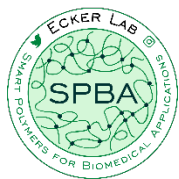


MELANIE ECKER, PH.D.



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EDUCATION

- Doctor of Natural Sciences (equivalent to Ph.D.)** 01/2015
Freie Universität Berlin, Germany
Thesis: Development, characterization and durability of switchable information carriers based on shape memory polymers
- Diploma in Chemistry (equivalent to master's degree)** 07/2010
Freie Universität Berlin, Germany
Thesis: Sequence-defined insertion of anionic groups into linear and monodisperse poly(amidomines)
- Intermediate Diploma in Chemistry (equivalent to bachelor's degree)** 03/2006
Freie Universität Berlin, Germany

RESEARCH INTERESTS

- Shape Memory Polymers for Biomedical Applications
- Polymeric Biomaterials
- Flexible Bioelectronics and Neural Interfaces
- Enteric Nervous System and Gastrointestinal Disorders

RESEARCH AND PROFESSIONAL EXPERIENCE

- Assistant Professor** 09/2019–present
University of North Texas, Denton, TX
Smart Polymers for Biomedical Applications
- Postdoctoral Research Associate** 08/2015–08/2019
The University of Texas at Dallas, Richardson, TX
Mentors: Dr. Walter Voit and Dr. Joseph Pancrazio
Research in the field of shape memory polymers for flexible, self-softening bioelectronics.
- Research Assistant (Doctoral Research)** 07/2011–12/2014
BAM Federal Institute for Material Research and Testing, Berlin, Germany
Advisor: Dr. Thorsten Pretsch
Research in the field of shape memory polymers focused on poly(ester urethanes) and epoxides
- Diploma Thesis and Research Assistant** 01/2010–11/2010
Max Planck Institute of Colloids and Interfaces, Berlin, Germany
Advisor: Dr. Laura Hartmann
Research in the field of biomimetics, focused on poly(amidoamines).

PUBLICATIONS

[Google Scholar](https://scholar.google.com/citations?user=998) citations: 998, h-index: 19

† senior author; Researcher ID: [J-5348-2012](https://orcid.org/0000-0002-0603-6683), ORCID-ID: [0000-0002-0603-6683](https://orcid.org/0000-0002-0603-6683)

Original Research

1. C. Chitrakar, M.A. Torres, P.E. Rocha-Flores, Q. Hu, **M. Ecker**[†], Multifaceted Shape Memory Polymer Technology for Biomedical Application: Combining Self-Softening and Stretchability Properties. *Polymers*, **2023**, *15*, 4226.

2. P. E. Rocha-Flores, E. Guerrero, O. Rodríguez-Lopez, C. Chitrakar, A. R. Parikh, J. J. Pancrazio, S. F. Cogan, **M. Ecker**, W. E. Voit, Softening and Flexible Hybrid Electronics Integration for Biomedical Applications, *MRS Communications*, **2023**.
3. K. P. Cortés-Guzmán, A. R. Parikh, M. L. Sparacin, R. M. Johnson, L. Adegoke, **M. Ecker**, W. E. Voit and R. A. Smaldone, Thermal annealing effects on the mechanical properties of bio-based 3D printed thermosets, *Polym. Chem.*, **2023**, *14*, 2697-2707.
4. Y. Suzuki, Q. Hu, B. Batchelor, W. Voit, **M. Ecker**[†], Thermo/hydration responsive shape memory polymers with enhanced hydrophilicity for biomedical applications, *Smart Materials and Structures*, **2023**, *32(1)*, 015006
5. K. Cortés-Guzmán, A. Parikh, M. Sparacin, A. Remy, L. Adegoke, C. Chitrakar, **M. Ecker**, W. Voit, and R. Smaldone; Recyclable, Biobased Photoresins for 3D Printing through Dynamic Imine Exchange. *ACS Sustainable Chemistry & Engineering*, **2022**, *10* (39), 13091-13099
6. S. Jagdale Q. Hu, **M. Ecker**, G. Kumar; Biocompatibility and thermoplastic formability of Pt-based metallic glasses, *Materials Letters*, **2021**, *295*, 129870.
7. E. Guerrero, A. Polednik, **M. Ecker**, A. Joshi-Imre, W. Choi, G. Gutierrez-Heredia, W. E. Voit, J. Maeng, Indium-Gallium-Zinc-Oxide Schottky Diodes Operating Across the Glass Transition of Stimuli-Responsive Polymers, *Advanced Electronic Materials*, **2020**, *6* (4), 1901210.
8. C. L. Frewin, **M. Ecker**, A. Joshi-Imre, J. Kamgue, J. Waddell, V. R. Danda, A. M. Stiller, W. E. Voit and J. J. Pancrazio, Electrical Properties of Thiol-ene/acrylate-based Shape Memory Polymers Intended for Use in Implantable Biomedical Devices, *Polymers*, **2019**, *11* (5), 902.
9. A. Zátonyi, G. Orbán, R. Modi, G. Márton, D. Meszéna, I. Ulbert, A. Pongrácz, **M. Ecker**, W. E. Voit, A. Joshi-Imre, Z. Fekete, A softening laminar electrode for recording single unit activity from the rat hippocampus, *Scientific Reports*, **2019**, *9* (1), 2321.
10. S. M. Hosseini, W. E. Voit, **M. Ecker**[†], The use of environmental dynamic mechanical analysis to predict the softening behavior of neural implants. *Journal of Visualized Experiments*, **2019**, (145), e59209.
11. S. M. Hosseini, R. Rihani, B. Batchelor, A. M. Stiller, J. J. Pancrazio, W. E. Voit, and **M. Ecker**[†], Softening Shape Memory Polymer Substrates for Bioelectronic Devices With Improved Hydrolytic Stability, *Frontiers in Materials*, **2018**, *5*, 66.
12. M. A. González-González, A. Kanneganti, A. Joshi-Imre, A. G. Hernandez-Reynoso, G. Bendale, R. Modi, **M. Ecker**, A. Khurram, S. F. Cogan, W. E. Voit, and M. I. Romero-Ortega, Thin Film Multi-Electrode Softening Cuffs for Selective Neuromodulation, *Scientific Reports*, **2018**, *8* (1), 16390.
13. H. W. Bedell, S. Song, X. Li, E. Molinich, S. Lin, A. Stiller, V. Danda, **M. Ecker**, W. E. Voit, J. J. Pancrazio, J. R. Capadona, Understanding the effects of both CD14-mediated innate immunity and device/tissue mechanical mismatch in the neuroinflammatory response to intracortical microelectrodes, *Frontiers in Neuroscience*, **2018**, *12*, 772
14. A. M. Stiller, J. Usoro, C. L. Frewin, V. R. Danda, **M. Ecker**, A. Joshi-Imre, K. C. Musselman, W. Voit, R. Modi, J. J. Pancrazio, and B. J. Black, Chronic intracortical recording and electrochemical stability of thio-lene / acrylate shape memory polymer electrode arrays, *Micromachines*, **2018**, *9* (10), 500
15. A. J. Shoffstall, **M. Ecker**, V. Danda, A. Joshi-Imre, A. Stiller, M. Yu, J. E. Paiz, E. Mancuso, H. W. Bedell, W. E. Voit, J. J. Pancrazio and J. R. Capadona, Characterization of the Neuroinflammatory Response to Thiol-ene Shape Memory Polymer Coated Intracortical Microelectrodes, *Micromachines*, **2018**, *9* (10), 486.
16. B. J. Black, **M. Ecker**, A. Stiller, R. Rihani, V. R. Danda, I. Reed, W. E. Voit, and J. J. Pancrazio, In Vitro Compatibility Testing of Thiol-ene/acrylate-based Shape Memory Polymers for Use in Implantable Neural Interfaces, *Journal of Biomedical Materials Research Part A*, **2018**, *106* (11), 2891-2898.
17. A. J. Shoffstall, S. Srinivasan, M. Willis, A. Stiller, **M. Ecker**, W. E. Voit, J. J. Pancrazio, J. R. Capadona, A Mosquito Inspired Strategy to Implant Microprobes into the Brain. *Scientific Reports*, **2018**, *8* (1), 122.
18. D.-H. Do, **M. Ecker**, and W. Voit, Characterization of a thiol-ene/acrylate-based polymer for neuroprosthetic implants, *ACS Omega*, **2017**, *2* (8), 4604–4611
19. **M. Ecker**, V. Danda, A. J. Shoffstall, S. F. Mahmood, A. Joshi-Imre, C. L. Frewin, T. H. Ware, J. R. Capadona, J. J. Pancrazio, W. E., Voit, Sterilization of Thiol-ene/Acrylate Based Shape Memory Polymers for Biomedical Applications. *Macromolecular Materials and Engineering*, **2017**, *302* (2), 1600331
20. R. Reit, H. Abitz, N. B. Reddy, S. N. Parker, A. Wei, N. Aragon, M. Ho, A. M. Weittenhiller, T. Kang, **M. Ecker** and W. Voit, Thiol–epoxy/maleimide ternary networks as softening substrates for flexible electronics, *Journal of Materials Chemistry B*, **2016**, *4* (32), 5367-5374

21. **M. Ecker** and T. Pretsch, Novel design approaches for multifunctional information carriers, *RSC Advances*, **2014**, 4 (87), 46680-46688
22. **M. Ecker** and T. Pretsch, Multifunctional poly(ester urethane) laminates with encoded information, *RSC Advances*, **2014**, 4 (1), 286-292.
23. **M. Ecker** and T. Pretsch, Durability of switchable QR code carriers under hydrolytic and photolytic conditions, *Smart Materials and Structures*, **2013**, 22 (9), 094005.
24. T. Pretsch, **M. Ecker**, M. Schildhauer and M. Maskos, Switchable information carriers based on shape memory polymer, *Journal of Materials Chemistry*, **2012**, 22 (16), 7757-7766.

Review Articles

25. C. Chitrakar, E. Hedrick, L. Adegoke, **M. Ecker**[†]; Flexible and Stretchable Bioelectronics. *Materials* **2022**, 15 (5), 1664
26. Q. Hu, **M. Ecker**[†], Overview of MMP-13 as a Promising Target for the Treatment of Osteoarthritis. *Int. J. Mol. Sci.* **2021**, 22(4), 1742.
27. A.H. Fang, W. Chao, **M. Ecker**[†], Review of Colonic Anastomotic Leakage and Prevention Methods. *J. Clin. Med.* **2020**, 9, 4061.
28. C. J. Bettinger, **M. Ecker**, T. D. Yoshida Kozai, G. G. Malliaras, E. Meng, W. Voit, Recent advances in neural interfaces—Materials chemistry to clinical translation, *MRS Bulletin*, **2020**, 45, 655–668.
29. **M. Ecker**, A. Joshi-Imre, R. Modi, C. Frewin, A. Garcia Sandoval, J. Maeng, G. Gutierrez, J. Pancrazio and W. Voit, From Softening Polymers to Multi-Material Based Bioelectronic Devices, *Multifunctional Materials* **2019**, 2 (1), 012001.

Book Chapters

30. J. N. Oliver, O. Akande, **M. Ecker**[†]; Incorporation of Novel Elements in Bioactive Glass Compositions to Enhance Implant Performance. in *Bioactive Glass – Recent Advances, New Perspectives and Applications*; IntechOpen, **2021**; ISBN 978-1-83969-702-9.
31. **M. Ecker** and T. Pretsch, Freely configurable Functionalization Tool for switchable Information Carriers, in *Materials Challenges and Testing for Manufacturing, Mobility, Biomedical Applications and Climate*, eds. W. Udomkitchdecha, T. Böllinghaus, A. Manonukul and J. Lexow, Springer International Publishing, **2014**, ch. 3, 25-35.

Conference Proceedings

32. A. C. Duran-Martinez, S. Hosseini, D. Del Nero, A. Joshi-Imre, W. E. Voit, **M. Ecker**[†], Thermoset polymers for bioelectronic interfaces - engineering of thermomechanical properties. In *2019 IEEE 69th Electronic Components and Technology Conference (ECTC)*, **2019**, 1258-1265.
33. **M. Ecker** and T. Pretsch, Durability of QR code carriers based on shape memory polymer in *ASME Conference on Smart Materials, Adaptive Structures and Intelligent Systems*, ed. ASME, Amer Soc Mechanical Engineers, Stone Mountain, GA, **2012**, vol. 1, 89-96.

Patent Applications

- US 11,584,867 B2; Bio-electronic devices including hydrolytically stable polymers, W. Voit, M. Ecker, S. Hosseini (filed 2022, published 2022, granted 2023)
- US 11,261,345 B2; Hydrolytically stable polymers, method of synthesis thereof and use in bio-electronic devices, W. Voit, M. Ecker, S. Hosseini, non-provisional utility patent application (filed 2018, published 2020, granted 2022)
- DE102011054925A1; Dyeing surface of polymer article comprising shape memory polymer, comprises pre-treating surface of polymer article, dyeing surface with dye solution comprising organic dye and organic solvent, and cleaning surface and drying dye solution; T. Pretsch, M. Ecker, M. Schildhauer (filed 2011, published 2013, accepted 2017)
- EP000002771392A2/WO002013060831 A2/WO002013060831A3 Method and dye mixtures for marking shape memory polymers, and shape memory polymer articles with switchable readability; Pretsch, M. Ecker, M. Schildhauer (filed 2012, published 2014)
- US 9,670,330 B2; Method and dye mixtures for marking shape memory polymers, and shape memory polymer articles with switchable readability; T. Pretsch, M. Ecker, M. Schildhauer (filed 2012, published 2015, granted 2017)

RECOGNITION

Awards, Honors

- Outstanding Faculty in Biomedical Engineering – Teaching, May 2023
- Nominated for the Faculty Teaching Award, May 2023

- UNT Washington D.C. Fellow, 2021 Cohort
- Faculty Advisor for UNT BMES student organization, July 2020–present
- IOP Outstanding Reviewer Award 2018 for Materials Research Express
- ACS Postdoc to Faculty Workshop Scholar, August 2017
- Travel Grant from BAM to participate in the 3rd WMRIF International Workshop for Young Materials Scientists in Pathum Thani, Thailand, August 2012

Invited Talks

- 2023/05/23: “What do Ducks, Diapers, and Rubber Bands have in Common?”, Research on Tap, Denton, TX
- 2022/07/12: “Smart Polymers for Biomedical Applications”, International Conference on Programmable Materials 2022, Berlin, Germany
- 2022/03/16: Stretchable and Compliant Bioelectronics to Interface with the Enteric Nervous System”, Neuroelectronic Interfaces GRC, Ventura, CA
- 2022/02/18: “Smart Polymers for Biomedical Applications”, Department of Biology lecture series at Texas Woman’s University, Denton, TX
- 2021/11/03: “Decoding the Enteric Nervous System: What Tools Do We Have?”, IEEE MetroCon 2021
- 2019/11/15: “From small molecules to chronically stable neural implants”, 2019 ACS Southwest-Rocky Mountain Regional Meeting, El Paso, TX
- 2018/07/20: “Self-Softening Bioelectronics”, The University of Texas at El Paso, PREM seminar, El Paso, TX
- 2017/08/14: “Development and characterization of bioelectronic devices using shape memory polymers with tunable degree of softening as substrates”, Duke University, Shen Lab, Durham, NC
- 2017/07/20: “Development and characterization of bioelectronic devices using shape memory polymers with tunable degree of softening as substrates”, Federal Institute for Materials Research and Testing, Berlin, Germany
- 2017/07/14: “Development and characterization of bioelectronic devices using shape memory polymers with tunable degree of softening as substrates”, Fraunhofer Institute for Applied Polymer Research, Golm, Germany

RESEARCH GRANTS

UNT Seed Funding COS-CENG	Understanding the Structure-Property Relationship of Shape Memory Polymers through Terahertz Spectroscopy	Ecker (Co-PI) Neu (Co-PI) \$10,000	06/01/2023-03/01/2024
UNT Seed funding, Center for Functional Materials	Thiol-clickable gelatin-based hydrogels for 3D cell cultures	Ecker (PI) \$6,000	10/20/2022-08/31/2023
NSF (BIOMAT) #2237510	CAREER: Shape Memory Polymers as Biomaterial	Ecker (PI) \$553,036	02/01/2023-01/31/2028
Philanthropist	Unrestricted Gift	\$5,000	
UNT Seed Funding COS-CENG	Metal Oxynitrides as Biocompatible Coatings for Medical Device Applications	Berman (Co-PI), Ecker, (Co-PI), Cundari (Co-PI), Kelber (Co-PI), \$10,000	06/18/2021–03/15/2022
Contract Qualia Oto Inc.	Submersion DMA Measurements	Ecker (PI) \$3,600	10/01/2020–12/31/2020

TEACHING

BMEN 2900	Special Problems in Biomedical Engineering	Spring 2020, Summer 2020, Spring 2021
BMEN 3321	Biomaterials	Spring 2021, Spring 2022, Spring 2023
BMEN 3996	Honors College Mentored Research Experience	Summer 2021, Fall 2021
BMEN 5316	Biopolymers and Flexible Electronics	Fall 2022

BMEN 5321	Biomaterials Compatibility	Fall 2019, Fall 2020, Fall 2021, Fall 2023
BMEN 5810	Topics in Biomedical Engineering	Spring 2020
BMEN 5900	Special Problems in Biomedical Engineering	Spring 2021, Summer 2021, Fall 2021, Spring 2022, Summer 2022, Spring 2023
BMEN 5950	Master's Thesis	Spring 2020, Fall 2020, Spring 2021, Summer 2021, Summer 2022, Fall 2022
BMEN 6910	Individual Research	Fall 2021
BMEN 6950	Biomedical Engineering Doctoral Dissertation	Fall 2021, Spring 2022, Summer 2022, Fall 2022, Spring 2023
MEEN 6940	Individual Research	Fall 2019, Fall 2020, Spring 2021
MTSE 6940	Individual Research	Fall 2019, Spring 2020, Fall 2020, Spring 2021

ADVISING AND MENTORING AT UNT

PhD Students

Katelyn Mathis	BMEN	Thesis Committee Member	05/2023–present
Trevor Exley	BMEN	Thesis Committee Member	12/2022–present
Kayode Oluwabunmi	MEEN	Thesis Committee Member	04/2021–05/2021
Tejal Pawale	MTSE	Thesis Committee Member	03/2021–present
Chandani Chitrakar	BMEN	Major Professor	09/2019–present
Qichan Hu	BMEN	Major Professor	09/2019–present
Joy-anne Najwa Oliver	MTSE/BMEN	Co-Advisor	09/2019–present
Jing You	BMEN	Thesis Committee Member	09/2019–present

MS Students

Anusuya Velkannan	BMEN	Primary Advisor	06/2023–present
Ashley Egenti	BMEN	Primary Advisor	06/2023–present
Percival Seddoh	BMEN	Thesis Committee Member	09/2022–06/2023
Daniel Johnson	BMEN	Thesis Committee Member	04/2023–06/2023
Christine Beauchamp	BMEN	Primary Advisor	06/2022–09/2022
Carolyne Reynolds	BMEN	Major Professor	01/2022–12/2022
Dovile Strimaityte	BMEN	Thesis Committee Member	10/2021–05/2022
Jessica Baas	BMEN	Primary Advisor	06/2021–05/2023
Katelyn Mathis	BMEN	Thesis Committee Member	11/2020–12/2021
Sean Fitzgerald	BMEN	Thesis Committee Member	10/2020–05/2021
Sukhpreet Singh	BMEN	Major Professor (Thesis)	09/2020–08/2021
Lauren Adegoke	BMEN	Primary Advisor	06/2020–12/2022
Erik Hedrick	BMEN	Primary Advisor	02/2020–12/2021
Christopher Ta	BMEN	Thesis Committee Member	02/2020–08/2020
Michael Joiner	BMEN	Thesis Committee Member	12/2019–12/2020

BS Students

Chloe Nguyen	BMEN	Primary Advisor	06/2023–present
Marc Anthony Torres	BMEN	Primary Advisor	01/2023–present
Khailyn Agis	BMEN	Primary Advisor	06/2022–05/2023
Alessandra Palladino	BMEN	Primary Advisor	01/2022–present
Christine Beauchamp	BMEN	Primary Advisor	06/2021–05/2022
Iqra Manahil Tariq	BMEN	Primary Advisor	06/2021–05/2022
Olanrewaju I. Akande	BMEN	Primary Advisor	10/2020–05/2023

Aima Ovai	BMEN	Primary Advisor	10/2020–05/2021
Nicholas Johnson	BMEN	Primary Advisor	10/2019–05/2020
George Sarkodie	BMEN	Primary Advisor	09/2019–05/2020
Lauren Adegoke	BMEN	Primary Advisor	09/2019–05/2020
Oluwasulabomi Idowu	BMEN	Primary Advisor	09/2019–01/2021

Other Students

Harshini Thanga Raj Malini	TAMS	Primary Advisor	01/2022–present
Srish Tallapaneni	TAMS	Primary Advisor	08/2021–12/2021
Ruchi Birur	TAMS	Primary Advisor	08/2021–12/2021
Ananya Mukund	TAMS	Primary Advisor	06/2021–12/2021
Karina Ambani	TAMS	Primary Advisor	01/2020–05/2021
Wilson Chao	TAMS	Primary Advisor	01/2020–08/2021
Alex Fang	TAMS	Primary Advisor	01/2020–05/2021

Senior Design

KAVE technology		Mentor	2023–2024
MedForce Engineers		Mentor	2022–2023
BioFemme		Mentor	2022–2023
Variable Independent Pressure System		Mentor and Sponsor	2022–2023
Synthomusocal Gel		Mentor	2020–2021
Epi-One Medical Instruments		Mentor	2019–2020

PROFESSIONAL ACTIVITIES

Professional Memberships

- Member: Society for Biomaterials (SfB), 2019–present
- Member, National Postdoctoral Association, 2017–2019
- Member, American Chemical Society (ACS), 2016–present
- Member, Biomedical Engineering Society (BMES), 2016–present
- Member, Materials Research Society (MRS), 2015–present
- Member, American Society of Mechanical Engineers (ASME), 2012–2014

Service Activities

- Ad hoc reviewer for NSF CBET proposal, 11/2021–present
- Reviewer on NIH study section BNVT (Early Career Reviewer Program), 09/2021–present
- Ad hoc reviewer for ACS PRF proposal, 09/2021–present
- BMES reviewer for abstracts for annual meetings, 06/2020–present
- SMART Scholarship Evaluation Panel Member, 2020, 2021, 2023
- MRS Member Engagement Committee, 2017–present
- MRS Broadening Participation in Materials Subcommittee, 2017–present

Outreach

- UNT’s the Lab, YouTube series to highlight research at the University, 2022 ([YouTube](#))
- [Neural Implant Podcast](#): “Dr Melanie Ecker on conformal soft neural electrodes in the gut-brain axis”, 2022
- Panelist at TAMS Research Symposium, UNT, 2022, Denton, TX
- Panelist at the Women in STEM Brunch, UNT, 2022, Denton, TX
- **TEDxUNT** Speaker: How Can We Use Plastics in a Smart Way? October 1, 2021 ([YouTube](#))
- Speaker at the Girls SURGE into STEM XR Camp, July 2021, Fort Worth, TX
- Mentor for Frisco ISD Independent Study and Mentorship (ISM) program, January 2021–present
- Regular ‘Skype a Scientist’ meetings, 2019–present

- Volunteer for “Comet Chemistry Camp”, a one-week chemistry camp at UT Dallas in collaboration with the ACS Dallas-Fort Worth section targeting girls ages 11–14, July 2018

Editorial Activities ([Publons](#); 81 verified reviews)

- Editorial Board Member for Scientific Reports
- Guest Editor for Special Issue in MDPI Applied Sciences
- Editorial Board Member for Smart Materials in Medicine
- Journal Topic Board Member for MDPI Applied Sciences
- Reviewer Board Member for MDPI Polymers
- Ad hoc reviewer for MDPI: Coatings, Materials, Micromachines, Advances
- Ad hoc reviewer for Wiley: Macromolecular Bioscience, Advanced Materials, Advanced Functional Materials, Advanced Materials Technologies
- Ad hoc reviewer for IOP: Biomedical Materials, Materials Research Express, Nanotechnology, Journal of Physics D: Applied Physics
- Ad hoc reviewer for Elsevier: Materials Chemistry and Physics
- Ad hoc reviewer for IEEE: Journal of Microelectromechanical Systems
- Ad hoc reviewer for AAAS: Science Advances
- Ad hoc reviewer for Taylor & Francis: Advanced Composite Materials

Conference Activities

- Panel Moderator “Leadership in both academic and industrial environments will share their experiences and tips to help young researchers to build their career path” at the *Neuroelectronic Interfaces GRS, 2022*, Ventura, CA
- Poster-Judge for the “Broadening Participation in Materials Undergraduate Student Event” at the *2017 MRS Fall Meeting*, Boston, MA
- Mentor for the “Broadening Participation in Materials Undergraduate Student Program” at the *2017 MRS Spring Meeting*, Phoenix, AZ
- Symposium Chair at the SMART 2016 Shape Memory Applications, Research and Technology Symposium (12 sessions), 12/2016 Richardson, TX
- Planning and organization of SMART 2016 Shape Memory Applications, Research and Technology Symposium, Richardson, TX
- Session Chair for POLY SYMPOSIUM: Advanced Functional Biopolymers & Biomaterials at the 252nd American Chemical Society National Meeting & Exposition, 08/2016, Philadelphia, PA

CAREER DEVELOPMENT AND CERTIFICATIONS

- AccoUNTable Supervisor Program, University of North Texas, 2023
- Responsible Conduct of Research (RCR) Course, University of North Texas, 2023
- Intercultural Competencies Workshop, University of North Texas, 2021
- Skills for Inclusive Conversations, LinkedIn learning, 2021
- Managing a Diverse Team, LinkedIn learning, 2021
- Developing Cross-Cultural Intelligence Program, LinkedIn learning, 2021
- Promoting Equity through Inclusive Teaching Practices, LinkedIn learning, 2021
- Teaching Portfolio Online Institute, Office of Faculty Success, University of North Texas, 2020
- Faculty First Flight, Office of Faculty Success, University of North Texas, 2019–2020
- AtKisson Training Group LLC & UNT Grantsmanship Workshop, University of North Texas, 2019
- Responsible Conduct of Research Professional Series Program, Office of Research Compliance, University of Texas at Dallas, 2018
- Principles of Rodent Surgery, Anesthesia, Analgesia and Peri-operative care Workshop, Office of Research Compliance, University of Texas at Dallas, 2018

- Rat Biotechnology Workshop, Office of Research Compliance, University of Texas at Dallas, 2018
- Rodent surgery Hands-on Workshop, Office of Research Compliance, University of Texas at Dallas, 2018
- Postdoctoral Teaching Certificate, Center for Teaching and Learning, University of Texas at Dallas, 2018
- ACS Postdoc to Faculty Workshop (P2F), American Chemical Society (ACS), 2017
- Manager and Supervisor Certificate, University of Texas at Dallas, 2016