

## CURRICULUM VITAE

**Mamuka Kotetishvili, PhD**

### CURRENT MAILING ADDRESS AND CONTACT INFORMATION

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### CITIZENSHIP AND RESIDENCE STATUS

CITIZENSHIP: Georgia

### RESIDENCY

2005 Received a status (Green Card) of Permanent Resident of the United States of America (Registration Category: Outstanding Researcher/Professor)

**LANGUAGES** Georgian – native, English – fluent, Russian – good

### EDUCATION

1995 PhD Candidate of Biology Sciences (Ph.D. Equivalent)  
Award Institute: Academician L. Kanchaveli Research Institute of Plant Protection, Tbilisi, Georgia. Conferred by a Board of the Academic Experts and Committee for Science and Technology of the Republic of Georgia, Tbilisi, Republic of Georgia

1981-1986 MS Specialty: Zoo-technology.  
Zoo-technical Veterinary Educational-Research Institute. Tbilisi, Republic of Georgia

## POST GRADUATE TRAINING

### Post-doctoral training

1999-2003

Advanced training in emerging and re-emerging infectious diseases research, control and prevention strategies, and their implementation and evaluation. Fogarty International Center, National Institutes of Health, USA (Grant number: 1 D43 TW00907-01).

1997-1999

Advanced training in Project: Photostabilization of *Bacillus thuringiensis* formulations for effective pest control. The Faculty of Agriculture, Hebrew University of Jerusalem, Rehovot, Israel.

2005

Workshop and training in “A comparative genomic analysis”. National Center for Supercomputing Applications, Urbana, Illinois, and Program in Genetics and Genomic Medicine, University of Maryland School of Medicine. Baltimore, Maryland, USA.

### Certificates

2024

Wiley Editor Certificate. Wiley. USA.

2005

Certificate of completion of the BSL-3 Training Course. Middle Atlantic Regional Centers of Excellence (MARCE). University of Maryland School of Medicine, Baltimore, Maryland, USA.

2005

Certificate of completion of the Health Insurance Portability and Accountability Training Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.

2004

Certificate of completion of the MARCE BSL-3 Laboratory Training Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.

2003

Certificate of completion of the Laboratory Safety Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.

2003

Certificate of completion of the Bloodborne Pathogen Training Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.

- 2003 Certificate of completion of the DOT Infectious and Diagnostic Materials Shipping Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.
- 2003 Certificate of completion of the Hazardous Waste Management Course. University of Maryland School of Medicine, Baltimore, Maryland, USA.
- 1996 Certificate of successful completion, Level C. The course of studies for the 1996 Summer Intensive Program of American English Language, Culture and Civilization. American-Georgian Summer Institute 1996. Tbilisi Independent University. Tbilisi, Georgia.

### REGISTRATION FOR WORK ON SELECT AGENTS

- 2004 Specialist registered by the Centers of Disease Control and Prevention (CDC) of the United States of America, and approved by the U.S. Department of Justice, for work with Select Agent, *Yersinia pestis*

### EMPLOYMENT AND PROFESSIONAL POSITIONS

- 2025-Present Professor of Microbiology and Applied Bioinformatics. School of Science and Technology, the University of Georgia, Tbilisi, Georgia
- 2024-Present Director of the One Health Institute (OHI). School of Science and Technology, the University of Georgia. Tbilisi, Georgia.
- 2019-2024 Deputy Director of Science and Foreign Relations. G. Natadze Scientific-Research Institute of Sanitary, Hygiene and Medical Ecology. Tbilisi, Georgia.
- 2022 Research Expert. The School of Science and Technology, Scientific-Research Institute of the University of Georgia. Tbilisi. Georgia.
- 2019-2022 Head of Risk Assessment Division. Scientific-Research Center of Agriculture. Tbilisi. Georgia
- 2014-2019 Professor of Microbiology and Molecular Genetics. The School of Natural Sciences and Medicine. Ilia State University. Tbilisi, Georgia.

- 2015-2019 Chief Specialist of Risk Assessment. Division of Risk Assessment. Scientific Research Center of Agriculture. Tbilisi, Georgia
- 2012-2013 Professor of Microbiology and Molecular Genetics. The College of Arts and Sciences. Ilia State University. Tbilisi, Georgia.
- 2011 Professor of Microbiology and Molecular genetics, and Acting Director. The Institute of Microbial Genetics and Biotechnology, Ilia State University. Tbilisi, Georgia.
- 2009-2010 Professor of Microbiology and Molecular genetics. Institute of Chemical Biology, Ilia State University. Tbilisi, Georgia.
- 2008-2009 Scientist. American Type Culture Collections (ATCC), Bacteriology Department, Mycobacterium Collections, and Biodefense and Emerging Infections Research Resources Repository, Manassas, Virginia, USA.
- 2004-2008 Assistant Professor of Epidemiology and Preventive Medicine. Department of Epidemiology and Preventive Medicine. University of Maryland School of Medicine. Baltimore, Maryland, USA.
- 2003-2004 Instructor of Epidemiology and Preventive Medicine. Department of Epidemiology and Preventive Medicine. University of Maryland School of Medicine. Baltimore, Maryland, USA.
- 1999-2003 Postdoctoral Fellow. Laboratory of Molecular Epidemiology, Department of Epidemiology and Preventive Medicine. University of Maryland School of Medicine. Baltimore, Maryland, USA.
- 1996-1999 Senior Research Scientist. Laboratory of Microbiological Method, Department of Biological control. Academician L. Kanchaveli's Research Institute of Plant Protection, Tbilisi, Republic of Georgia
- 1991-1996 Research Scientist. Laboratory of Microbiological Method, Department of Biological Control. Academician L. Kanchaveli's Research Institute of Plant Protection, Tbilisi, Republic of Georgia.

1988-1991 Senior Laboratory Technician.  
Laboratory of the Secondary Metabolites, Regional Branch of Scientific Research Institute of Agrarian Biotechnology of USSR, Tbilisi, the Republic of Georgia.

## COMMITTEE RESPONSIBILITIES

2023-present Ad hoc Reviewer for grant applications. The Scientific Committee of the European One Health Association (EOHA), Maisons-Alfort, France.

2018-present Member, Expert Committee for Evaluation of University Educational Programs. National Center for Educational Quality Enhancement. Tbilisi, Georgia.

2018-2022 Head of the Scientific Method Section for Food Safety, Veterinary and Phytosanitary Risk Assessments, and for Food technology. The Scientific-Research Center of Agriculture. Tbilisi, Georgia

2018-2022 Member, Scientific Committee.  
The Scientific-Research Center of Agriculture. Tbilisi, Georgia.

2018-2022 Member, Hiring Committee  
The Scientific-Research Center of Agriculture. Tbilisi, Georgia.

2008-2009 Member, Research Committee.  
American Type Culture Collections (ATCC), Manassas, Virginia, USA.

2008-2009 Member, Hiring Committee. American Type Culture Collections (ATCC), Manassas, Virginia, USA.

2004-2008 Member, Research Committee.  
Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine. Baltimore, Maryland, USA.

2008 Member, Molecular Epidemiology Task Force Group.  
Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine. Baltimore,

Maryland, USA.

2006-2008 Member, a Representative of the Junior Faculty.  
Mentoring Committee, Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine. Baltimore, Maryland, USA.

2004-2008 Associated Member, Graduate School.  
University of Maryland School of Medicine. Baltimore, Maryland, USA.

## TEACHING/TRAINING COURSES GIVEN

### Teaching Courses

2012-2019 Director for the MS and PhD course “Molecular genetic methods, introductory bioinformatics and biotechnology”. Ilia State University. Tbilisi, Georgia.

2011-2013 Director for the BC course “Eukaryotic and prokaryotic genomic databases and their general characteristics”; Lecturer for the MS and PhD course “Molecular genetic methods, introductory bioinformatics and biotechnology”, (Programs: Chemical Biology; and Molecular Biotechnology). The Faculty of Graduate Studies. Ilia State University. Tbilisi, Georgia.

2009-2010 Co-director for the MS Course “The application of molecular genetic methods in biomedical industry”; lecturer for the MS and PhD courses “Molecular genetic methods, introductory bioinformatics and biotechnology”, and “Microbial molecular biology and biotechnology”. The Faculty of Graduate Studies, Ilia State University. Tbilisi, Georgia.

2007-2008 Co-Director for the MS and PhD Course: Molecular epidemiology of diseases (PREV 780). Department of Epidemiology and Preventive Medicine. University of Maryland School of Medicine, Baltimore. Maryland, USA.

2007-2008 Lecturer for the MS Course: Strain molecular typing. Department of Epidemiology and Preventive Medicine. University of Maryland School of Medicine, Baltimore. Maryland, USA.

### Training Courses

Tutor Practical Workshop on CRA and MRA for EAST-ENP

Countries. Organized by European Food Safety Authority (EFSA). Tbilisi, Georgia. 2019.

Trainer

Training Course: General principles of food safety. The USDA Program of International Development. Land O'Lakes Inc. The US Department of Agriculture. Tbilisi, Georgia. 2019.

## **EDITORIAL BOARD ACTIVITIES**

### **Editorial Board Appointments**

2025-Present	Editorial Board Member, Journal of iLabMED, John Wiley & Sons, Inc. USA.
2024-Present	Academic Editor and Editorial Board Member, Journal of BMC Microbiology, BioMed Central Ltd. Part of Springer Nature. UK.
2024-Present	Academic Editor and Editorial Board Member, Journal of AIDS Research and Treatment, John Wiley & Sons, Inc. USA.
2024-Present	Academic Editor and Editorial Board Member, Journal "EMI: animal and Environment". Taylor and Francis. UK.
2008-2014	Editorial Board Member, Journal of Clinical Microbiology. American Society for Microbiology (ASM), USA.

### **Journal Peer Review Activities**

Since 2026	Ed hoc Reviewer, Journal of Microbiology and Molecular Biology Reviews. American Society for Microbiology (ASM), USA.
Since 2025	Ed hoc Reviewer, Journal of Communications Biology. Springer Nature Portfolio. UK.
Since 2025	Ed hoc Reviewer, Journal of Ecology and Evolution. Wiley-Blackwell. USA.
Since 2025	Ed hoc Reviewer, npj Biofilms and Microbiomes. Springer Nature, Germany.

- Since 2025 Ed hoc Reviewer, Journal of Animal Microbiome. BMC. Springer Nature, Germany.
- Since 2024 Ed hoc Reviewer, Journal of BMC Genomics, BioMed Central, UK.
- Since 2024 Ed hoc Reviewer, Journal of Archives of Virology, Springer-Verlag GmbH Austria, part of Springer Nature.
- Since 2024 Ed hoc Reviewer, Journal of Infection and Drug Resistance, Dove Medical Press. UK.
- Since 2024 Ed hoc Reviewer, Journal of Archives of Microbiology. Springer Berlin Heidelberg, Germany.
- Since 2023 Ed hoc Reviewer, Journal of Scientific Reports. Springer Nature. Germany-UK.
- Since 2023 Ed hoc Reviewer, Journal of Medical Virology. Wiley-Blackwell. USA.
- Since 2023 Ed hoc Reviewer, Journal of Probiotics and Antimicrobial Proteins. Springer, USA.
- Since 2022 Ed hoc Reviewer, Journal of Global Antimicrobial Resistance. International Society of Antimicrobial Chemotherapy (ISAC), Global Chinese Association of Clinical Microbiology and Infectious Diseases (GCACMID), and the Asia-Pacific Society of Clinical Microbiology and Infection (APSCMI).Elsevier.
- Since 2021 Ed hoc Reviewer, Journal of Clinical Epidemiology and Global Health. Official Journal of the Indian Clinical Epidemiology Network. Elsevier. India.
- Since 2021 Ed hoc Reviewer, Journal of Infection and Drug Resistance. Dovepress. UK.
- Since 2020 Ed hoc Reviewer, Journal of Food and Chemical Toxicology. British Industrial Biological Research Association, Oxford ; New York : Pergamon Press; Elsevier. UK.
- Since 2020 Ed hoc Reviewer, Journal of Current Microbiology. Springer. USA.

Since 2019	Journal of Microbial Drug Resistance, MARY ANN LIEBERT INC, USA.
Since 2019	Ed hoc Reviewer, Journal of Microbial Drug Resistance. Mary Ann Liebert, Inc., publishers. USA.
Since 2013	Ed hoc Reviewer, Journal of Virology. American Society for Microbiology (ASM), USA.
Since 2010	Ed hoc Reviewer, Journal of Bacteriology. American Society for Microbiology (ASM), USA.
Since 2010	Ed hoc Reviewer, Infection and Immunity. American Society for Microbiology (ASM), USA.
Since 2009	Ed hoc Reviewer, Journal of Foodborne Pathogens and Disease. Mary Ann Liebert, Inc., publishers. USA.
Since 2007	Ed hoc Reviewer, American Journal of Infection Control. Association for Professionals in Infection Control and Epidemiology (APIC). USA.
Since 2004	Ed hoc Reviewer, Journal of Applied and Environmental Microbiology. American Society for Microbiology (ASM) USA.
Since 2004	Ed hoc Reviewer, Journal of Clinical Microbiology. American Society for Microbiology (ASM), USA.
Since 2004	Ed hoc Reviewer, Journal of Infectious Diseases. Oxford Academic. USA.

#### Other Expert Review activities

2026	Ed hoc Reviewer, Metascience Novelty Indicators Challenge. Global Initiative Governmental Program. UK.
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#### **PROFESSIONAL SOCIETIES**

2024-Present	Member of the Governing Board and General Assembly of the European One Health Association (EOHA), Maisons-Alfort, France.
2023-Present	Associated Member of the Governing Board and General Assembly of the European One Health Association (EOHA), Maisons-Alfort, France.
2023-Present	Member of the Scientific Committee of the European One Health Association (EOHA), Maisons-Alfort, France.

2022-Present	Member (and Focal Point in Georgia). The New European Surgical Academy (NESA). Germany.
2019-Present	Academician and Member. The Academy of the Educational Sciences of Georgia. Tbilisi, Georgia.
2019-Present	Member, The Georgian Nutrition Society. Tbilisi, Georgia.
1999-2010	Member, American Society for Microbiology. USA
2004-2007	Member, Maryland Branch of the American Society for Microbiology. Baltimore, Maryland, USA.

## **CONSULTING ACTIVITIES**

2010	Visiting Consultant of the National Tuberculosis Program of Georgia. Department of Epidemiology, School of Public Health, Harvard University. Boston, Massachusetts, USA.
2010	Consultant National Tuberculosis Program of Georgia, National Center for Tuberculosis and Lung Diseases. Tbilisi, Georgia.
1997-1999	Consultant National Center for Diseases Control of Georgia, Georgia Republic Ministry of Health. Tbilisi, Republic of Georgia.

## **Other**

2023-present	Focal point of Scientific-Research Institute of Sanitary, Hygiene and Medical Ecology for the EU Med-Vet-Net Association, Maisons-Alfort, France.
2019-2022	National Focal Contact Person in Georgia, for the communication with the European Food Safety Authority (EFSA), Parma, Italy.

## **SCHOLARSHIPS AND AWARDS**

1999	The Georgia Republic President's Award of the Second Degree for Young Scientists. Tbilisi, Georgia.
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- 1999 Academic Stipend granted by President of the Georgia Republic, Eduard Shevardnadze. Tbilisi, Georgia.
- 1992 Award for advanced scientific research. Project: "Enrichment of feed using "Biosill". The Scientific Institute of Biotechnology, the Regional Branch of the Academy of Agriculture of USSR. Tbilisi, the Republic of Georgia.

## SUPERVISION OF DOCTORAL THESES

- 2018-2022 Supervisor for Ekaterine Gabashvili's Ph.D. research; thesis: Antibiotic Resistance in Black Sea Microbial Populations and the Impact of Bacteriophages on Horizontal Transfer of Antimicrobial Resistance Genes. Iliia State University. Tbilisi, Georgia.
- 2004-2008 Supervisor for the design and execution of the molecular aspects of Cynthia Bee Stine's Ph.D. Research project. Thesis: Mycobacteriosis in Chesapeake Bay striped bass *Morone saxatilis*. Department of Epidemiology and Preventive Medicine. School of Medicine, University of Maryland. Baltimore, USA.

## RESEARCH GRANTS AND CONTRACT SUPPORT

- Project Director Project: TAIEX Workshop: The Different Stages of Food Safety Microbiological Risk Assessment. Technical Assistance and Information Exchange Instrument of the European Commission. 14 - 16 December 2021
- Project Director Project: General principles of food safety. The USDA Program of International Development. Land O'Lakes Inc. The US Department of Agriculture 09.2019-12.2019
- Principal Investigator Project: Drug resistant tuberculosis in Republic of Georgia. Fogarty International Center of National Institutes of Health (NIH) (03/30/07-11/28/07). Global Health Resource Center of University of Maryland.
- Principal Investigator Project: The use of microarrays for studying genome-wide features of *Yersinia pestis* isolates from Former Soviet Union. PFGRC (NIH/NIAID sponsored Pathogen Functional Genomics Resource Center at TIGR). (2005)
- Co-investigator Project: Genetic clustering among *Y. pestis* and other yersiniae. 07/01/03-06/30/05. The National Institutes of

Co-Investigator	Grant No.02-5-21048. Biotechnology Engagement Program (BTEP), Department of Health and Human Services. Molecular epidemiology and antimicrobial resistance of bacterial infections. 02/01/02-01/31/05.
Co-Investigator	Project: BioHazard Epidemiology. EDO. 10/9/04-12/13/04.
Co-investigator	Project: Identification of <i>L. monocytogenes</i> genetic clusters having increased pathogenic potential. The United States Department of Agriculture, USDA/CSREES, 12/15/01 – 12/30/03.

## PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Kobakhidze S, Janelidze D, Kuchuloria N, **Kotetishvili M.** Codon usage optimization contributes to evolutionary dynamics of TetM following its acquisition via interspecies and intergeneric recombination events in recipient bacteria. *BMC Microbiol.* 2026 Jan 29. doi: 10.1186/s12866-026-04771-9. Epub ahead of print. PMID: 41612178.
2. Kobakhidze S, Song A, Tang YW, **Kotetishvili M.** Contrasting genome composition and codon usage in *Listeria monocytogenes* temperate versus virulent phages. *Virus Evol.* 2025 Dec 18;12(1):veaf100. doi: 10.1093/ve/veaf100. PMID: 41573078; PMCID: PMC12822063.
3. Tsiklauri R, Kobakhidze S, **Kotetishvili M.** Interactive networks of donors and recipients of the TetM gene and its evolutionary dynamics across the bacterial domain. *Sci Rep.* 2025 Oct 9;15(1):35312. doi: 10.1038/s41598-025-19304-z. PMID: 41068170; PMCID: PMC12511340.
4. Tsiklauri R, Kobakhidze S, Tsereteli M, Jimsherishvili L, Kakabadze N, Koulouris S, **Kotetishvili M.** Genome data cross-contamination versus interdomain recombination: *Equus caballus* and *Mus musculus* genetic loci in the insertion sequence-rich genomes of two clonally related methicillin-resistant *Staphylococcus aureus* strains from China. *BMC Microbiol.* 2025 Apr 27;25(1):251. doi: 10.1186/s12866-025-03951-3. PMID: 40289079; PMCID: PMC12034162.
5. Kobakhidze S, Koulouris S, Kakabadze N, **Kotetishvili M.** Genetic recombination-mediated evolutionary interactions between phages of potential industrial importance and prophages of their hosts within or across the domains of *Escherichia*, *Listeria*, *Salmonella*, *Campylobacter*, and *Staphylococcus*. *BMC Microbiol.* 2024 May 4;24(1):155. doi: 10.1186/s12866-024-03312-6. PMID: 38704526; PMCID: PMC11069274.
6. Tabatadze L, Gabashvili E, Kobakhidze S, Lomidze G, Loladze J, Tsitskishvili L, **Kotetishvili M.** Evolutionary analysis of rabies virus isolates from Georgia. *Arch Virol.* 2022 Aug 1. doi: 10.1007/s00705-022-05550-3. Epub ahead of print. PMID: 35913651.
7. Gabashvili E, Kobakhidze S, Chkhikvishvili T, Tabatadze L, Tsiklauri R, Dadiani K, Koulouris S, **Kotetishvili M.** Metagenomic and Recombination Analyses of Antimicrobial Resistance Genes from Recreational Waters of Black Sea Coastal Areas and Other Marine Environments Unveil Extensive Evidence for Their both Intrageneric and Intergeneric Transmission across Genetically Very Diverse Microbial Communities. *Mar Genomics.* 2021 Dec 16;61:100916. doi: 10.1016/j.margen.2021.100916. Epub ahead of print. PMID: 34922301.

8. Stylianos Koulouris, Jean Lou CM Dorne, Peter Sousa Hoejskov, Davit Pipoyan, Meline Beglaryan, Lilit Sahakyan, Elmira Hasanova, Jamila Hajizada, Misir Misirli, Burhana Murshudova, Qiyasaddin Calladov, Camal Guliyev, Hanna Sandul, Ekaterina Fedorenko, Leila Tabatadze, Saba Kobakhidze, Tamar Chkhikvishvili, Ekaterine Gabashvili, Rusudan Tsiklauri, Ketevan Dadiani, Giorgi Mikadze, Kakha Sokhadze, Lasha Avaliani, Rezo Kobakhidze, Levan Ujmajuridze, **Mamuka Kotetishvili**, Tatiana Calionchina, Liscenco Oleg, Kateryna Chuzhakina. Overview of risk assessment activities for the food safety area in East European Neighborhood Policy countries. European Food Safety Authority (EFSA), APPROVED: 20/09/2021, doi:10.2903/sp.efsa.2021.e191101.
9. Gabashvili E, Kobakhidze S, Chkhikvishvili T, Tabatadze L, Tsiklauri R, Dadiani K, **Kotetishvili M.** Bacteriophage-Mediated Risk Pathways Underlying the Emergence of Antimicrobial Resistance via Intragenetic and Intergeneric Recombination of Antibiotic Efflux Genes Across Natural populations of Human Pathogenic Bacteria. *Microb Ecol.* 2021 Sep 1. doi: 10.1007/s00248-021-01846-0. Epub ahead of print. PMID: 34467445.
10. Gabashvili, E., Kobakhidze, S., Koulouris, S. Robinson, T., **Kotetishvili, M.** Bi- and Multi-directional Gene Transfer in the Natural Populations of Polyvalent Bacteriophages, and Their Host Species Spectrum Representing Foodborne Versus Other Human and/or Animal Pathogens. *Food Environ Virol* (2021). <https://doi.org/10.1007/s12560-021-09460-6>.
11. J. Paule, N. Goginashvili, I. Tvaure, L. Paule, E. Gabashvili, **M. Kotetishvili**, N. Kobakhidze. Identification and genetic diversity of *Acer ibericum* (Aceraceae) in South Caucasus. *Journal of Forest Science.* 2021. Vol. 67 (9) 420-426.
12. Gabashvili E, Osepashvili M, Koulouris S, Ujmajuridze L, Tskhitishvili Z, **Kotetishvili M.** Phage Transduction is Involved in the Intergeneric Spread of Antibiotic Resistance-Associated bla<sub>CTX-M</sub>, mel, and tetM Loci in Natural Populations of Some Human and Animal Bacterial Pathogens. *Curr Microbiol.* 2020;77(2):185-193. doi:10.1007/s00284-019-01817-2
13. Lomidze D., **M. Kotetishvili**. Genetic Recombination of the *rpoB* Gene as a Mechanism of the *Mycobacterium tuberculosis* resistance to Rifampin. *Asian Journal of Pharmacy, Nursing and Medical Sciences.* 2015 April. Vol. 3, No. 2, p. 23-32.
14. Harris, A. D., **M. Kotetishvili**, S. Shurland, J. A. Johnson, J. G. Morris, L. Nemoj, J. K. Johnson. How Important is Patient-to-patient Transmission in Extended Spectrum  $\beta$ -Lactamase (ESBL) *Escherichia coli* Acquisition. *American Journal of Infection Control.* 2007 Mar;35(2):97-101.
15. **Kotetishvili, M.**, A. Kreger, G. Wauters, J. G. Morris, Jr., A. Sulakvelidze, O. C. Stine. Multilocus Sequence Typing for Studying Genetic Relationships Among *Yersinia* species. *J Clin Microbiol.* 2005 Jun;43(6):2674-84.
16. Nemoj, L., **M. Kotetishvili**, J. Tigno, A. Keefer-Norris, A. D. Harris, E. N. Perencevich, J. A. Johnson, D. Torpey, A. Sulakvelidze, , J. G. Morris Jr., O. C. Stine. Multilocus Sequence Typing (MLST) vs. Pulsed Field Gel Electrophoresis (PFGE) for the Characterization of Extended Spectrum Beta Lactamase (ESBL) Producing *E. coli* isolates. *J Clin Microbiol.* 2005 Apr;43(4):1776-81.
17. Revazishvili, T., **M. Kotetishvili**, O. C. Stine, A. Kreger, , J. G. Morris Jr., and A. Sulakvelidze. Comparative Analysis of Multilocus Sequence Typing and Pulsed-Field Gel Electrophoresis for characterizing *Listeria monocytogenes* strains isolated from environmental and clinical sources. *J. Clin. Microbiol.* 2004. Jan; **42**(1): 276-85.
18. **Kotetishvili, M.**, O. C. Stine, Y. Chen, A. Kreger, A. Sulakvelidze, S. Sozhamannan and J. G. Morris Jr. Multilocus Sequence Typing has better discriminatory ability for typing *Vibrio cholerae* than does Pulsed Field Gel Electrophoresis, and it clusters epidemic *V. cholerae* serogroups in a distinct genetic cluster. *J. Clin. Microbiol.* 2003. May. **41**:2191-6.
19. Li M., **Kotetishvili, M.**, Y. Chen, and S. Sozhamannan. Comparative genomic analyses of the *Vibrio* pathogenicity (VPI) and Cholera Toxin prophage (CTX $\phi$ ) regions in non-epidemic serogroup strains

- of *Vibrio cholerae*. Applied Environmental Microbiology. 2003. Mar. **69**:1728-38.
20. **Kotetishvili, M.**, O. C. Stine, A. Kreger, J. G. Morris Jr., and A. Sulakvelidze. Multilocus Sequence Typing for characterization of clinical and environmental *Salmonella* strains. J. Clin. Microbiol. 2002. May. **40**:1626-1635.
  21. Kvachantiradze, M., E. Tvalchrelidze, **M. Kotetishvili**, T. Tsitsishvili. The photostabilization of *Bacillus thuringiensis* using clinoptilolite as UV protectant. Bulletin of the Georgian Academy of Sciences. 2001. **163**: 303-306.
  22. Turabelidze, D., **M. Kotetishvili**, A. Kreger, J. G. Morris Jr., and A. Sulakvelidze. Improved Pulsed-Field Gel Electrophoresis for typing vancomycin-resistant enterococci. J. Clin. Microbiol. 2000. Nov. **38**:4242-4245.
  23. Kvachantiradze, M., E. Tvalchrelidze, **M. Kotetishvili**, T. Tsitsishvili. Application of clinoptilolite as an additive for the photostabilization of the *Bacillus thuringiensis* formulation. Stud. Surf. Sci. Catal. Hungary. 1999. **125**:731-735.
  24. Mchedlishvili, Z., I. Kalandadze, T. Kiguradze, L. Shanshiashvili, **M. Kotetishvili**, R. Solomonia, D. Mikeladze. Gminobutyric acid and Ca<sup>2+</sup> subunit of Calmodul Na-dependent protein kinase II amount in different brain regions of *Kroushinsky Molodkina* rats. Moambe. Journal of the Academy of Sciences of Georgia. 1998. **158**: 498-501.
  25. Chkhubianishvili, T., I. Malania, **M. Kotetishvili**. Application of the photostabilized *Bacillus thuringiensis* formulation against *Ocneria dispar* in Georgia. Intl. J. Ecology and Life. Russia. 1998. **3**:10.
  26. **Kotetishvili M.** The study of the effect of the liquid Thyringin on the melon aphid. Proceedings of the Georgian Academy of Agriculture. 1997. **34**: 137-141.
  27. Chkhubianishvili, T., I. Malania, **M. Kotetishvili**. The photostabilized *Bacillus thuringiensis* formulation. J. Plant Protection and Quarantine. Moscow. Russia. 1997. **5**:16.
  28. Chkhubianishvili, T., **M. Kotetishvili**. The biotechnical method for the control of the greenhouse whitefly. Moambe. Journal of the Academy of Sciences of Georgia. 1991, **141**:629-630.

## INTERNATIONAL CONFERENCES/WORKSHOPS

1. Saba Kobakhidze, Nata Kakabadze, **Mamuka Kotetishvili**. Lateral genetic transfer driving co-evolutionary interactions of phages of probable industrial importance and their hosts across the Escherichia, Listeria, Salmonella, Campylobacter, and Staphylococcus Domains. International Symposium "Paradigm Shifts for Global One Health". April 23-25. Wageningen, Netherlands.
2. Saba Kobakhidze, Ketevan Dadiani, Nata Kakabadze, **Mamuka Kotetishvili**. A unique strain of *Clostridium tetani*, isolated from a retail fish market in India, carries in its genome a 1176-bp region being highly homologous to 18S ribosomal RNA loci of eukaryotic origin" at 20<sup>th</sup> World Congress on Clinical Pediatrics December 09-10, 2022 | Barcelona, Spain.
3. Saba Kobakhidze, Ketevan Dadiani, **Mamuka Kotetishvili**. A genome of the *Citrobacter freundii* strain RTE-E5 from Bangladesh carries the eukaryotic genetic material most closely related to internal loci of the human 18S ribosomal RNA gene and one of the internal transcribed spacers. The 11<sup>th</sup> Global Microbiological Summit and Expo: Recent Advancements in Medical Microbiology. Nov. 02-03. Rome, Italy.
4. Saba Kobakhidze, Giorgi Mikadze, Ketevan Dadiani, **Mamuka Kotetishvili**. The unusual pattern of bacterial evolution: Genomes of *Clostridium botulinum* and some other bacterial species carry

- eukaryotic genetic loci involved in coding for 18S and 28S ribosomal subunits. The 2<sup>nd</sup> World Congress on Food Safety and Nutrition Science. August 22-23, 2022. London, UK.
5. Saba Kobakhidze, Rusudan Barkalaia, Ketevan Dadiani, Giorgi Mikadze, **Mamuka Kotetishvili**. The *Staphylococcus aureus* strains WH9628 and WH3018 recovered from patients in Wuhan, China, were found to carry in their genomes specifically some horse and mouse genetic loci. 17<sup>th</sup> International Conference on Microbial Interactions and Microbial Ecology. October 05-06, 2022, Zurich, Switzerland.
  6. Saba Kobakhidze, Ketevan Dadiani, Giorgi Mikadze, **Mamuka Kotetishvili**. Evidence for the presence of eukaryotic genetic loci in the genome of the *Klebsiella pneumoniae* strain RTE-E3 recovered from ready-to-eat food in Bangladesh. 3<sup>rd</sup> International Conference on Microbiology and Immunology. November 21-22, 2022, London, UK.
  7. Tabatadze Leila, Gabashvili Ekaterine, Kobakhidze Saba, Lomidze George, Loladze Jimsheri, Tsitskishvili Levani, **Kotetishvili Mamuka**. Evolutionary Patterns of Rabies Virus Strains from Georgia Exhibit Risks of Their Transmission and Rabies Coinfections among Dogs and Cattle. One – Health, Environment, Society – Conference. 21-24 June, 2022. EFSA. Brussels.
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  25. Cohen, E., T. Joseph, **M. Kotetishvili**. Diatomite as a possible UV protectant for the photostabilization of *Bacillus thuringiensis*. In: Abstracts, XIV<sup>th</sup> International Plant Protection Congress (IPP), Jerusalem, Israel, July 25-30, 1999.
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**SPEECHES GIVEN INTERNATIONALLY**

- 2025 Strengthening Global One Health from the Ground Up: Inaugural Initiatives of the University of Georgia's One Health Institute in Antimicrobial Resistance and Genomic Surveillance of Foodborne and Zoonotic Pathogens. THE 6TH International Laboratory Medicine Symposium (ILMS2025). Lead of Expert Panel in Translational Research in One Health June 13-14, 2025, Chongqing, China.
- 2023 Introductory Overview of the G. Natadze Scientific-Research Institute of Sanitary, Hygiene, and Medical Ecology (GNHI). The Governing Board and General Assembly Meeting. The EU Med-Vet-Net Association. March 22-23, 2023, Vienna, Austria.
- 2022 Title: The unusual pattern of bacterial evolution: Genomes of *Clostridium botulinum* and some other bacterial species carry eukaryotic genetic loci involved in coding for 18S and 28S ribosomal subunits. The 2<sup>nd</sup> World Congress on Food Safety and Nutrition Science. August 22-23, 2022. London, UK.
- 2022 Title: Evidence for the presence of eukaryotic genetic loci in the genome of the *Klebsiella pneumoniae* strain RTE-E3 recovered from ready-to-eat food in Bangladesh. 3<sup>rd</sup> International Conference on Microbiology and Immunology. November 21-22, 2022, London, UK.
- 2022 Title: Epidemiology and risks of foodborne diseases in Georgia: gaps and challenges of food safety research lacking "One Health" approach. Tbilisi International Conference: Importance of Nutrition in Preventing Disease: Current International Research, Challenges and Opportunities for Georgia. The Great Britain and Ireland Nutrition Society and the Georgian Nutrition Society. Tbilisi, Georgia.
- 2021 Title: Food safety and animal health/welfare risk assessment challenges in Georgia, and the international collaboration as one of the pathways for problem solutions in the above areas. Workshop on cooperation activities with EFSA and risk assessment. April 22, 2021. EFSA-BIOR-SRCA (Online).
- 2021 Title: One-health case study: The case of rabies in Georgia. ONE-Health Regional Workshop for East ENP countries. European Food Safety Authority (EFSA). Parma, Italy. December 9, 2021 (Online).
- 2021 Title: Food safety and animal health/welfare risk assessment challenges in Georgia, and the international collaboration as one of the pathways for problem solutions in the above areas. International Online Workshop on cooperation activities with EFSA and risk assessment. BIOR. Institute of

Food Safety, Animal Health, and Environment. Latvia.

- 2020 Title: Food Safety Risk Assessment Challenges in Georgia. East-ENP Online-Workshop: International Collaboration and Resources for Promoting Food Safety Risk Assessment In ENP Countries. European Food Safety Authority. Italy.
- 2019 Title: Risk Assessment System of Georgia. The International Workshop “Good Regulatory Practices in Strengthening Georgian Food Laws”; organized by the U.S. Department of Agriculture (USDA). Tbilisi, Georgia
- 2010 Title: Mechanisms of drug resistance in *Mycobacterium tuberculosis*. The joint Georgian - Norwegian conference “Actual problems of Pulmonology and TB infection”. Tbilisi, Georgia. October 4-5. 2010.
- 2010 Title: The most common drug resistance mutations of Multidrug-resistant *Mycobacterium tuberculosis* in Georgia. Building Human Capacity for HIV, TB and HCV Research; International Workshop organized by the Georgian Infectious Diseases, AIDS and Clinical Immunology Center, the Center of Tuberculosis and Lung Diseases, the Emory University, the New York University, and Johns Hopkins University. Tbilisi, Georgia.
- 2008 Title: Recombination of chromosomal genes as a mechanism of virulence and environmental persistence in *Listeria monocytogenes* and *Campylobacter*. ATCC. Manassas, Virginia, USA.
- 2008 Title: Mechanisms of drug resistance in bacteria: missense mutations in *Mycobacterium tuberculosis* and allelic/gene exchange in *campylobacter*. University of Maryland School of Medicine, Baltimore. Maryland, USA.
- 2007 Title: Genetic recombination as a mechanism for the species divergence and drug resistance in bacteria. University of Maryland School of Medicine, Baltimore. Maryland, USA.
- 2007 Title: Population structures and mechanisms of drug resistance of foodborne pathogens. Food and Drug Administration (FDA). U.S. Department of Health and Human Services. Rockville, Maryland, USA.
- 2006 Title: Horizontal gene transfer as a mechanism for the species divergence and drug resistance in bacteria. University of Maryland School of Medicine, Baltimore, USA.
- 2005 Title: Intra- and inter-species relationships in the genus of *Yersinia*. University of Maryland School of Medicine, Baltimore, USA.
- 2004 Title: Multilocus Sequence Typing (MLST) as an alternative genotyping tool for determining population structures, genotypes and transmission of human pathogenic bacteria. FDA. U.S. Department of Health and Human

Services. Rockville, Maryland, USA.

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Title: Diatomite as a possible UV protectant for the photostabilization of *Bacillus thuringiensis*. XIVTH International Plant Protection Congress (IPP), Jerusalem, Israel.