report "Avian Influenza in the Russian Federation. Disease Control Strategies", 30.11.- 1.12.2021 (online). <https://msd.conventus.pro/> International Conference " Future of the Livestock - 2021", Moscow School of Management Skolkovo, organizers – company "MSD Animal Health" and publishing house "Agroinvestor"

5. Irza V.N. / III International Workshop "The impact of climate change on the spreading of new viral infections during birds' seasonal migrations in Northern and Eastern Eurasia" December 7-8, 2021 Federal State Budgetary Scientific Institution Federal Research Center for Fundamental and Translational Medicine (Russia, Novosibirsk).

6. Irza V.N. / Participation in an expert meeting and workshop for the countries of the Asia-Pacific region within Global Framework for the Progressive Control of Transborder Diseases of Animals (GF-TADs). Organizers – OIE Regional Office in Japan and Hokkaido University.

7. Irza V.N. / Participation in the 27th Annual meeting of the National Reference Laboratories of the European Union (NRL EU) on Avian Influenza and Newcastle disease. The organizer is the Institute for Experimental Zoophylaxis (Italy).

8. Irza V.N. / Participation in the 2nd FAO/IAEA Research Coordination Meeting on Avian Influenza in Wild Animals (videoconference) (contract 22555/Ro) -16-18.06.21. Report on the AI situation in the Russian Federation and the activities of the ARRIAH as part of the research program CRP D32034.

9. Irza V.N. / Participation in a webinar organized by the Rosptitsoyuz for specialists of poultry farms and state veterinary services of the Russian Federation and CIS countries, a lecture on the current HPAI situation in the world and the Russian Federation as well as on HPAI and LPAI controls.

10. Irza V.N. / Participation in the OFFLU experts meeting on the widespread of HPAI and the submission of comments on the situation in the Russian Federation (videoconference), 8.11.2021.

11. Irza V.N. / Participation in the OFFLU expert meeting "OFFLU pre VCM data discussion", (videoconference).

12. Karaulov A.K., Metlin A.E./A report on "The Global Anti-rabies Efforts: Human and Animal Vaccines and Eradication Programs, 2021", organizer – the OIE regional office.

13. Korennoy F., Zakharova O., Iashin I., Toropova N., Gogin A., Kolbasov D., Blokhin A., Karaulov A., Surkova G., Malkhazova S. / Connecting our world: *Biometeorology 2021*. «Zoonotic Diseases in the Russian Arctic: The Study of Environmental Suitability to Anthrax and Leptospirosis in the Current and Future Climate».

14. Kremenchugskaya S.R. 16th Meeting of the FAO/OIE FMD Reference Laboratory Network (November 23-24, 2021) Pirbright, United Kingdom (online) Report: Report on the activities of the OIE Regional Reference

Laboratory for FMD (FGBI "ARRIAH") in 2021.

15. Mazloum Ali / Conference on the results of the implementation of the Complex Research Plan (CRP) "Diagnosis and monitoring of highly dangerous animal infections", Samara. Report - Analysis of full genome sequence of the ASF virus isolate taken from wild boar on the border with Mongolia. (December 01-02, 2021).
16. Mazloum Ali / International Conference "Online Workshop on Laboratory Diagnosis and Control of ASF and CSF". Report - Comparative Analysis of Full Genome Sequences of African Swine Fever Virus isolates taken from wild boars in Russia in 2019. (08-09.06.2021).
17. Malkhazova S.M., Korennoy F.I., Shartova N.V., Vatlina T.V. / A online oral report at the GnosisGIS International Symposium (as part of the 13th European Multicolloquium on Parasitology), Belgrade, Serbia: "COVID-19 in the Russian Federation: regional differences and public health response".
18. Mikhailishin D.V., 3-rd virtual meeting within the framework of FMD epidemiological and laboratory networks in Western Eurasia (August 17-18, 2021) Report: Vaccines and choice of vaccines within FMD prevention and control programs.
19. Shotin A.R. / Conference on the results of the implementation of the Complex Research Plan (CRP) "Diagnosis and monitoring of highly dangerous animal infections". Report - Recommendations for sampling, storage and transportation of biomaterial sample taken from wild boars for ASF testing. (December 01-02, 2021).
20. Shotin A.R. / International Conference "Online Workshop on Laboratory Diagnosis and Control of ASF and CSF". Report - The use of alternative samples for ASF diagnosis. (June 08-09, 2021).
21. Shotin A.R. / International scientific and practical conference "Veterinary and sanitary food safety is the basis of human health" (within the framework of the Global Food Forum-2021: National Dialogue). Report - ASF detection in pig products. (May 05, 2021).
22. Shotin A.R. / International scientific and practical conference "Molecular diagnosis 2021". Report - Comparative analysis of full-genome sequences of African swine fever virus isolates taken in Russia. (November 09-11, 2021).
23. Volkov M.S. Conference "Current challenges to diagnosis and prevention of avian infectious diseases in commercial poultry farming", was held During "UzAgroExpo 2021" exhibition, Tashkent.
24. Volkov M.S. Exhibition and conference LAVC-2021 "Control of avian infectious diseases in commercial poultry farming" Lima, Peru.
25. Volkov M.S. Seminar for specialists in commercial poultry farming "Diagnostic capacity of the FGBI "ARRIAH", prevention of avian infectious diseases" Samarkand, Uzbekistan.
26. Yel'kina Yu.S. International Conference "Food security during the COVID-19 pandemic" (March 29-31, 2021) Ural State Agrarian University. Report: Studying immunogenic and protective properties of anti-FMD emulsion vaccine from strain O/Korea/14 (O/SEA/Mya-98).

c) National conferences: 9

1. Andreychuk D.B. / Scientific and practical conference of veterinarians in poultry establishments of the Russian Federation "Trends 2021 in poultry farming. Ensuring animal disease freedom at a poultry establishment. Innovative and effective solutions" (Vladimir, 2021). Report - "Current avian viral infections. Monitoring results in poultry farming."
2. Irza V.N. / A webinar for participants of advanced training courses organized for specialists of the state veterinary services of the FGBI "Center for Veterinary Medicine", a lecture on "HPAI Preventive and Control measures", 04.02.2021
3. Irza V.N. / A report in a webinar organized by the Poultry Breeders Union for specialists from poultry farms and state veterinary services of the Russian Federation and CIS countries, a lecture on the current HPAI situation in the world and the Russian Federation as well as on controls of highly and low pathogenic avian influenza, 10.11.2021.
4. Irza V.N. / A webinar organized by the Perm Krai Poultry Breeders Union for specialists of poultry farms and state veterinary services, a lecture on the HPAI current situation and its controls, FGBI "VNIIZH", 14.09.2021.
5. Irza V.N. / A webinar-meeting of the Rosptitsesoyuz on "HPAI Prevention at Poultry Farms in the Russian Federation and Addressing the Issue of Poultry Vaccination against HPAI", a report on the current HPAI situation in the world and the Russian Federation and on controls of high- and low-pathogenic avian influenza, FGBI "VNIIZH", 3.12.202.
6. Irza V.N. / A conference for heads of poultry establishments and veterinarians employed at Russian poultry farms organized by the Federal Center for Animal Health (FGBI ARRIAH) and entitled "Poultry production trends in 2021. Ensuring animal disease freedom at poultry establishments. Innovative and effective solutions", a report on "HPAI. Prevention and controls. ", April 14-16, 2021.
7. Korennoy F.I., Surkova G.V., Orlov D.S., Karaulov A.K., Malkhazova S.M. /Online presentation at the XIII Annual All-Russian Congress on Infectious Diseases named after Academician V.I. Petrovsky "Infectious diseases in the modern world: current and future threats". "Modeling of the potential anthrax nosoarea in the Arctic regions in the current and future climate".
8. Irza V.N. / Interregional Agro-Industrial Conference (IAC) 2021, Chelyabinsk (online), report on the AI current situation in the world and the Russian Federation, 18.02.2021.

9. Irza V.N. / Summit "Agrarian policy of Russia: safety and quality of food products", report at the section "Poultry" - "AI Prevention on poultry farms", Moscow, Exhibition Center "Crocus" - May 18, 2021.

d) Other

(Provide website address or link to appropriate information): 16

1. International Conference and Special session to commemorate the 10th anniversary of the rinderpest eradication and ensuring global freedom from rinderpest, organized by the International Atomic Energy Agency (IAEA) and the Food and Agriculture Organization of the United Nations (FAO).
2. Karaulov, Metlin - A report on "The Global Anti-Rabies Efforts: Human and Animal Vaccines and Eradication Programs, 2021", organized by the OIE regional office.
3. Mazloum Ali / Lecture for researchers of the Democratic People's Republic of Korea - Report - Toward Development of Effective and Safe African Swine Fever Virus Vaccines. October 22, 2021
4. Methodical guidelines for determining the primary structure of the H gene of avian influenza virus isolates of subtype H9 using RT-PCR and nucleotide sequencing: approved by FGBI "ARRIAH" February 08, 2021 / A. V. Andriyasov, V. Yu. Sosipatorova, N. G. Zinyakov [et al.]. - Vladimir, 2021
5. Methodical guidelines for detection of avian influenza virus RNA subtype N6 using real-time RT-PCR: approved by FGBI "ARRIAH" January 22, 2021 / Andriyasov A.V., Ovchinnikova Ye.V., Zhestkov P.D., etc. - Vladimir, 2021
6. Mikhailishin D.V. /Development of technology for manufacturing an emulsion vaccine against foot-and-mouth disease of farm animals/Mikhailishin Dmitry Valeryevich- 2021 <http://www.fsvps.ru/fsvps/iac>
7. Participation in the meeting of the International research consortium for control and eradication of lumpy skin disease and African swine fever in Europe with the support of Sciensano Institute (Belgium).
8. Participation in the regional consultative meeting within the framework of the Global Peste des Petits Ruminants Eradication Program (PPR GEP: "Towards the PPR global eradication: 2022-2027) for the countries of the Economic Cooperation Organization (ECO), as well as Russia, China and Mongolia.
9. Participation in the webinar "Exchange of India Experience in the field of Control and Key Achievements" with regard to peste des petits ruminants (PPR) control, organized by the Regional Office (FAO-REU) and the FAO/OIE PPR Secretariat.
10. Participation in the information meeting organized by FAO within PPR Global Eradication Program (GEP).
11. Participation in a working meeting on international comparison test results organized by the OIE and making a report on the study of molecular and biological properties of the LSDV recombinant strain in cell culture and in experiments with susceptible animals
12. Participation in an online scientific seminar on LSD organized by JVL Consulting (Belgium) as a lecturer.
13. An online oral report at the GnosisGIS International Symposium (as part of the 13th European Multicolloquium on Parasitology), Belgrade, Serbia: "COVID-19 in the Russian Federation: regional differences and public health response". Malkhazova S.M., Korennoy F.I., Shartova N.V., Vatlina T.V.
14. An online report at the International Conference on Biometeorology "Connecting our World: Biometeorology 2021 (poster presentation)". "Zoonotic Diseases in the Russian Arctic: Exploring the Ecological Suitability of Current and Future Climates for Anthrax and Leptospirosis". Korennoy Fedor, Zakharova Olga, Iashin Ivan, Toropova Nadezhda, Gogin Andrey, Kolbasov Denis, Blokhin Andrei, Karaulov Anton, Surkova Galina, Malkhazova Svetlana
15. An online report at the XIII Annual All-Russian Congress on Infectious Diseases named after Academician V.I. Petrovsky "Infectious diseases in the modern world: current and future threats". "Modeling the potential anthrax nosoarea in the regions of the Arctic in the current and future climate." Korennoy F.I., Surkova G.V., Orlov D.S., Karaulov A.K., Malkhazova S.M.
16. A Newcastle Disease Forecast in the Russian Federation for 2021. Scientific publication / V.N. Irza, M.S. Volkov, A.V. Varkentin, A.K. Karaulov [i dr.]. FGBI "ARRIAH" - Infectious animal diseases forecasts in the Russian Federation for 2021. - Vladimir, 2021. - 30 p. <http://www.fsvps.ru/fsvps/iac>.

9. Additional comments regarding your report: