Peerzada Tajamul Mumtaz, Ph.D.

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PROFESSIONAL SUMMARY

Accomplished Molecular Biologist with nearly 10 years of comprehensive research experience, including doctoral and postdoctoral training, specializing in cell and extracellular vesicle (EV) biology, microbiology, host-microbe interactions, microbiome dynamics, and multi-omics data integration. Currently a Postdoctoral Research Associate at the University of Nebraska-Lincoln, leading innovative studies on the biodistribution, bioavailability, and functional roles of microbial EVs in gut health and metabolic diseases. Proficient in cutting-edge molecular and cellular techniques, high-throughput omics technologies, and advanced bioinformatics analysis. Demonstrated ability to drive interdisciplinary research projects that bridge molecular biology and biotechnology, with a strong commitment to translating scientific insights into practical applications. Passionate about advancing knowledge and developing novel solutions with significant academic and societal impact.

ACADEMIC QUALIFICATIONS

Ph.D.	Jaipur National University (JNU), India	Biochemistry	2021
M.Sc.	University of Kashmir, Srinagar, J&K, India	Biochemistry	2014
B.Sc.	Sri Pratap College of Science, Jammu & Kashmir, India	Science with Biochemistry	2011

PROFESSIONAL EXPERIENCE

RESEARCH

2021-Present **Postdoctoral Research Associate** at Department of Nutrition and Health Sciences, University of Nebraska-Lincoln (4.6 years).
(Professor Janos Zempleni, Ph.D., Mentor)

2015-2021 **Ph.D. Student**, School of Life Sciences, JNU-Jaipur **/** Research Scholar, Division of Animal Biotechnology, Faculty of Veterinary Sciences & Animal Husbandry, Sher-e-Kashmir University of Agricultural Sciences, Kashmir India.

TEACHING

Fall 2025 ***Staff Teaching Assistant for Graduate Course***

Department of Nutrition and Health Sciences, University of Nebraska–Lincoln, USA

Course: Molecular Nutrition Techniques (NHS 821)

- Facilitating laboratory sessions covering essential molecular biology techniques such as nucleic acid extraction, PCR, cell culture, protein isolation, and Western blotting.
- Delivering hands-on training to graduate students to strengthen their practical skills and methodological proficiency.

Fall 2024 ***Staff Teaching Assistant for Graduate Course***

Department of Nutrition and Health Sciences, University of Nebraska-Lincoln, USA

Course Title: Molecular Nutrition Techniques (Course No. 821)

- Led laboratory sessions focused on key molecular biology techniques, including nucleic acid extraction, PCR, cell culture, protein extraction, and Western blotting.
- Provided hands-on instruction to graduate students to enhance their practical understanding of these methodologies.

Fall 2023 ***Staff Teaching Assistant – Graduate Course***
Department of Nutrition and Health Sciences, University of Nebraska-Lincoln, USA

Course: Molecular Nutrition Techniques (Course No. 821)

- Facilitated lab sessions and provided hands-on instruction in molecular biology techniques, including nucleic acid extraction, PCR, cell culture, protein extraction, and Western Blotting.

INVITED / GUEST LECTURES

2024 Invited to deliver a lecture entitled "Bacterial Extracellular Vesicles: message in a bubble" to graduate students at the Department of Nutrition and Health Sciences-UNL, Lincoln, USA, March.

2023 Invited to deliver a lecture entitled "Isolation and characterization of Bacterial Extracellular Vesicles" to graduate students at the Department of Nutrition and Health Sciences-UNL, Lincoln, USA, April.

2020 Invited to deliver a lecture during a hands-on training on "Basic biomedical techniques" at the Government Medical College, Doda, sponsored by ICMR, India, June.

AWARDS AND HONORS

2025 ***M-PACT FUTURES Scholar*** **travel award**, University of Michigan (June 2025)

Selected for the M-PACT FUTURES: Preparing the Next Generation of Leaders in Biomedical and Health Sciences Conference. Fully funded (travel, lodging, and meals) by the University of Michigan.

2024 **Best Poster Award** for the poster entitled " *Bifidobacterium Infantis* Extracellular Vesicles: Composition and Potential to Modulate Host Biological Processes via Cross-Kingdom Communication" at NPOD 10th Annual Research Symposium, University of Nebraska-Lincoln-USA.

2020 Token of Appreciation presented by Registrar GMC Doda, for delivering an invited lecture on "*Basic Biomedical Techniques*".

2020 **ESACT Scholarship award** for attending course on Animal Cell Technology.

2019 **GYAN Scholarship award**, SciGenom Research Foundation.

2018 Received the Certificate of Achievement from Merck for outstanding performance in "the cell culture quiz".

2018 Received acceptance letter for the prestigious Raman-Charpak Visiting Fellowship at National Institute of Agricultural Research (INRA), Telhouse, France. (*Regrettably, despite being honored with the acceptance, the fellowship was not secured.*)

2011 Received National Cadet Corps (NCC) C Certificate.

PROFESSIONAL MEMBERSHIPS

1. Member of the Society for Industrial Microbiology and Biotechnology (SIMB).
2. Member of the American Association of Extracellular Vesicles (AAEV).
3. Member of Early Carrier Network of International Society of Extracellular Vesicles (ISEV)
4. Member of the Indian Society for Extracellular Vesicles (InSEV).
5. Member of Animal Genome Research Community-USA
6. Member of the American Society for Nutrition (ASN)-USA.
7. Member of the National Postdoc Association-USA.
8. Member of the University of Nebraska-Lincoln postdoc Association (UNL-PDA).
9. Member of the National Center for Faculty Development and Diversity-USA (NCFDD).

PUBLICATIONS (Google scholar profile)

Peerzada Tajamul Mumtaz, Upadhyaya, B., Shu, J., Cui, J., & Zempleni, J. Bovine milk extracellular vesicles, prepared by ultracentrifugation, contain microbial mRNA which does not accumulate in human plasma following milk consumption. Extracellular Vesicles and Circulating Nucleic Acids (EVCNA), (2025).

Zhou, F., **Peerzada Tajamul Mumtaz**, Dogan, H., Madadjim, R., Cui, J., & Zempleni, J. Divergence of gut bacteria through the selection of genomic variants implicated in the metabolism of

sugars, amino acids, and purines by small extracellular vesicles in milk. Gut Microbes, 17(1): 2449704 (2025).

Saleem, Afnan, **Peerzada Tajamul Mumtaz**, Sahar Saleem, Tasaduq Manzoor, Qamar Taban, Mashooq Ahmad Dar, Basharat Bhat, and Syed Mudasir Ahmad. Comparative transcriptome analysis of E. coli & Staphylococcus aureus infected goat mammary epithelial cells reveals genes associated with infection. International immunopharmacology 126 (2024): 111213.

Peerzada Tajamul Mumtaz, Basharat Bhat, Eveline M. Ibeagha-Awemu, Qamar Taban, Mengqi Wang, Mashooq Ahmad Dar, Shakil Ahmad Bhat et al. Mammary epithelial cell transcriptome reveals potential roles of lncRNAs in regulating milk synthesis pathways in Jersey and Kashmiri cattle. BMC genomics (2022)

Peerzada Tajamul Mumtaz, Qamar Taban, Basharat Bhat, Syed Mudasir Ahmad, Mashooq Ahmad Dar, Zahid Amin Kashoo, Nazir A. Ganie, and Riaz Ahmad Shah. "Expression of lncRNAs in response to bacterial infections of goat mammary epithelial cells reveals insights into mammary gland diseases." Microbial pathogenesis 162 (2022): 105367.

Peerzada Tajamul Mumtaz, Shakil Ahmad Bhat, Mudasir Ahmad Syed, Mashooq Ahmad Dar, Raashid Ahmed, Uneeb Urwat, Aadil Ayaz, Divya Shrivastava, Riaz Ahmed Shah, Nazir Ahmad Ganai. LncRNAs and immunity: watchdogs for host pathogen interactions. Biological Procedures Online (2017).

Peerzada Tajamul Mumtaz, Qamar Taban, Mashooq Ahmad Dar, Shakil Ahmad Bhat, Riaz Ahmad Shah, Nazir Ahmad Ganai, Sajad Majeed Zargar and Syed Mudasir Ahmad. Circular RNAs: From Biogenesis to functional paradox. Biological Procedures Online (2020).

Qamar Taban, **Peerzada Tajamul Mumtaz,** Syed Mudasir Ahmad, Basharat Bhat, Mashooq Ahmad Dar, Zahid Amin Kashoo, Nazir A. Ganie, and Riaz Ahmad Shah. Scavenger receptor B1 facilitates the endocytosis of Escherichia coli via TLR4 signaling in goat mammary gland infection. Cell Communication and Signaling 20, (2023).

Taban, Qamar, **Peerzada Tajamul Mumtaz**, Khalid Z. Masoodi, Ehtishamul Haq, and Syed Mudasir Ahmad. Scavenger receptors in host defense: from functional aspects to mode of action. Cell Communication and Signaling 20, (2022).

Shakil Ahmad Bhat, Syed Mudasir Ahmad, **Peerzada Tajamul Mumtaz**, Abrar Ahad Malik, Mashooq Ahmad Dar, Uneeb Urwat, Riaz Ahmad Shah, Nazir Ahmad Ganai. Long non-coding RNAs: Mechanism of action and functional utility, Non-Coding RNA Research (2016).

Bhat, Shakil Ahmad, Syed Mudasir Ahmad, Eveline M. Ibeagha-Awemu, Basharat A. Bhat, Mashooq Ahmad Dar, **Peerzada Tajamul Mumtaz**, Riaz A. Shah, and Nazir A. Ganai. "Comparative transcriptome analysis of mammary epithelial cells at different stages of lactation reveals wide differences in gene expression and pathways regulating milk synthesis between Jersey and Kashmiri cattle." PloS one 14, no. 2 (2019).

Bhat, S.A., Ahmad, S.M., Ibeagha-Awemu, E.M., Mobashir, M., Dar, M.A., **Peerzada Tajamul Mumtaz,** Shah, R.A., Dar, T.A., Shabir, N., Bhat, H.F. and Ganai, N.A. Comparative milk proteome analysis of Kashmiri and Jersey cattle identifies differential expression of key proteins involved in immune system regulation and milk quality. BMC genomics, (2020).

Mashooq Ahmad Dar, Uneeb Urwat, Syed Mudasir Ahmad, Raashid Ahmad, Zahid Amin Kashoo, Tanveer Ali Dar, Shakil A Bhat, **Peerzada Tajamul Mumtaz**, Nadeem Shabir, Riaz Ahmad Shah, and Mohammad Heidari. Gene expression and antibody response in chicken against Salmonella Typhimurium challenge. Poultry Science (2018).

Dar MA, Ahmad SM, Bhat SA, Ahmed R, Urwat U, **Peerzada Tajamul Mumtaz**, Dar TA, Shah RA, Ganai NA. Salmonella typhimurium in poultry: a review. World's Poultry Science Journal. (2017).

Aadil Ayaz, Zaffar Iqbal, Nazir Ahmad Ganai, N. Singh, Aarif Ali, **Peerzada Tajamul Mumtaz,** Mashooq Ahmad Dar, Mir Shabir, Syed Shanaz, and Suheel Yousuf Wani. Impact of High Glycine Tyrosine Kap Gene on Cashmere Fibre Trait Characteristics. Biotechnology Journal International 19(3): 1-5, (2017).

Mashooq Ahmad Dar, Raashid Ahmad, Uneeb Urwat, Syed Mudasir Ahmad et al., Parvaiz Ahmad Dar, Zahid Amin Kushoo, Tanveer Ahmad Dar**, Peerzada Tajamul Mumtaz**, Shakil Ahmad Bhat, Umar Amin, Hina Fayaz Bhat, Nadeem Shabir, Riaz Ahmad Shah, and Nazir Ahmad Ganai. Expression Kinetics of NRAMP gene family and immuno-pathological manifestations against the challenge of Salmonella Typhimurium in poultry. BMC Veterinary Research 2017.

BOOKS EDITED / CHAPTERS

Andrabi, S., **Mumtaz, P.T**. and Taban, Q. ed., (2018) lncRNAs: From disease biomarkers to targeted therapeutics. Cambridge Scholars Publishing, p.300. ISBN 1527559106, 9781527559103 (Associate Editor).

Mumtaz, P., Taban, Q., Ismail, S., Srivastava, Dar, M. and Andrabi, M., 2020. Functional Aspects of long non-coding RNAs: A review. In: Long Non-Coding RNA: From Disease Biomarkers to Targeted Therapeutics, 1st ed. [online] London: Cambridge Scholars Publishing, p.201.

Peerzada Tajamul Mumtaz, Showkeen Muzamil, Khalid Bashir Dar, Qamar Taban, Muzaffar Ahmad Rather, Saima Sajood, Aarif Ali, Insha Amin, Mashooq Ahmad Dar, Aadil Ayaz. Antiproliferative and Apoptotic Activities of Natural Honey. Springer Nature, DOI: 12.5287/springer.65672

Taban, Q., **Mumtaz, P.,** Ismail, S., Ehtishamul, H., Dar, M. and Andrabi, M., 2020. Long non-coding RNAs in Infection and Immunity. In: Long Non-Coding RNA: From Disease Biomarkers to Targeted Therapeutics, 1st ed. [online] London: Cambridge Scholars Publishing, p.201.

Rather MA, Bashir SM, **Mumtaz PT**, Amin I, Ali A. (2020) Recent Advances in the Discovery of Bioactive Components from Natural Honey. Springer Nature. Doi. 12.5287/springer.65672.

Mashooq Dar, **Peerzada Tajamul Mumtaz**, Qamar Taban, Shakil Ahmad Bhat, Shabir Ahmad Mir, Riaz Ahmad Shah, and Syed Mudasir Ahmad. Immunopathogenesis of Salmonellosis. Intech Open **ISBN 978-953-51-5843-1.**

Qamar Taban, **Peerzada Tajamul Mumtaz**, Arif Ali. Honey in Anticancer Drug Toxicity. SpringerNature, DOI: 12.6745/springer.65673

Mashooq Ahmad Dar, **Peerzada Tajamul Mumtaz**, Shakil Ahmad Bhat, Mudasar Nabi, Qamar Taban, Riaz Ahmad Shah, Hilal Musadiq Khan, and Syed Mudasir Ahmad (September 5th, 2018). Genetics of Disease Resistance in Chicken, Application of Genetics and Genomics in Poultry Science, Xiaojun Liu, IntechOpen, DOI: 10.5772/intechopen.77088.

Aarif Ali, Saima Sajood, Qamar Taban, **Peerzada Tajamul Mumtaz**, Muzafar Ahmad Rather and Showkat Ahmad Ganie. Honey as Component of Diet: Importance and Scope. Springer Nature. Doi. 12.5287/springer.65672.

Bilal Ahmad Tantry, Qamar Taban, Shaik Rahiman, Mohammad Abdul Hafeez, Mudasar Nabi and **Peerzada Tajamul Mumtaz**. Diverse Functions of Long Non-Coding RNAs in Cardiovascular Disease. In: Long Non-Coding RNA: From Disease Biomarkers to Targeted Therapeutics, 1st ed. [online] London: Cambridge Scholars Publishing, p.201.

MANUSCRIPTS IN PREPARATION / UNDER REVIEW

Peerzada Tajamul Mumtaz, & Zempleni, J. Role of Core Gut Functional Bacteria (CGFB) - Derived Extracellular Vesicles (CGFB-EVs) in gut metabolism. Target Journal: Nature Microbiology. Manuscript in preparation.

INTELLECTUAL PROPERTY RIGHTS (PATENTS)

Syed Mudasir Andrabi, **Peerzada Tajamul Mumtaz**, Qamar Taban, Riaz Ahmad Shah, A Process of Isolating and Culturing of Primary Mammary Epithelial Cells (PMECs) From Caprine and Bovine Raw Milk Comprising Steps. Indian Patent Application Number **201911013320 A**, date of filing: 2/04/2019; Publication date: **09/10/2020**. Patent number: **556725** Grant Date:**23/12/2024.**

CONFERENCES / MEETINGS ATTENDED/ABSTRACTS/ PRESENTATIONS (ORAL/POSTER)

2025 **Mumtaz P.T**. and Zempleni J. Microbial EVs from the Gut Cross Host Barriers to Deliver Functional cargo (Cre) and Induce Gene Expression. University of Nebraska, 16th Annual NPOD Research Retreat, April 9th, 2025, Lincoln, NE. (Poster)

2025 Zempleni, J., & **Mumtaz, P. T**. The milk EV – bacterial EV – host health triad. Abstract presented at the International Society for Extracellular Vesicles (ISEV) Annual Meeting 2025.

2024 **Mumtaz P. T** and Zempleni J. *Bifidobacterium Infantis* Extracellular Vesicles: Composition and Potential to Modulate Host Biological Processes via Cross-Kingdom Communication" University of Nebraska, NPOD 10th Annual NPOD Research Symposium, October 8th, 2024. (Poster)

2024 **Mumtaz P. T** and Zempleni J. Beyond Borders: Investigating Bifidobacterium infantis derived Extracellular Vesicles as Messengers in Cross-Kingdom Communication. University of Nebraska, NPOD 15th Annual NPOD Spring Retreat, April 16, 2024. (Poster)

2023 Zempleni, J., Zhou, F., Dogan, H., Madajim, R., **Mumtaz, P. T**., & Cui, J. Divergence of gut bacteria through the selection of genetic variants by small extracellular vesicles in milk. Abstract presented at the International Society for Extracellular Vesicles (ISEV) Annual Meeting, 2023.

2023 **Mumtaz P. T** and Zempleni J. Exploring Cross-Kingdom Communication with Microbial Messengers: Bifidobacterium infantis EVs' Diverse Cargo, Bioavailability in Mice, and Interaction with Human Intestinal Cells (Caco2). University of Nebraska, NPOD 9th Annual Research Symposium September 26, 2023. (Poster)

2023 Janos Zempleni, Fang Zhou, Haluk Dogan, Roland Madadjim, **Peerzada Tajamul Mumtaz**, Juan Cui. Divergence of gut bacteria through the selection of genetic variants by small extracellular vesicles in milk. Abstract #1435668 International Society for Extracellular Vesicles 2023 Annual Meeting (ISEV2023); Seattle, WA, 12:45 – 1:45 p.m., May 17, 2023.

2023 **Mumtaz P. T** and Zempleni J. Bifidobacterium infantis EVs: cargo content, internalization by human intestinal Caco-2 cells, and bioavailability and distribution in mice. University of Nebraska, NPOD 14th Annual NPOD Spring Retreat, April 25, 2023. (Poster)

2022 **Mumtaz P. T**, Zempleni J. Extracellular vesicles from Bifidobacterium infantis are bioavailable in C57BL/6J mice and human intestinal Caco-2 cells. NPOD Retreat, April 19, 2022, Lincoln, NE. (Poster)

2022 **Mumtaz P. T** and Zempleni J. *Bifidobacterium infantis*-derived EVs carries a diverse cargo of compounds and are bioavailable in C57BL/6J mice and internalized by human intestinal Caco-2 cells. University of Nebraska, NPOD 8th Annual Research Symposium September 7, 2022. (Poster)

2021 **Peerzada Tajamul Mumtaz** and Muzamil S.M. Dietary Nano zinc oxide (ZnO) and vitamin E supplementation helps to alleviate cold stress in broiler chickens at the International Conference on Nanotechnology for Better Living" NBL-21, held at NIT Srinagar (J&K) in hybrid mode from 7-11 September 2021. (Oral)

2021 Virtually attended International Conference on Challenges and Strategies in Reproductive and Environmental Health with Special Reference to COVID-19 Pandemic & 31st Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF) held online from February 19-21, 2021.

2018 **Peerzada Tajamul Mumtaz**, Qamar Taban and Syed Mudasir Andrabi "Long Non-coding RNA profiles of bovine mammary epithelial cell during bacterial infection: An underestimated layer in host-pathogen interaction" at JK Science congress, held at university of Kashmir on 2nd-4th April 2018. (Oral)

2017 **Peerzada Tajamul Mumtaz**, Qamar Taban and Syed Mudasir Andrabi "Identification of long noncoding RNAs in bovine mammary epithelial cells challenged with pathogenic bacteria by next generation RNA sequencing" at international conference on "Recent trends in bioinformatics and biotechnology for sustainable development" organized at SKUAST-Jammu from October 12-13, 2017. (Oral)

PROFESSIONAL SERVICES

2024 **Judge,** Poster Presentations, 4th Annual UNL Microbiology Research Symposium, organized by the Department of Microbiology, University of Nebraska-Lincoln.

2024 ***Guest Editor***, Special Issue on "Extracellular Vesicles in Immune Modulation: Insights from the Gut Microbiome, Host Cells, and Therapeutic Applications," in *Frontiers in Immunology*.

2024 **Judge** at the Summer Research Symposium organized by the Office of Graduate Studies on August 6th, at the University of Nebraska-Lincoln, USA.

2024 **Judge** at the student poster award competition during Spring Research Days, organized by the Office of Graduate Studies on March 27, at the University of Nebraska-Lincoln, USA.

2023 **Judge** at Southeast Regional Science Fair, organized by the College of Education and Human Sciences and sponsored by the Nebraska Junior Academy of Science (NJAS) on March 22nd, at the University of Nebraska-Lincoln, USA.

2023 **Judge** at the undergraduate and graduate poster competitions during Nebraska Research Days, organized by the Office of Graduate Studies on March 28-29, at the University of Nebraska-Lincoln, USA.

2022 **Judge** at the student poster award competition during Spring Research Days organized by the Office of Graduate Studies on April 12, at the University of Nebraska-Lincoln, USA.

2017 Actively participated as Resource Person for 7-day National Workshop on "Genomics and Stem cell Technologies in animal research and production" from 17-24th July 2017, sponsored by DST-SERB at Division of Biotechnology, FVSc &AH, SKUAST-Kashmir.

LEADERSHIP & SERVICE

President, Postdoctoral Association

University of Nebraska–Lincoln | 2024–Present

2025 Organized and chaired the workshop "Navigating through Postdoc to a Faculty Position" featuring three invited faculty speakers to share insights on transitioning from postdoc to faculty roles. (April 10th)

2025 Organized and chaired the workshop "Transition from Postdoc to a Faculty" featuring an invited faculty speaker (Dr. Tang) to share insights on transitioning from postdoc to faculty roles. (May 8th)

2025 Organized and chaired the workshop "Building an Academic Career: From Postdoc to Faculty," featuring an invited faculty speaker Dr. Ivan Vechetti & Dr. Velez Arango to share insights on transitioning from postdoc to faculty roles. (June 13th)

MANUSCRIPT PEER REVIEW (Between 1-10 reviews for each of the journals)

1. BMC Genomics
2. Journal of Nano biotechnology
3. Saudi Journal of biological sciences
4. Journal of Visualized Experiments
5. Scientific Reports
6. BMC Medical Genomics
7. Frontiers in Immunology
8. Frontiers in Genetics
9. Frontiers in Veterinary Science
10. Journal of Genetics and Genomics
11. Free Radical Biology and Medicine
12. Functional & Integrative Genomics
13. Child Development and Nutrition
14. Water, Air, & Soil Pollution
15. Frontiers in Oncology
16. Immunity, Inflammation and Diseases
17. Mammalian Genome
18. BMC Genomic Data
19. Microbial Cell Factories
20. Journal of Mammary Gland Biology and Neoplasia
21. Nutrition Reviews
22. Biochemical Genetics

GRANT APPLICATION REVIEWS

2025 Served as a Proposal Evaluator for Undergraduate Creative Activities and Research Experiences (UCARE) proposals submitted to Undergraduate Research & Fellowships department for 2025-2026, at University of Nebraska-Lincoln, USA.

2024 Served as a Proposal Evaluator for Undergraduate Creative Activities and Research Experiences (UCARE) proposals submitted to the Undergraduate Research & Fellowships department for 2024-2025, at the University of Nebraska-Lincoln, USA.

2023 Served as a Proposal Evaluator for Undergraduate Creative Activities and Research Experiences (UCARE) proposals submitted to the Undergraduate Research & Fellowships department for 2023-2024, at the University of Nebraska-Lincoln, USA.

GRANT APPLICATION SUBMITTED

2025 Proposal entitled "Gut Microbial Vesicles as Modulators of Host Metabolism in Obesity and Type 2 Diabetes" submitted to the Nebraska Microbiome Research Interest Group, UNMC Omaha, July 2025.

PROFESSIONAL DEVELOPMENT/ TRAININGS/ CERTIFICATIONS

1. **iCELLis Nano Training** (May 30, 2025)
   Biomedical and Research Core (BORC), University of Nebraska–Lincoln, NE
   Trainer: Dylan Knutson, Principal Upstream Field Application Specialist
2. **CLONE PIX 2 Training** (March 7, 2025)
   BORC, University of Nebraska–Lincoln, NE
   Trainer: Dwayne Carter, Field Applications Scientist II, Molecular Devices, LLC
3. **Seminar on RNA Biology, Structure, and AI-Driven Innovations** (April 28, 2025)
   Nebraska Center for Integrated Biomolecular Communication, Lied Commons, Lincoln.
4. **Focus on Peer Review** (July 11, 2024)
   Nature Masterclasses
5. **Volatile Gas Anesthesia Training** (2024)
   Institutional Animal Care Program (IACP), University of Nebraska–Lincoln, NE
6. **Writing Winning Grant Proposals** (March 8, 2024)
   Office of Research and Economic Development, Nebraska Innovation Campus Conference Center, UNL
7. **NanoString GeoMx Spatial Profiling: Hands-On Workshop** (March 2–4, 2024)
   BORC, University of Nebraska–Lincoln, NE
8. **NanoString GeoMx Spatial Profiling: Technology Introduction and Project Planning Workshop** (March 1, 2024)
   BORC, University of Nebraska–Lincoln, NE
9. **NPOD Biostatistics Workshop: Power and Sample Size** (May 23, 2023)
   University of Nebraska–Lincoln
10. **NPOD Biostatistics Workshop: Introduction to R** (March 3, 2023)
    University of Nebraska–Lincoln
11. **Amnis Image Flow Cytometer Workshop** (February 23, 2023)
    BORC, University of Nebraska–Lincoln, NE
12. **Environmental Health & Safety Training** (2023)
    University of Nebraska–Lincoln
13. **Sexual Misconduct Prevention and Response Training** (2023)
    University of Nebraska–Lincoln
14. **Information Security Fundamentals Training** (2023)
    University of Nebraska–Lincoln

15. **CITI Program: Working with the IACUC** (2023)
    University of Nebraska–Lincoln
16. **Writing Winning Grant Proposals** (March 10, 2022)
    Office of Research and Economic Development (via Zoom)
17. **Digital Droplet PCR (ddPCR) Workshop** (November 16, 2022)
    BORC, University of Nebraska–Lincoln
18. **Postdoc Teaching Practicum** (December 2021)
    Center for Integrated Research, Teaching, and Learning (CIRTL)
19. **NPOD Biostatistics Workshop: Organizing Data for Analysis (with R and SAS)** (August 5, 2021) University of Nebraska–Lincoln
20. **CITI Program: Biomedical Responsible Conduct of Research** (2021)
    University of Nebraska–Lincoln
21. **CITI Program: Biomedical Investigators and Key Personnel** (2021)
    University of Nebraska–Lincoln
22. **CITI Program: Institutional Official — Animal Care and Use** (2021)
    University of Nebraska–Lincoln
23. **CITI Program: Working with Mice in Research Settings** (2021)
    University of Nebraska–Lincoln
24. **CITI Program: Working with the IACUC** (2021)
    University of Nebraska–Lincoln
25. **CITI Program: Aseptic Surgery** (2021)
    University of Nebraska–Lincoln
26. **Biomedical Laboratory Techniques Training** (November 25–29, 2019)
    5-day workshop, sponsored by ICMR
27. **Drug Designing Workshop** (March 21, 2019)
    Sponsored by DST-BIF
28. **Bioinformatics Data Analysis Workshop** (March 13–15, 2019)
    3-day workshop, sponsored by DST-BIF
29. **Genomics and Stem Cell Technologies Workshop** (July 17–24, 2017)
    7-day workshop, sponsored by DST-SERB
30. **Advanced Genomics and Bioinformatics Workshop** (August 10–31, 2015)
    21-day workshop, sponsored by the Department of Biotechnology