

Nataliia Rudova

Date of birth:

31 JAN 1984.

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Scientific degree:

PhD (Candidate of Veterinary Sciences), Veterinary Microbiology, Epizootology, Infectious Diseases and Immunology

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H-index: 5

PhD thesis:

Molecular diagnostics of porcine circovirus infection and the study of the phylogenetic relationships of its pathogen. (Ukraine, Kharkiv, National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine", 2020)

Education:

2001-2006 – Kharkiv State Zooveterinary Academy, veterinary faculty, doctor of veterinary medicine

2009 – 2015 National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine", post-graduate student

2017 – National Science Center "Institute of Metrology", Ensuring the functioning of quality management systems and the organization and conduct of internal audit in accordance with the requirements of DSTU ISO 9001: 2015 and ISO / IEC 17025: 2017

2019 – TCC "Euroacademia", "Preparation for accreditation and audit check in laboratories in accordance with DSTU ISO/IEC17025:2017 requirements")

Experience:

2023 – to the present - Researcher, Department of Organic and Bioorganic Chemistry of the State Scientific Institution "Institute for Single Crystals"

2021-2023 – Head of the Laboratory of Molecular Diagnostics at National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine" (NSC IECVM)

2021 – Senior researcher of the Laboratory of Molecular Diagnostics at National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine" (NSC IECVM)

2015-2020 – Junior researcher at National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine" (NSC IECVM), Quality commissioner of the Testing Center of National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine"

2006-2017 – practicing veterinarian of Kharkiv State municipal clinical of veterinary medicine

Trainings:

- Oratory-Oral presentation technique, Kharkiv (Ukraine), 2014, (School of Speech);
- Time management and goal setting, Kharkiv (Ukraine), November 8-9 2017 (German Biosecurity Programme);
- Training on biosafety & biosecurity, Kharkiv (Ukraine), December 6-9 2017 (German Biosecurity Programme);
- Training on bioinformatics and phylogenetic analysis, Kharkiv (Ukraine), February 19-23 2018 (German Biosecurity Programme);
- Training on bio risk management, Kharkiv (Ukraine), November 13-16 2018 (German Biosecurity Programme);
- Training program Crisis Management, Kharkiv (Ukraine), June 23-24 2019 (German Biosecurity Programme);
- Dual-use, non-proliferation and bioethics management, Kharkiv (Ukraine), May 29-31 2019 (German Biosecurity Programme);
- Managing Sensitive Technology Transfers in Research Settings, (On-line), March 22-25 2021, (King's College London and the James Martin Center for Nonproliferation Studies at the Middlebury Institute);
- DNA preparation and quality controls for next generation sequencing of M. tuberculosis isolates, Borstel (Germany), September 29 – October 01 2022 (Research Center Borstel);
- Training in basic introduction to molecular biological and serological methods: Western blotting, LPS extraction, Ground Anthrax Bacillus Refined Isolation (GABRI), ELISA, qPCR, SDS-PAGE, Colony-lift, Munich (Germany), October 11-27, 2022 (Bundeswehr Institute of Microbiology);
- Fellowship program on Capacity Building for Prevention, Diagnosis and Treatment of Pulmonary Tuberculosis and Non-tuberculosis Mycobacteria Infection in Ukraine, (On-line), October 2-13 2023 (Korea International

Cooperation Agency and GC Labs under the International Cooperation Program of the Government of Korea);

- Capacity Building for Prevention, Diagnosis and Treatment of Pulmonary Tuberculosis and Non-tuberculosis Mycobacteria Infection in Ukraine, Seoul (Korea) 21.07-03.08 2024 (Korea International Cooperation Agency and GC Labs under the International Cooperation Program of the Government of Korea);
- Microbiology Training, Lviv (Ukraine), November 4-8 2024 (Explogen LLC);
- Comparative Analysis of two Oxford Nanopore Sequencing approaches: Accuracy, Throughput and Application Suitability, Munich (Germany), November 18-22, 2024 (Bundeswehr Institute of Microbiology);

Rewards:

- Kharkiv Mayor's Award "Giftedness", 2004

Skills and knowledges:

- research work (molecular genetic research, microbiological research);
- ensuring the functioning of quality management systems;
- doctor of veterinary medicine (practitioner);

Foreign Languages:

- English (speaking)

Top 5 publication:

Rudova, N., Buttler, J., Kovalenko, G., Sushko, M., Bolotin, V., Muzykina, L., Zinenko, O., Stegnyy, B., Dunaiev, Y., Sytiuk, M., Gerilovych, A., Drown, D. M., Bortz, E., & Solodiantkin, O. (2022). Genetic Diversity of Porcine Circovirus 2 in Wild Boar and Domestic Pigs in Ukraine. *Viruses*, 14(5), 924. <https://doi.org/10.3390/v14050924>

Muñoz-Gómez, V., Solodiantkin, O., **Rudova, N.**, Gerilovych, A., Nychyk, S., Hudz, N., Ukhovska, T., Sytiuk, M., Polischuk, V., Mustra, D., De Nardi, M., Lechner, I., & Schuppers, M. (2021). Supporting control programs on African swine fever in Ukraine through a knowledge, attitudes, and practices survey targeting backyard farmers. *Veterinary Medicine and Science*, 7(5), 1786–1799. <https://doi.org/10.1002/vms3.578>

Bolotin, V., Kovalenko, G., Marchenko, N., Solodiantkin, O., **Rudova, N.**, Kutsenko, V., Bortz, E., Gerilovych, A., & Drown, D. M. (2021). Complete Genome Sequence of *Brucella abortus* 68, Isolated from Aborted Fetal Sheep in Ukraine.

Konstantynovska, O., Rekrotchuk, M., Hrek, I., Rohozhyn, A., **Rudova, N.**, Poteiko, P., Gerilovych, A., Bortz, E., & Solodiankin, O. (2019). Severe Clinical Outcomes of Tuberculosis in Kharkiv Region, Ukraine, Are Associated with Beijing Strains of *Mycobacterium tuberculosis*. *Pathogens*, 8(2), 75. <https://doi.org/10.3390/pathogens8020075>

Kovalenko, G., Ducluzeau, A.-L., Ishchenko, L., Sushko, M., Sapachova, M., **Rudova, N.**, Solodiankin, O., Gerilovych, A., Dagdag, R., Redlinger, M., Bezymennyi, M., Frant, M., Lange, C. E., Dubchak, I., Mezhenyskyi, A. A., Nychyk, S., Bortz, E., & Drown, D. M. (2019). Complete Genome Sequence of a Virulent African Swine Fever Virus from a Domestic Pig in Ukraine. *Microbiology Resource Announcements*, 8(42), e00883-19. <https://doi.org/10.1128/MRA.00883-19>

Participating in international projects:

1. Fund. Ministry of Education and Science of Ukraine. Topic: Risk Analysis of hepatitis E virus spreading among the population of pigs infected with the virus PRRS in Ukraine and France (2017-2018).
2. Fund. Defense Threat Reduction Agency. Topic: UP-9 The spread of African swine fever virus (ASFV) in domestic pigs and wild boar in Ukraine – Building capacity for insight into the transmission of ASFV through characterization (2017-2020).
3. Fund. Defense Threat Reduction Agency. Topic: UP-10 Regional Field-to-Table Risk Assessment of the spread of African swine fever virus (ASFV) across Ukraine in wild fauna and via consumer trade routes – insight into the development of effective ASFV quarantine strategies and public policy (2018-2020)
4. Fund. U.S. Civilian Research & Development Foundation (CRDF) and NIHIDA, USA. Topic: Establishing TB Portal of *Mycobacterium tuberculosis* cases from Kharkiv region (2019-2020).
5. Fund. U.S. Civilian Research & Development Foundation (CRDF) Topic: The Mediterranean and Black Sea Flyway: Transboundary Determinants of Avian Zoonotic Infectious Diseases 2021-2022
6. Fund. U.S. Civilian Research & Development Foundation (CRDF) and NIHIDA, USA. Topic: Establishing TB Portal of *Mycobacterium tuberculosis* cases from Ukraine (2020-2025).
7. Fund. German Biosecurity Programme, Germany. Topic: German-Ukrainian Biosecurity Initiative for Zoonosis Risk Management Near the external EU Border (2021-2025).