

Executive Bio – Prof. Dr. Tanveer Hussain (Pakistan)

Dr. Tanveer Hussain is a Professor of Biological Sciences at the Virtual University of Pakistan, Islamabad and leading the Animal Genomics & Biodiversity Research Group. He is Veterinarian and a molecular geneticist with more than 19 years of academic and research experience. His research has encompassed diverse animal species, including livestock and wild animals, with particular emphasis on molecular genetics, biodiversity, production traits, conservation, and genetic improvement. His research focus has been on camel and yak genomics, genetic diversity, breeding, conservation, and adaptive potential of dromedary camels and yaks under changing climates representing hottest and coldest climate resilient species. He has led the HEC-funded project “GBS Based Genome Exploration of Camel to Determine their Genetic Potentials as the Animal of Future,” contributing to genomic knowledge of camel genetic resources. He has investigated regionally Pakistani dromedary breeds using mitochondrial markers, microsatellites markers, immune-related genes, prions, and molecular markers relevant to adaptation, health, and genetic diversity. More recently, his research has addressed genetic variation in Mareecha camels and the genomic potential of camels as animals of the future. He has been an active member of ISOCARD since 2015, Technical Expert to the Camel Association of Pakistan, and a member of the Executive Committee of ICC-GIC. His vision is to strengthen international collaboration, genomic conservation, sustainable camel production, and capacity building across the camelids community across the world.

Statement of Intent
(Prof. Dr. Tanveer Hussain-Pakistan)

I am seeking to serve on the Executive Committee of the International Society of Camelid Research and Development (ISOCARD) as I believe my research experience, long-standing engagement with camel science, and involvement in the camelid research community can contribute meaningfully to the Society's future development. My academic career has focused on molecular genetics, biodiversity, conservation, and genetic improvement across diverse animal species, with a sustained and specialized emphasis on dromedary camels.

Over the years, I have contributed to the genetic characterization and genomic understanding of camel breeds through studies involving mitochondrial DNA, microsatellite markers, immune-related genes, interferon genes, prion genes, and other molecular markers. I have also led an HEC-funded project on genome exploration of camels to investigate their genetic potential as animals of the future. Such efforts have strengthened my understanding of camel genetic diversity, adaptation, health, conservation, and production potential.

My engagement with the camelid community extends beyond research publications, and have been an active member of the ISOCARD since 2015. Technical Expert to the Camel Association of Pakistan, and a member of the Executive Committee of the International Camel Consortium for Genetic Improvement and Conservation (ICC-GIC). Moreover, actively participated in international camel conferences and initiatives, including leading the celebrations of the World Camel Days in June and the International Year of Camelids 2024.

As an ISOCARD Executive Committee member, would like to contribute by strengthening international collaboration, particularly connecting researchers and institutions from South Asia and other camel-producing regions. I would like to bridge the research connect and establish linkages from north to south and east to west with particular focus on young and emerging research groups focus on camelids.

I am motivated to help ISOCARD further develop as a truly global platform for camelid research and development, while ensuring that the unique genetic resources and scientific contributions of camel-producing countries to receive greater global recognition.

TANVEER HUSSAIN, PhD

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Areas of Interest:

Molecular geneticist and animal genomics researcher with more than 17 years of teaching and research experience. My research spans livestock, wildlife and neglected animal genetic resources, using molecular and genomic approaches to investigate genetic diversity, phylogeny, conservation, breeding, adaptability, productivity and disease resistance. A major and sustained focus of my work is the genetic characterization, genomics, conservation and sustainable utilization of Pakistani dromedary camels, with emphasis on their potential as resilient livestock under changing climates

Academic Qualification

Degree	Year	Discipline	Division/ Grade	Institute
Ph.D.	2013	Molecular Biology & Biotechnology (Animal Genomics)	A	University of Veterinary and Animal Sciences, Lahore, Pakistan
M.Phil	2008	Animal Breeding & Genetics	A	University of Veterinary and Animal Sciences, Lahore, Pakistan
D.V.M.	2006	Veterinary Sciences	A	University of Veterinary and Animal Sciences, Lahore, Pakistan

Current Professional and Leadership roles

- Professor, Department of Biological Sciences, Virtual University of Pakistan (2025–Present).
- Director, Office of Research, Innovation & Commercialization (ORIC), Virtual University of Pakistan (2025–Present).
- Head, Animal Genomics & Biodiversity Research Group.
- Vice Chairman, World Cashmere Goat Genome Cooperative Network.
- Focal Person for Pakistan, International Society of Camelid Research and Development (ISOCARD).
- Member, Executive Committee, International Camel Consortium for Genetic Improvement and Conservation (ICC-GIC).
- Technical Expert, Camel Association of Pakistan (2021–2023).

Research Output (Summary)

Citations	>1001
h-index	17
i-10 index	25
Impact factor	≈ 230
Publications	222
Publications as First author	37
Editorial	01
Review papers	14
Books/ Chapters/ Proceedings as author/ co-author/ co-editor	24
Publications in conference proceedings	08
Invited Speaker talks	24
Conferences/ workshops	160
Research Projects	24
Student's research supervision	179
International Consortiums	05
International Fellowships	04
Research Productivity Awards	02
International Award (<i>Yak and Camel Foundation 2023</i>)	01
Gold Medals (<i>based upon research contributions</i>)	02
Zoologist of the Year Award (2026)	01

Camel Research & Genetic contributions

My principal area of specialization is camel genomics and molecular genetics, particularly the genetic resources of Pakistani dromedary camels. I have investigated genetic diversity, population relationships, adaptation, health-related genes and breeding potential using mitochondrial DNA, microsatellites, sequence-based markers and candidate genes.

- Genetic diversity and phylogenetic characterization of eight Pakistani dromedary camel breeds using mitochondrial ATP6/ATP8 markers.
- Microsatellite-based genetic diversity analysis of Mareecha and Barela/Bareela camel breeds.
- Molecular investigation of interferon genes, immune-related genes and other candidate loci in Pakistani camel populations.
- Prion protein gene characterization in Pakistani dromedary breeds in relation to animal health and zoonotic concerns.
- Research on genetic architecture, production potential and adaptive capacity of Pakistani camel breeds.
- HEC-funded project: "GBS Based Genome Exploration of Pakistani Camel to Determine their Genetic Potentials as the Animal of Future."
- Research and scientific advocacy on the role of camels as resilient livestock and an important genetic resource under global climate change.

Selected Camel Publications

1. Hussain, T. et al. (2024). Molecular Variations in Interferon Alpha Gene in Mareecha Dromedary Camel of Pakistan. *International Journal of Agriculture and Biology*, 32: 475–482.
2. Hussain, T. et al. (2022). Review on Genomics, Production Potential and Usefulness of Camel as the Animal of Future. *International Journal of Agriculture and Biology*, 27: 193–202.
3. Hussain, T. et al. (2021). Sequence Diversity of Interferon Beta-1 Gene in Dromedary Camel Breeds of Pakistan. *Pakistan Journal of Zoology*, 53(3): 1185–1187.
4. Hussain, T. et al. (2021). Microsatellite Marker Based Genetic Diversity in Mareecha and Barela Breeds of Dromedary Camel from Pakistan. *Veterinarska Stanica*, 52(3).
5. Hussain, T. et al. (2018). Molecular Diversity and Phylogenetic Analysis of Eight Dromedary Camel Breeds of Pakistan Based on Mitochondrial ATP6 and ATP8 Genes. *Pakistan Journal of Agricultural Sciences*, 55(2): 397–401.
6. Hussain, T. et al. (2017). Genetic Analysis and Comparison of Pakistani Camels (*Camelus dromedarius*) by Prion Gene. *Acta Scientiae Veterinariae*, 45: 1–8.
7. Hussain, T. et al. (2016). Sequence Diversity of BoLA-DRB3 Gene in Pakistani Dromedary Camel. *Journal of Animal and Plant Sciences*, 26(1): 301–303.

Research Across other Animals Species

Alongside camel research, I have contributed to molecular genetics, genomics, conservation and breeding research in a broad range of domestic and wild species, reflecting a multidisciplinary animal-genomics program.

Species / group	Selected research focus
Yak (<i>Bos grunniens</i>)	Molecular diversity, phylogeny, microsatellites, candidate genes, adaptation and productivity.
Goats	Genetic diversity, phylogeny, mitochondrial markers, microsatellites and candidate genes in Pakistani breeds.
Sheep	Genetic diversity, phylogeny and molecular characterization of indigenous breeds.
Cattle	Mitochondrial phylogeny, genetic diversity and breeding-related studies.
Buffalo	Population genetic diversity and SNP-based genetic characterization.
Chicken	Genome/population genetics and participation in international chicken genomics networks.
Wildlife	Genetic profiling and conservation studies of Punjab urial, chinkara, vultures, pheasants and other species.
River dolphin	Genomic and conservation research involving the Indus River dolphin.

Contribution to ISOCARD & Vision

I aim to strengthen ISOCARD as a truly global platform connecting camelid researchers, breeders, veterinarians, industry, policy makers and young scientists. My priorities include expanding international collaboration, promoting camel genomics and conservation genetics, supporting young researchers and researchers from underrepresented camel-producing regions, facilitating knowledge exchange, and increasing recognition of camelids as strategic livestock for climate resilience, food security and sustainable livelihoods.

Executive Bio

Dr Moldir Nurseitova Kazakhstan

Dr Moldir Nurseitova is a Senior Researcher in the Chemical Methods and Analysis Laboratory at Antigen LLP, Kazakhstan. She holds a PhD in Ecology and has more than 15 years of experience in food safety, analytical research, environmental contaminants, and products of animal origin. Her work has a sustained focus on Bactrian and dromedary camels, particularly camel milk quality and authenticity, persistent organic pollutants, milk composition, fermentation, and the development of camel-product standards.

Her camel-related research includes studies of PCB and DDT transfer and kinetics in Bactrian camels, comparison of dairy performance among camel types, camel body measurements and productivity, camel milk proteins, fermented camel milk, milk-fat authenticity, and cryoscopic detection of added water. She has contributed to national and international research projects and has managed projects on food quality, biosafety, and analytical laboratory modernization.

Dr Nurseitova helped organize the 4th ISOCARD Conference in Almaty in 2015 and has continued to contribute to international camel research through publications, conference presentations, and collaboration with researchers in Kazakhstan, France, and other camel-producing countries. Her recent work supports evidence-based quality requirements for camel milk and the development of national and international standards that recognize the specific characteristics of Bactrian camel products.

Her vision is to strengthen collaboration among camel researchers, laboratories, producers, and standardization bodies; expand opportunities for young scientists; and translate scientific findings into practical tools for food safety, product authenticity, sustainable camel production, and wider recognition of Central Asian camel research.

Statement of Intent

Dr Moldir Nurseitova Kazakhstan

I am seeking to serve on the Executive Committee of the International Society of Camelid Research and Development because my research experience in camel products, food safety, and analytical science can contribute to the Society's scientific and regional development.

For more than fifteen years, my work has connected environmental science with the safety and quality of foods of animal origin. A major part of this work has focused on camels in Kazakhstan. I have studied the transfer and kinetics of persistent organic pollutants in Bactrian camels, camel milk composition and authenticity, milk-fat adulteration, fermentation of shubat, and analytical indicators such as the freezing point of camel milk. I have also contributed to research on body measurements, productivity, and the development of evidence for camel-product standards.

My relationship with the ISOCARD community includes participation in camel conferences and contribution to the organization of ISOCARD 2015 in Almaty. These activities have shown me the value of connecting researchers across countries and disciplines, especially in regions where camels are important for food security and rural livelihoods but local scientific results are not always sufficiently visible internationally.

As a member of the Executive Committee, I would work to strengthen cooperation between Central Asian researchers and the wider camelid community. I would support joint research, harmonized analytical methods, exchange of reference data, and greater participation of young scientists and laboratory specialists. I would also promote closer dialogue between science, producers, industry, and standardization organizations so that research findings can lead to reliable quality requirements and practical benefits for camel farmers and consumers.

I am particularly motivated to ensure that Bactrian camel research and the experience of Kazakhstan and neighboring countries are represented in international initiatives. I would bring to ISOCARD a combination of laboratory expertise, project management experience, international collaboration, and long-term commitment to camel milk safety and authenticity.

I would be honored to contribute to ISOCARD's mission and to work with colleagues to advance rigorous, collaborative, and practically relevant camelid research.

Moldir Nurseitova PhD

Senior Researcher Antigen LLP Kazakhstan

Email	mnurseitova2@gmail.com
ORCID	0000-0001-7356-9941
Scopus Author ID	56043269300
Web of Science	P-9159-2017

Areas of Interest

Food safety and authenticity; camel milk quality; persistent organic pollutants in animal-derived foods; analytical chemistry; milk and dairy products; camel-product standardization; sustainable use of camel resources.

Academic Qualifications

Degree	Year	Discipline	Institution
PhD	2014	Ecology	Al-Farabi Kazakh National University
MSc	2009	Ecology	Al-Farabi Kazakh National University
BSc	2007	Biology	International Kazakh-Turkish University

Current and Previous Roles

- Senior Researcher, Chemical Methods and Analysis Laboratory, Antigen LLP, 2024-present.
- Head of the Chemical Methods and Analysis Laboratory, Antigen LLP, 2014-2024.
- Senior Lecturer, Department of Biotechnology, Al-Farabi Kazakh National University, 2019-2022.
- Junior Researcher, Laboratory "Ecology of the biosphere" of Centre of Physico-Chemical Methods of Investigations and Analysis, 2011-2014

International Experience

- Research internships in food-contaminant analysis at the University of Lorraine and CIRAD, France, 2012 and 2014.
- Organizer and participant, 4th ISOCARD Conference, Almaty, Kazakhstan, 2015.
- Participant, international conference Camel Milk Overview in the Mediterranean Basin, Algeria, 2022.

Research Profile

Camel Science Food Safety Analytical Methods

Camel Research and Scientific Contributions

- Transfer, bioaccumulation, and kinetics of PCB and DDT residues in Bactrian camels and camel milk.
- Comparison of dairy performance, body measurements, and productivity of dromedary, Bactrian, and crossbred camels.
- Studies of camel milk proteins, spontaneous shubat fermentation, composition, quality, and authenticity.
- Analytical detection of camel milk adulteration, including fatty-acid and sterol profiling and freezing-point measurement.
- Research supporting national standards for camel milk composition, productivity, quality, and authenticity.
- Development and application of GC, HPLC, FTIR, extraction, and physicochemical methods for foods of animal origin.

Selected Research Projects

- Development of innovative methods for improving the genetic potential of Kazakhstan camel populations and technologies for camel-product production and processing, 2024-2026, Senior Researcher.
- Study of spontaneous fermentation mechanisms in camel milk as a source of authentic microflora, 2022-2024, Senior Researcher.
- Development of technology to reduce transfer of persistent organic pollutants from pasture soils to foods of animal origin, 2021-2023, Project Manager.
- Proteomic study of camel milk proteins, 2015-2017, responsible researcher.
- Transfer of DDT to Bactrian camels, personal research grant, 2012.

Core Analytical Expertise

Environmental and food sampling; sampling-strategy development; sample preparation by solid-phase microextraction, derivatization, Soxhlet extraction, liquid-liquid extraction, and concentration; chromatographic and spectroscopic analysis; laboratory quality systems; interpretation of food authenticity and contaminant-transfer data.

Languages

Kazakh native; Russian and English fluent.

Selected Camel Publications and ISOCARD Vision

1. Konuspayeva G., Nurseitova M., Chuvashova E., Bilal Z., Amutova F., Faye B. Detection of water adulteration in camel milk by freezing point. *Journal of Dairy Research*, 2026. <https://doi.org/10.1017/S002202992610212X>
2. Amutova F. et al., including Nurseitova M. Body measurements, milk composition and productivity of Aruana dromedary and Kazakh Bactrian camel: the basis for the establishment of a national standard. *Biology*, 2026, 15, 644. <https://doi.org/10.3390/biology15080644>
3. Nurseitova M. et al. Comparative study of the physicochemical properties of cisternal, alveolar, and residual milk of dromedary camels from South Kazakhstan Region. 2025. <https://doi.org/10.52081/bkaku.2025.v74.i3-1.315>
4. Konuspayeva G., Faye B., Nurseitova M., Akhmetsadykova S. What are the challenges for implementing an organic label for camel milk? *Frontiers in Nutrition*, 2023, 10, 1288553. <https://doi.org/10.3389/fnut.2023.1288553>
5. Jurjanz S., Nurseitova M., Konuspayeva G., Faye B. Kinetics of polychlorinated biphenyls in Bactrian camels. *Emirates Journal of Food and Agriculture*, 2018, 30(4), 312-319. <https://doi.org/10.9755/ejfa.2018.v30.i4.1667>
6. Nurseitova M. et al. Bioaccumulation and decontamination mechanisms of persistent organic pollutants in Bactrian camels. *International Journal of Biology and Chemistry*, 2015, 9(1), 4-8.
7. Jurjanz S., Nurseitova M., Konuspayeva G., Faye B. Comparison of dairy performances among dromedaries, Bactrian and crossbred camels in South Kazakhstan. *Emirates Journal of Food and Agriculture*, 2014, 26(4), 366-370. <https://doi.org/10.9755/ejfa.v26i4.17271>

Contribution to ISOCARD and Vision

I aim to help ISOCARD connect camel researchers, analytical laboratories, producers, and standardization bodies. My priorities are collaborative research, harmonized methods for camel-product quality and authenticity, greater visibility for Bactrian camel science, and meaningful opportunities for young researchers. I also seek to support the translation of scientific results into practical standards and tools that improve food safety, consumer confidence, and sustainable camel production.

Motivation Letter

– Application for ISOCARD Executive Committee Membership

Dear ISOCARD Executive Committee and Members,

I am writing to formally express my sincere interest in serving as a member of the Executive Committee of the International Society of Camelid Research and Development (ISOCARD). I firmly believe that my academic background, research experience, and active engagement in camel-related projects position me well to make meaningful contributions to the Society's mission and governance.

I currently serve as a Lecturer at the College of Food Science and Engineering, Inner Mongolia Agricultural University, and am a core member of the China-Mongolia Belt and Road Joint Laboratory on Biomacromolecule Applications. I obtained my Ph.D. in Molecular Microbiology from the University of Copenhagen (2021–2025) and my Master's and Bachelor's degrees in Veterinary Medicine from China Agricultural University (2013–2020). This interdisciplinary training across veterinary medicine, microbiology, and food science has equipped me with a comprehensive perspective on animal health, microbial ecology, and product development, while also strengthening my research capabilities in antimicrobial resistance, genomics, and microbial ecology.

ISOCARD's commitment to interdisciplinary camelid research and the diversified development of the field aligns closely with my own research directions and the core priorities of my hosting laboratory. The China-Mongolia Belt and Road Joint Laboratory, where I am a core member, has four flagship research pillars, with camel germplasm resource exploration, camel product development, and the exploitation of lactic acid bacteria resources as key priority areas. I am currently leading a project funded by the Inner Mongolia Natural Science Foundation for Young Scientists entitled "Mining, Antimicrobial Mechanism and Application Potential of Bacteriocins from Lactic Acid Bacteria in the Bactrian Camel Gut Niche" (Project No. 2026QC0574). This project focuses on the gut microbiota of Bactrian camels, exploring their bioactive potential for food safety and animal health applications—a frontier area with significant promise for both camel research and industry development.

The Bactrian camel, as an iconic species of the Mongolian Plateau and a vital economic livestock in arid regions, has long been a core subject of China-Mongolia collaborative research. My laboratory serves as a strategic platform linking China's Belt and Road Initiative with Mongolia's Steppe Road Strategy, consistently dedicated to joint research, talent cultivation, and technology transfer in camel-related fields. This nomination to the Executive Committee is not merely a personal honor, but a valuable opportunity to serve the global camel research community. I am deeply committed to conducting interdisciplinary, cross-regional, and sustainable innovative research. Drawing on my professional foundation in microbiology and veterinary medicine, my research experience in camel-related projects, and my engagement with international cooperative

platforms, I am confident in my ability to contribute tangibly to the development of ISOCARD and the advancement of global camelid science.

I sincerely thank the nominating committee for their trust and consideration, and I look forward to the opportunity to collaborate with distinguished colleagues in promoting the high-quality development of global camelid research.

Yours sincerely,

Taya Tang

PhD, Lecturer

College of Food Science and Engineering

Inner Mongolia Agricultural University, China

Email: ttycau@163.com

Curriculum Vitae

Personal Information

Name	Taya Tang	M/F	Female
Birth Date	January 14,1995	Phone	+86 18801316323
Nationality	Chinese	Email	ttycau@163.com
ORCID:	https://orcid.org/0000-0002-5414-4355		



Work Experience

Sep. 2025 – Present	Lecturer , China-Mongolia Belt and Road Joint Laboratory on Biomacromolecule Application, Collage of Food Science and Engineering, Inner Mongolia Agricultural University, China
Nov. 2024 – Jan. 2025	Research Assistant , Laboratory of Food Safety and Zoonoses, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark

Education Background

Nov. 2021 – Jan. 2025	Ph.D. in Molecular Microbiology Faculty of Health and Medical Sciences, University of Copenhagen, Denmark
Sep. 2018 – Jul. 2020	Master of Veterinary Medicine College of Veterinary Medicine, China Agricultural University
Sep. 2013 – Jun. 2018	Bachelor of Veterinary Medicine College of Veterinary Medicine, China Agricultural University

Research Project

Mining, Antimicrobial Mechanism and Application Potential of Bacteriocins from Lactic Acid Bacteria in the Bactrian Camel Gut Niche

(Funding: Inner Mongolia Natural Science Foundation Youth Program. Project No.: 2026QC0574)

Publications

1. Soto-Serrano A, **Tang T**, Su C, et al. Latilactobacillus parasakei sp. nov., isolated

from freshwater puddles near Skálholt, Iceland, and emended description of the genus *Latilactobacillus*. *International Journal of Systematic and Evolutionary Microbiology*, 2026. DOI: 10.1099/ijsem.0.007189.

2. Gao Y, Ji L, **Tang T**, et al. Genomic surveillance reveals distinct clonal lineages and antibiotic resistance patterns in *Staphylococcus aureus* from retail pork in Beijing versus Copenhagen. *Microbiology Research*, 2026, 170(2):0034. DOI: 10.3390/microbiolres17020034.

3. López PA[#], **Tang T**[#], Aideh B, et al. Metagenomic analysis of 130-year-old Danish starter culture material including genome analysis of *Lactococcus cremoris* starter. *International Dairy Journal*, 2025, 167:106258. DOI: 10.1016/j.idairyj.2025.106258.

4. **Tang T**, Leisner JJ. Bacteriocin antagonistic potentials of *Lactococcus cremoris* and *Lactococcus lactis* isolates from different habitats. *Probiotics and Antimicrobial Proteins*, 2025, 17(6):4203–4214. DOI: 10.1007/s12602-024-10361-w.

5. **Tang T**[#], Valsøe S[#], Soto-Serrano A, et al. Complete genome sequence of *Weissella soli* strain 3-88 isolated from Kaldá river, Iceland. *Microbiology Resource Announcements*, 2025, 14(8):e0043825. DOI: 10.1128/mra.00438-25.

6. **Tang T**, Chen Y, Zhao Z, et al. Nisin-loaded chitosan/sodium alginate microspheres enhance the antimicrobial efficacy of nisin against *Staphylococcus aureus*. *Journal of Applied Microbiology*, 2024. DOI: 10.1093/jambio/txae259.

7. **Tang T**, Leisner JJ. Complete genome sequence of *Listeria seeligeri* strain 43-1 isolated from a Danish forest freshwater swamp. *Microbiology Resource Announcements*, 2024, 13(7):e0031124. DOI: 10.1128/mra.00311-24.

8. **Tang T**, Leisner JJ, Roux S. Draft genome sequences of three *Carnobacterium maltaromaticum* isolates from two low pH bogs in Denmark. *Microbiology Resource Announcements*, 2024, 13(1):e0096923. DOI: 10.1128/mra.00969-23.

9. **Tang T**, Martinenghi LD, Hounmanou YMG, Leisner JJ. Distribution and ecology of the generalist lactic acid bacterium *Carnobacterium maltaromaticum* in different freshwater habitats: Metabolic and antagonistic abilities. *Environmental Microbiology*, 2023, 25(12):3556–3576. DOI: 10.1111/1462-2920.16508.

10. Li H[#], **Tang T**[#], Stegger M, et al. Characterization of antimicrobial-resistant *Staphylococcus aureus* from retail foods in Beijing, China. *Food Microbiology*, 2021, 93:103603. DOI: 10.1016/j.fm.2020.103603.

11. Yang Y[#], **Tang T**[#], Liu B, et al. TB@PLGA nanoparticles for photodynamic/photothermal combined cancer therapy with single near-infrared irradiation. *International Journal of Nanomedicine*, 2021:4863 – 4871. DOI: 10.2147/ijn.s304713.

12. **Tang T**[#], Xu X[#], Wang Z, et al. Cu₂ZnSnS₄ nanocrystals for microwave thermal and microwave dynamic combination tumor therapy. *Chemical Communications*, 2019, 55(87):13148–13151. DOI: 10.1039/c9cc07762f.

Executive Committee (EC) of ISOCARD
Nomination Form – 2026 General Assembly

Submission Deadline: [15/08/2026] | **Return to:** [Dr Mufida Atigui: atigui.moufida@gmail.com]

SECTION 1: Vacant Position Details

Please check the box [X] for the specific position you are contesting (select one):

- General Executive Committee Member [X]
- Secretary []
- Treasurer []

SECTION 2: Nominee Information (The Candidate)

- **Full Name & Titles:** Prof. Dr. Guangzhi Zhang
- **Institutional/Corporate Affiliation:** Institute of Animal Science (IAS), Chinese Academy of Agricultural Sciences (CAAS), Beijing 100193, China
- **Current Job Title / Role:** Deputy Director of IAS
- **Society Membership (circle):** _Yes_ ; No 0; Year Joined: _____
- **Email Address:** zhangguangzhi@caas.cn
- **Phone Number:** _____

SECTION 3: Nominator Endorsements

Most scientific societies require candidates to be nominated and seconded by current financial members in good standing. (Self-nominations are permitted if allowed by the bylaws, but seconders are still typically required).

Proposer (Nominator 1)

- **Full Name:** Prof. Dr. Ulrich Wernery **Membership ID:** _____ ✓
- **Affiliation:** Scientific Director, CVRL, UAE **Email:** cvrl@cvrl.ae
- *"I hereby nominate the above nominee for the selected EC position and declare that the information provided is true to the best of my knowledge."*
- **Signature:** *Ulrich Wernery* **Date:** 21.07.2026 [1, 2]

Seconded (Nominator 2)

- **Full Name:** Dr. Christiana Hebel **Membership ID:** _____ ✓
- **Affiliation:** Veterinarian, CVRL **Email:** christiana@cvrl.ae
- *"I hereby second the nomination of the above candidate."*
- **Signature:** *Christiana Hebel* **Date:** 27.7.26 [1, 2, 3]

SECTION 4: Candidate Supporting Materials

Please attach the following components to this form. Failure to include them may render the nomination invalid.

1. **Executive Bio (Max 200 words):** A summary of your professional background, main scientific contributions, and prior engagement with the society. *Note: If an election ballot is required, this bio will be published to the voting members.*

He got PhD in Veterinary Medicine from Ghent University, Belgium, and completed postdoctoral training at the University of California, Berkeley, USA. Committee member of the Zoonotic Tuberculosis Committee of the Chinese Anti-Tuberculosis Association, the inaugural Youth Editorial Board Member of Animal Research and One Health, and an editorial board member of journals including *Veterinary Research*, *Animal Research and One Health*, *Modern Agriculture*, and *Advanced Genetics*.

His research focuses on integrated prevention and control of critical bacterial zoonosis in livestock such as brucellosis and tuberculosis affecting cattle, sheep and camels. Over the past five years, he has published 15 SCI papers as first or corresponding author in journals like *Journal of Infectious Diseases*, *Science Bulletin* and *Frontiers in Immunology*, with total citations exceeding 840. He presided over 8 research projects including 3 sub-projects of the 14th Five-Year National Key R&D Program and 1 BRICS Young Scientist Exchange Program project, and authored one monograph as the first chief editor. He has established international collaborations with institutions in 10 countries, like France, Brazil, the UAE and Mongolia to promote global application of zoonosis diagnostics and vaccines. Member of Belgian and American Immunology Societies, he also reviews manuscripts for PLOS Pathogens, mBio and other journals.

2. **Statement of Intent / Strategic Vision (Max 400 words):** Outline why you want to serve on the EC, the skills you bring, and your vision for the society's future priorities.

I am writing to express my strong interest in serving as an Executive Committee Member of ISOCARD. My research career has long focused on zoonotic bacterial diseases, particularly brucellosis and tuberculosis in cattle, sheep and camels.

I maintain extensive research collaborations with institutions across 10 countries, such as UAE, Mongolia, Brazil, Belgium, the United States, Thailand, and France, which equips me with solid cross-continental networks and field-oriented expertise to support the core mission of the society. I possess rich international cooperation experience and have led multiple international research projects, including the FAO South-South Cooperation Programme in Mongolia that targets brucellosis prevention and control in cattle, sheep, and camels. I have developed two innovative diagnostic reagents for camel brucellosis. Furthermore, I established differential diagnostic assays to distinguish vaccine-induced immunity from natural infection in bovine brucellosis, greatly facilitating precise diagnosis and pilot eradication of bovine brucellosis in Beijing. I also serve as a key team member contributing to the research and development of rough live brucellosis vaccines. Notably, in May 2026, I chaired the International Symposium on Zoonoses and Key Infectious Diseases of Camels, which successfully attracted more than 200 professional zoonosis experts from 10 countries worldwide.

China hosts large populations of Bactrian camels, whereas the UAE and many Middle Eastern regions rely on dromedary camels. Distinct biological characteristics and disease epidemiological patterns exist between these two camel species. As an EC member, I can facilitate targeted comparative research between Bactrian and dromedary camels, accelerating technological advances in camel disease prevention and animal health.

If elected, I will bring solid expertise in camel zoonoses, experience coordinating international research projects, and a track record of facilitating technology exchange between Asia, Africa and the Middle East. I am well positioned to bridge laboratory research and field disease control for diverse camel production systems.

Looking ahead, I envision three priority areas for ISOCARD. First, strengthen global surveillance networks for camel-associated diseases to mitigate public health risks at the human – camel interface. Second, promote the development and international rollout of affordable, robust diagnostic tools and safe vaccines applicable to both camel species. Third, foster research partnerships and young scientist exchange programmes to build regional capacity in camel health.

I aim to amplify ISOCARD's influence within the One Health framework, connect Asian Bactrian camel research communities to the society, and translate scientific findings into practical control strategies for pastoral regions worldwide. I am committed to contributing time, academic networks and technical knowledge to advance ISOCARD's objectives.

3. **Abbreviated Curriculum Vitae (CV):** Attach an academic or professional CV of no more than 3 pages highlighting relevant publications, governance, or leadership experience. Please see the CV file.

SECTION 5: Declarations & Candidate Consent

Please read and initial each box before signing.

- I confirm that I am a current financial member in good standing of the Society.
- I confirm that I meet all eligibility criteria outlined in the Society's Constitution and Bylaws.
- I acknowledge the time commitment involved (approx. X hours/month) and confirm I have institutional support to fulfill these duties.
- I agree to abide by the Society's Code of Conduct and Conflict of Interest policies.

Nominee's Signature: _____

_____ Date: 07.23.2026

GUANGZHI ZHANG. PhD.

CURRICULUM VITAE

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WORK EXPERIENCES

Researcher
IAS, CAAS

Beijing, China
2018-Now

Postdoctoral Researcher
University of California, Berkeley

Berkeley, USA
2015-2018

Immunotherapeutics and Vaccine Research Initiative (IVRI) Researcher
University of California, Berkeley

Berkeley, USA
2017-2018

EDUCATION/TRAINING

Ghent University

Merelbeke, Belgium
2010-2015

PhD, Veterinary Medicine

Dissertation Title: Virulence factors of *Helicobacter suis* with emphasis on gamma-glutamyl transpeptidase

Thesis Exam Committee: Prof. Herman Favoreel (UGent, Belgium); Prof. Hilde De Reuse (Institut Pasteur, France); Prof. Piet Deprez (UGent, Belgium)

Huazhong Agricultural University

Wuhan, China
2007-2010

Master, Preventive Veterinary Medicine

Agricultural University of Hebei

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2003-2007

Bachelor, Veterinary Medicine

SELECTED PUBLICATIONS IN PAST 5 YEARS (as first author[#] and corresponding author*)

1. Asif G[#], Chudhary A[#], Feng Y[#], Silvana BM, Jiang H*, Ding J*, **Zhang G***. Comprehensive Genomic and Computational Insights into *Brucella suis*: Pan-Genome Analysis, Evolutionary Perspectives, and *In-silico* Vaccine Design. *BMC Genomics*. 2026. June. 17th (IF₂₀₂₅=3.9, JCR Q2).
2. Jiao P[#], Liu D[#], Jia X*, **Zhang G***, Jiang H*, Ding J*. Host Z-RNAs: the endogenous trigger for ZBP1 activation during pathogen infection. *Science Bulletin*. 2026 Jan 12:S2095-9273(26)00012-5. doi: 10.1016/j.scib.2026.01.011 (IF₂₀₂₅=21.1, JCR Q1).
3. **Zhang G***, Shen Q[#], Ye J, Feng Y, Boireau P, Fan X, Lv L, Li Y, Xu X, Cha H, Shen C, Zhang Y, Peng X, Jiang H*, Ding J*. Single-cell transcriptome profiling reveals the immune dysregulation characteristics of mice infected by *Brucella abortus*. *Journal of Infectious Diseases*. 2025 Oct 11:jiaf522 (IF₂₀₂₅=4.5, Nature Index, JCR Q1).
4. Li, L[#], **Zhang, G***, Liu, M., Lv, L., Peng, X., Feng, Y., Yang, X., Ding, J., Liu, C., Qin, J., Li, P., Jiang, H. and Fan, X., The Induction and Characterization of a Potential Rough-Type *Brucella* Vaccine Candidate Strain RA343, and Its Safety, Protective Efficacy in Mouse and Guinea Pig Models. 2025. *Anim Res One Health*, 3: 195-205. <https://doi.org/10.1002/aro2.70001> (IF₂₀₂₅=5.3, JCR Q1).
5. **Zhang G**, Raheem A[#], ..., Jiang H*, Xin T*, Ding J*. Immunomodulatory Effects of *Lactiplantibacillus plantarum*

- Strain RW1 During Salmonella Infection in Murine Intestinal Epithelial Cells and Dextran Sulfate Sodium-Induced Murine Colitis. *Probiotics Antimicrob Proteins*. 2024 Dec 3. doi: 10.1007/s12602-024-10411-3. (IF₂₀₂₄=4.4, JCR Q1)
6. Yuan Y, Ning W,..., Mao L, **Zhang G**, Zhou S, Ding J, Yang X, Ye J. Serine/threonine protein kinase mediates rifampicin resistance in *Brucella melitensis* through interacting with ribosomal protein RpsD and affecting antioxidant capacity. *mSystems*. 2024 Dec 5:e0110924. doi: 10.1128/msystems.01109-24. (IF₂₀₂₄=5.0, JCR Q1)
 7. **Zhang G**[#], Qiu Y[#], Boireau P,..., Tadesse Z, Wani AN, Song J*, Ding J*. Modern Agriculture and One Health. *Infectious Diseases of Poverty*. 2024. 13:74 (IF₂₀₂₄=4.8, JCR Q1)
 8. Wang J[#], Ling D[#], Shi L, Li H, Peng M, Wen H, Liu T, Liang R, Lin Y, Wei L, **Zhang G**^{*}, Chen S*. METTL3-mediated m⁶A methylation regulates ovarian cancer progression by recruiting myeloid-derived suppressor cells. *Cell & Bioscience*. 2023 (IF₂₀₂₃=7.5, JCR Q1).
 9. Wu Y[#], **Zhang G**[#], Jiang H, Xin T, Jia L, Zhang Y, Yang Y, Qin T, Xu C, Cao J, Ameni G, Ahmad A, Ding J, Li L, Ma Y*, Fan X*. Molecular Characteristics of Bovine Viral Diarrhea Virus Strains Isolated from Persistently Infected Cattle. *Veterinary Sciences*. 2023; 10(7):413 (IF₂₀₂₃=2.4, JCR Q1).
 10. Li H[#], Lin W[#], **Zhang G**[#], Liu R, Qu H, Zhang J, Xing X*. BMSC-exosomes miR-25-3p regulates the p53 signaling pathway through PTEN to inhibit cell apoptosis and ameliorate liver ischemia-reperfusion injury. *Stem Cell Reviews and Reports* 2023. Aug 18. doi: 10.1007/s12015-023-10599-x. (IF₂₀₂₃=4.8, JCR Q1).
 11. **Zhang G**, Wang J, Zhao Z, Xin T, Fan X, Shen Q et al., Ding J. Regulated necrosis, a proinflammatory cell death, potentially counteracts pathogenic infections. *Cell Death & Disease*, 2022 Jul 22;13(7):637 (IF₂₀₂₂=9.7, JCR Q1).
 12. **Zhang G**, Raheem A, Gao XT, Zhang JW, Shi LJ, Wang MY, et al. Cytoprotective Effects of *Lactobacilli* on Mouse Epithelial Cells during *Salmonella* Infection. *Fermentation-Basel* 2022, 8(3). (IF₂₀₂₂=3.7, JCR Q2).
 13. **Zhang G**, Li B, Yoo D, Qin T, Zhang X, Jia Y, et al. Animal coronaviruses and SARS-CoV-2. *Transbound Emerg Dis* 2021, 68(3): 1097-1110. (IF₂₀₂₁=4.5, JCR Q1)
 14. Raheem A, Liang L, **Zhang G**^{*}, Cui S*. Modulatory Effects of Probiotics During Pathogenic Infections With Emphasis on Immune Regulation. *Front Immunol* 2021, 12: 616713. (IF₂₀₂₁=8.8, JCR, Q1)
 15. **Zhang G**, Wang H, Zhang JW, Tang XM, Raheem A, Wang MY, et al. Modulatory Effects of *Bacillus subtilis* on the Performance, Morphology, Cecal Microbiota and Gut Barrier Function of Laying Hens. *Animals-Basel* 2021, 11(6). (IF₂₀₂₁=3.2, JCR Q1)

GRANTS/FUNDINGS

1. Beijing Rural Revitalization Agricultural Science and Technology Project (Title: Screening of Brucellosis Immune Vaccines and Establishment & Application of Differential Diagnostic Methods for Brucellosis, NY2502170100), 2025.03-2026.12, PI (1300, 000 RMB).
2. China-Brazil Young Scientists Exchange Program (Title: Brucellosis Prevention & Control Improve Animal Health and Food Safety), 2025.1-2025.12, PI (34, 000 RMB) (Ministry of Science and Technology, China).
3. National Key Research and Development Program of China (No. No. 2024YFD1800300; 2025.01-2027.12). PI of sub-project (400,000 RMB) (Ministry of Science and Technology, China).
4. National Key Research and Development Program of China (No. No. 2022YFD1301105; 2022.06-2027.05). PI of sub-project (540,000 RMB) (Ministry of Science and Technology, China).
5. National Key Research and Development Program of China (No. 2021YFD1801200; 2021.01-2023.12). PI of sub-project (500,000 RMB) (Ministry of Science and Technology, China).
6. Central Public-interest Scientific Institution Basal Research Fund (Grant number: 2021-YWF-ZYSQ-10; 2021.01-2022.12), PI (200,000 RMB).

PROFESSIONAL ASSOCIATIONS

1. Scientific Editors of Journals: *Veterinary Research*, *Modern Agriculture*, *Animal Research and One Health*, *Advanced Genetics*
2. Scientific Reviewers: *Veterinary Microbiology*, *Pathogens*, *Vaccines*, *Veterinary Research*, *Applied and Environmental Microbiology*, *International Journal of Molecular Sciences*, *Microbiology Spectrum*, *Bio-protocol*...
3. Member of Belgium Immunology Society; Member of New York Academy of Sciences; Member of American Association of Immunologists