

LaDeidra Monét Roberts, PhD

227 Kelly Hall, 325 Stanger Street, Virginia Tech, Blacksburg, VA 24061

monetr@vt.edu | [Roberts Glyco-Diversity Lab](#) | [Google Scholar](#) | [PubMed](#)

- 2023 –** **Assistant Professor**, Department of Biomedical Engineering, Virginia Tech
Principal Investigator, *Roberts Glyco-Diversity (RGD) Lab*
Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences
Department of Biomedical Engineering and Mechanics
Atrium Health Wake Forest Baptist Comprehensive Cancer Center
Affiliate Faculty of Health and Life Sciences, Virginia Tech
Affiliate Faculty of Macromolecules Innovation Institute, Virginia Tech
Affiliate Translational Biology, Medicine, and Health, Virginia Tech
- 2019-2022** **Postdoctoral Associate**, Fralin Biomedical Research Institute at Virginia Tech
Carillion, Department of Biomedical Engineering and Mechanics, Blacksburg, VA
PI: Jennifer Munson, PhD
- 2019** **Ph.D.**, Biomedical Engineering
Cornell University, Nancy E. and Peter C. Meinig School of Biomedical Engineering, Ithaca, NY
PI: Matthew Paszek, PhD
- 2017** **M.S.**, Biomedical Engineering
Cornell University, Nancy E. and Peter C. Meinig School of Biomedical Engineering, Ithaca, NY
PI: Matthew Paszek, PhD
- 2014** **B.S.**, Biomedical Engineering, High Honors
Georgia Institute of Technology, Coulter Department of Biomedical Engineering, Atlanta, GA

FELLOWSHIPS AND AWARDS

- 2025-2026** Outstanding Undergraduate Research Mentor Award, Virginia Tech Office of Undergraduate Research
- 2025** [Virginia Business Magazine 100 People to Meet in 2025](#)
- 2025** [Faculty Mentor of the Month](#) (March), Virginia Tech Graduate School
- 2024** Henrietta Lacks Legacy Award, Young Doctors Roanoke
- 2020** [Cell Mentors 1,000 inspiring Black scientists in America](#)
- 2019** Zellman Warhaft Commitment to Diversity Award, Diversity Programs in Engineering, Cornell University
- 2019** Edward Alexander Bouchet Graduate Honor Society
- 2018** Social Justice Award, Graduate & Professional Student Diversity Council, Cornell University
- 2016** Excellence in Leadership, Diversity Programs in Engineering, Cornell University
- 2016** National Science Foundation Graduate Program Fellowship Program
- 2015** Ford Foundation Pre-doctoral Fellowship
- 2014** Dean's Excellence Fellowship, Cornell University
- 2014** President's Undergraduate Research Award (PURA), Georgia Tech
- 2013** Peach State LSAMP Oral Presentation in Life Sciences, Cellular and Molecular Biology, 2nd place
- 2012** Whitaker Undergraduate Program Award for Study Abroad at Georgia Tech
Lorraine, Whitaker International Program and the Institute of International

2009-2013

Education (IIE)

Tower Award Recipient for Scholastic Achievement, Silver & Bronze Category,
Office of Minority Educational Development (OMED), Georgia Tech

RESEARCH

PUBLICATIONS (*first co-author, † corresponding author)

1. Hammel JH, Murphy HE, Oyediran KO, Gordon PM, and **Roberts LM**[†]. Engineered Lymphatic Stroma Model Applications in Central Nervous System Leukemia. *Integr Biol* (2026)
2. **Roberts LM**^{*†}, Hammel JH*, Jin P, Azar F, Cunningham JJ, Schumaeker S, Davis S, Azar F, Feng T, Wang M, Rutkowski MR, and Munson JM[†]. Demonstration of Chemotherapeutic Mediated Lymphatic Changes in Meningeal Lymphatics in vitro, ex vivo, and in vivo. *Commun Biol* (2025)
3. Udaysuryan B, Nguyen T, Umaña A, **Roberts LM**, Ahmad R, Sobol P, Jones SD, Munson JM, Slade DJ, and Verbridge SS. Fusobacterium nucleatum induces pancreatic cancer cell proliferation and migration by regulating host autocrine and paracrine signaling. *Sci Signal* (2022).
4. Shimpi AA, Tan ML, Vilkhovoy M, Dai D, **Roberts LM**, Kuo JC, Huang L, Varner JD, Paszek MJ, Fischbach C. Convergent approaches to delineate the metabolic regulation of tumor invasion by hyaluronic acid biosynthesis. *Adv Health Mat* (2022).
5. **Roberts LM***, Perez MJ*, Balogh KN, Mingledorff G, Cross JV, and Munson JM. Myeloid Derived Suppressor Cells migrate in response to flow and lymphatic endothelial cell interaction in the breast tumor microenvironment. *Cancers* (2022).
6. **Roberts LM*** & Munson JM. Modulating Microenvironments for Treating Glioblastoma. *Curr Microenvironment Reports* (2020).
7. Noble JM*, **Roberts LM***, Vidavsky NA*, Chiou AE, Fischbach C, Paszek MJ, Estroff LA, and Kourkoutis LF. Direct comparison of optical and electron microscopy methods for structural characterization of extracellular vesicles. *J Struct Biol* (2020).
8. Shurer CR*, Kuo JC*, **Roberts LM***, Gandhi JG, Colville MJ, Enoki TA, Pan H, Su J, Noble JM, O'Donnell JP, Yin RY, Hollander MJ, Kourkoutis LF, Feigenson GW, Reesink HL, and Paszek MJ. Physical Principles of Membrane Shape Regulation by the Glycocalyx. *Cell* (2019).
9. Platt MO, Evans D, Keegan PM, McNamara L, Parker IK, **Roberts LM**, Caulk AW, Gleason Jr. RL, Seifu D, Amogne W, and Clement P. Low-cost method to monitor patient adherence to HIV antiretroviral therapy using multiplex cathepsin zymography. *Molecular Biotechnology* (2016).
10. Parker IK, **Roberts LM**, Hansen L, Gleason Jr. RL, Sutliff RL, and Platt MO. Pro-atherogenic shear stress and HIV proteins synergistically upregulate cathepsin K in endothelial cells. *Annals of Biomedical Engineering* (2014).
11. Hansen L, Parker IK, **Roberts LM**, Sutliff RL, Platt MO, and Gleason Jr. RL. Azidothymidine (AZT) leads to arterial stiffening and intima-media thickening in mice.

Journal of Biomechanics (2013).

12. **Roberts LM** and Platt MO. Implications of Highly Active Antiretroviral Therapy in the Development of Cardiovascular Disease in HIV Patients. The Tower Undergraduate Research Journal of the Georgia Institute of Technology (2014). [Link](#)

IN REVIEW & IN SUBMISSION

1. Johnson DJ, Shangin EA, Marrone HL, Richardson EJ, Barkers-Woode DO, Collins CJ, and **Roberts LM**. Extracellular Vesicle-Mediated Preconditioning of Osteoblasts by ER+ Breast Cancer Cells: Implications for the Bone Metastatic Niche. *Front Pharmacol* (Accepted August 2026)

GRANTS

Current Research

Susan Duncan Innovation in Agriculture and Life Sciences Seed Grant

\$25,000

07/01/2026-06/30/2027

Hey, Sugar: Cancer and the Art of Recognition

Co-PI

Completed Research

4-VA Collaborative Research Grant

\$30,000

08/01/2025-07/31/2026

Multi-scale Approaches Examining Preferential Recruitment in Breast-to-Bone Metastasis

PI

4-VA Collaborative Research Grant

\$30,000

08/01/2025-07/31/2026

Lymphatic Remodeling of the Uterus During Pregnancy

Co-PI

2024 Neuro Oncology (NRO) Inter-programmatic Collaborative Research Pilot

Neuro Oncology (NRO) Program of the Atrium Health Wake Forest Baptist Comprehensive Cancer Center (AHWFBCCC)

\$100,000

12/1/2024-11/30/2025

The Cancer Stem Cell Glycocalyx and Interstitial Fluid Flow Interactions in Glioblastoma

PI

2024 Small Pilot Awards

Atrium Health Wake Forest Baptist Comprehensive Cancer Center, Signaling and Biotechnology (SBT) Program

\$20,000

07/15/2024-07/14/2025

O-linked Glycosylation and Microvesicle Shedding in Breast-to-Bone Metastasis

PI

Summer VT University Libraries Collaborative Research Grant

\$5,000

08/01/2023-12/15/2023

Behind Density Lines: Machine Learning and Citizen Scientists in Quantifying Scanning Electron Microscopy Images

PI

Outcomes: A web-based gamified computer science senior capstone project that was showcased in The Cube at the Virginia Tech Science Festival to provide access for citizen scientist to quantify scanning electron microscopy images. [Link](#)

INVITED TALKS

Roberts LM, “Engineering and Decoding Glycocalyx-Mediated Transport in Cancer”, MII Technical Conference and Review, Materials in Medicine Session, September 2026

Roberts LM, “The Not-So-Sweet Connection: Considering the Cancer-Cell Glycocalyx”, The Joint School of Nanoscience and Nanoengineering (JSNN) Seminar, North Carolina A&T State University and University of North Carolina at Greensboro, March 2026

Roberts LM, “Linking the Cancer Cell Glycocalyx and Lymphatics in Breast Cancer”, Physical Sciences of Cancer Gordon Research Conference (Oral), Pomona, CA, February 2025

Roberts LM, “Glycocalyx-Driven Intercellular Communication in Breast-to-Bone Metastasis”, Atrium Health Wake Forest Baptist Comprehensive Cancer Center Molecular Oncology Retreat (Oral), Winston-Salem, NC, December 2024

Roberts LM, “How Microvesicles Are “Budding” Into the Cancer Conversation”, Center for Extracellular Vesicle Research Seminar Series (Oral), Vanderbilt University, Nashville, TN, November 2024

Roberts LM, “Bloom Where You Are Planted: My Journey To and Through Academia,” Cornell Biomedical Engineering Society Symposium (Keynote Speaker), Ithaca, NY, August 2024

Roberts LM, “A Motley Crew: Linking Intratumoral Heterogeneity to Invasion and Interstitial Fluid Flow,” Emerging Leaders Symposium Keynote (Oral), University of Virginia, Charlottesville, VA, November 2022

Roberts, LM, “Forward: Why We Cannot Go Back to Where We Were,” Black History Month event hosted by Virginia Tech Health Sciences and Technology, and the Fralin Biomedical Research Institute at VTC, February 2021. [Link](#)

SCIENTIFIC PRESENTATIONS/PODIUM TALKS (Presenter + contributors)

Pokhrel C, Emmel P, Paul T, Elliot C, Allen IC, Vlaisavljevich E, and **Roberts LM**. “Hormonal Regulation of Lymphatics in Shaping Ovarian Tissue Architecture”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025

Oyediran, K, Johnson D, and **Roberts LM**. “Whispers Through the Brain: How Triple Negative Breast Cancer Extracellular Vesicles Reprogram Glial Cells Towards a Permissive Metastatic Niche”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025

Murphy H, Garcia-Vega M, Smith RK, and **Roberts LM**, “Assessing the Intersection of Aging and O-Linked Glycosylation”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025

Johnson D, Altreuter S, Richardson E, and **Roberts LM**. “Profiling extracellular vesicles from breast cancer cells reveals subtype-specific differences in size distribution”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025

Garcia-Vega M, Murphy H, and **Roberts LM**. “Analyzing Differences in Age on the Influence of Breast Cancer-derived Signals on T Cell Activation and Cytotoxicity”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025

Ferrao S, Krishnamoorthy S, Liang Y, Degen K, Munson J, and **Roberts LM**. “The interplay between interstitial fluid flow and the glycocalyx in glioma stem cell invasion”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), San Diego, CA, October 2025.

Taylor, AR, Tate K, Muelenaer, AA, **Roberts LM**, Arena C, Arena SL. “Toward a Health Equity Spine Across Biomedical Engineering Curriculum: A Faculty-Led Collaborative Autoethnography Exploring Lessons Learned,” 2025 ASEE Annual Conference & Exposition (Podium Talk), Montréal, QC, June 2025

Murphy H, Garcia-Vega M, Smith RK, and **Roberts LM**, “Assessing the Intersection of Aging and O-Linked Glycosylation”, (Poster), Cancer Research Center (CRC) Symposium, Fralin Biomedical Research Institute (FBRI) – Lightning Talk Session (Oral). Roanoke, VA, June 2025

Johnson, D, Shangin, EA, Oyediran, K, Ferrao, S, Altreuter, S, Richardson, E, Collins, C, and **Roberts, LM**, “Breast Cancer-Derived Microvesicle Reprogramming of the Lymphatic Niche”, Cancer Research Center (CRC) Symposium, Fralin Biomedical Research Institute (FBRI) – Lightning Talk Session (Oral). Roanoke, VA, June 2025

Ferrao S, Krishnamoorthy S, Degen K, Munson J, and **Roberts LM**. “The interplay between interstitial fluid flow and the glycocalyx in glioma stem cell invasion”, Cancer Research Center (CRC) Symposium, Fralin Biomedical Research Institute (FBRI) – Lightning Talk Session (Oral). Roanoke, VA, June 2025.

Shangin EA, Johnson D, Marrone H, Bahrnifard H, Whittington A, Collins C, and **Roberts LM**, “Assessing Breast-To-Bone Metastatic Mechanisms: An In Vitro Human Osteoblast Tissue Culture Study”, School of Biomedical Engineering and Sciences (SBES) Annual Symposium (Oral), Blacksburg, VA, April 2025

Murphy H, Garcia-Vega M, Smith RK, **Roberts LM**, “Assessing the Intersection of Aging and O-Linked Glycosylation”, School of Biomedical Engineering and Sciences (SBES) Annual Symposium (Poster), Blacksburg, VA, April 2025

Johnson, D, Shangin, EA, Oyediran, K, Ferrao, S, Altreuter, S, Richardson, E, Collins, C, and **Roberts, LM**, “Linking Lymphatics and Glycosylation in Breast to Bone Metastasis”, School of Biomedical Engineering and Sciences (SBES) Annual Symposium (Poster), Blacksburg, VA, April 2025

Ferrao S, Krishnamoorthy S, Degen K, Munson J, and **Roberts LM**. The interplay between interstitial fluid flow and the glycocalyx in glioma stem cell invasion. School of Biomedical Engineering and Sciences (SBES) Annual Symposium (Poster), Blacksburg, VA, April 2025.

Johnson D, Shangin EA, Oyediran K, Ferrao S, Collins C, and **Roberts LM**, “Linking the Cancer Cell Glycocalyx and Lymphatics in Breast Cancer”, 2025 Afrobiotech (Poster), Atlanta, GA, February 2025

Roberts LM, Johnson D, Shangin EA, Oyediran K, Ferrao S, Collins C, “Linking the Cancer Cell Glycocalyx and Lymphatics in Breast Cancer”, Physical Sciences of Cancer Gordon Research

Conference (Poster), Pomona, CA, February 2025

Roberts LM, “The Not-So-Sweet Connection: Considering the Cancer-Cell Glycocalyx”, Cancer and Aging Retreat, Atrium Health Wake Forest Baptist Comprehensive Cancer Center (Oral), Winston-Salem, NC, April 2024

Oyediran K, Venkanagari A, Munson JM, and **Roberts LM**, “Overstepping Boundaries: How Fluid Flow Impacts Different Tumor Cell Populations to Invade in Brain Cancer,” Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) (Poster), Phoenix, AZ, November 2023

Roberts LM, “A Motley Crew: Linking Intratumoral Heterogeneity to Invasion and Interstitial Fluid Flow,” Physical Sciences of Cancer Gordon Research Conference (Oral), Galveston, TX, February 2023

Pre-2023

Roberts LM, Esparza C, Cornelison RC, Munson JM. “Development and characterization of VEGF-C overexpression cell line in murine glioma to probe vasculature functionality and interstitial fluid flow,” Cancer Research Alliance Retreat (Poster), Fralin Biomedical Research Institute, Roanoke, VA, March 2022

Roberts LM, “The Sweet Spot: Glyco-diversity and opportunities in cancer and beyond,” Virginia Tech Biomedical Engineering and Mechanics (BEAM) Research Seminar Series (Oral), Blacksburg, VA, October 2021

Roberts LM, Macias-Orhuela, Y, Atay, N, Stine, C, and Munson, JM. “Intratumoral heterogeneity & invasion profiles in glioblastoma,” Biomedical Engineering Society (BMES) Annual Meeting (Oral, Virtual), Orlando, FL, October 2021

Roberts LM, “From the glycocalyx to interstitial fluid flow: opportunities in cancer,” 2021 Cornell BMES Alumni Symposium Invited Speaker (Virtual), June 2021

Roberts LM, “A Motley Crew: Linking Intratumoral Heterogeneity to Invasion and Interstitial Fluid Flow,” Emerging Scholars Program, Boston University (Oral), Virtual, May 2021.

Roberts LM, “How Microvesicles Are Budding into the Cancer Conversation,” Edward A. Bouchet Annual Conference (Oral), Yale University, New Haven, Connecticut, April 2019.

Roberts LM, Yin RY, Noble JM, Shurer CR, Kuo JC, Gandhi JG, Su J, Reesink HL, Kourkoutis LF, and Paszek MJ. “Glycocalyx-Induced Membrane Shapes and Microvesicle Biogenesis and Shedding,” Biomedical Engineering Society (BMES) Annual Meeting (Poster), Atlanta, GA, October 2018.

Noble JM, Vidavsky NA, **Roberts LM**, Chiou A, Paszek MJ, Fischbach CF, Estroff LA, and Kourkoutis LF. “Revealing Mechanisms of Microvesicle Biogenesis in Breast Cancer Cells via in situ Microscopy,” Microscopy and Microanalysis, August 2018

Roberts LM, Yin RY, Kuo JC, Noble JM, Su J, Gandhi JG, Shurer CR, Reesink HL, Kourkoutis LF, and Paszek MJ. “Microvesicle Shedding Regulated by the Glycocalyx,” Cornell Center on the Physics of Cancer Metabolism, Physical Sciences in Oncology Retreat (Poster), Cornell University, Ithaca, NY, January 2018.

Vidavsky NA, Noble JM, **Roberts LM**, Chiou AE, Paszek MJ, Fischbach-Teschl CF, Kourkoutis LF, and Estroff LA. “Revealing Mechanisms of Microvesicle Biogenesis in Breast Cancer via in situ

Microscopy,” Cornell Center on the Physics of Cancer Metabolism, Physical Sciences in Oncology Retreat (Poster), Cornell University, Ithaca, NY, January 2018

Roberts LM, Shurer CR, Hollander M, Enoki, T, and Paszek MJ. “Microvesicle Induction by the Metabolically-Regulated Glycocalyx”, Biomedical Engineering Society (BMES) Annual Meeting (Oral), Phoenix, AZ, October 2017

Roberts LM, Shurer CR, Kuo JC, Gandhi JG, Colville MJ, Enoki T, and Paszek MJ. “Membrane Bending & Shape Changes by the Cancer Cell Glycocalyx”, Biomedical Engineering Society (BMES) Annual Meeting (Poster), Phoenix, AZ, October 2017

Roberts LM, Shurer CR, Hollander M, Enoki, T, and Paszek MJ. “Entropic Control of Microvesicle Shedding in Breast Cancer,” Cornell Center on the Physics of Cancer Metabolism, Physical Sciences in Oncology Retreat (Poster), Cornell University, January 2017.

Roberts LM, Shurer CR, Hollander M, and Paszek MJ. “Muc1-induced Microvesicle Shedding in Breast Cancer: A Biophysical Phenomenon,” Biomedical Engineering Society (BMES) Annual Meeting (Poster), Minneapolis, October 2016.

Roberts LM, Shurer CR, Hollander MJ, and Paszek MJ. “Muc1-induced Microvesicle Shedding in Breast Cancer: A Biophysical Phenomenon,” National Academies of Science Ford Foundation Conference (Poster), Washington DC, September 2016.

Roberts LM, Shurer CR, Hollander MJ, and Paszek MJ. “Muc1-induced Microvesicle Shedding in Breast Cancer: A Biophysical Phenomenon,” Academic Research & Leadership Symposium at the National Society of Black Engineers Conference (Poster), Boston, MA, March 2016.

Roberts LM, Parker IK, and Platt MO. “Effects of HAART Therapies on Arterial Remodeling in HIV+ Patients,” *Peach State LSAMP Eighth Annual Fall Symposium & Research Conference* (Oral), Marietta, Georgia, October 2013

Roberts LM, Parker IK, and Platt MO. “Antiretroviral Drugs and Their Effects on Arterial Remodeling and Protease Activity,” *Annual Biomedical Engineering Society Conference* (Poster), Seattle, Washington, September 2013

OTHER MEDIA COVERAGE & FEATURES

- “Faculty receive state-funded 4-VA grants for collaborative research.” [Link](#)
- “Northgate graduate recognized for making a difference.” [Link](#)
- “Monet Roberts receives inaugural Henrietta Lacks Legacy award.” [Link](#)
- “BME Department Held Inaugural Symposium for Emerging Leaders in Biomedical Engineering.” [Link](#)
- “Emerging Leaders in Biomedical Engineering Symposium.” [Link](#)
- “Cancer Research Alliance forges new collaborations, strengthens research programs at inaugural retreat.” [Link](#)
- “Juneteenth event to celebrate Black scientists and engineers”. [Link](#)
- Heinke C & **Roberts LM**. Contributed as co-host/Limper Science Advocate. “The Imposter Syndrome.” *Science Blender*, [Link](#)
- The Martlets Society, World Beyond Academia (WBA) Talks, Season 1, Episode 7, Co-host, [Link](#)
- Tea from the Tower: Tips and Advice on Applying for Nationally Competitive Fellowships (Virtual), *The Ebony Tower*, Guest panelist, [Link](#)

TEACHING AND MENTORSHIP

COURSES

- **Instructor:** BMES 2104: Introduction to Biomedical Engineering, Virginia Tech, Fall 2024, 2025, 2026
- **Instructor, Creator:** SS BMES 5984: Protein Structure and Function in Disease, Virginia Tech, Spring 2024, 2026

GUEST LECTURER

- **2024:** "Proteins: The Mighty Mediator," Guest lecturer, *Biomaterials*
- **2021:** "A Motley Crew: Linking intratumoral heterogeneity to invasion and interstitial fluid flow (IFF) in glioma" *Introduction to Scieneering Freshman Seminar*

UNDERGRADUATE STUDENTS MENTORED

- **Fawzia Beidas ('28)**
- **Danielle Grunwald ('28)**
- **Leena Sheehan ('28)**
- **Jude Molique ('28)**
- **Aubrie Fowler ('28)**
- **Melody Vega-Garcia ('27)**
- **Peyton Emmel ('27)**
- **Sarah Krishnamoorthy ('27)**
- **Melinda Panda ('26)**
- **Elise Richardson ('26)**
- **Gianna Manzo ('25)**
- **Sara Altreuter ('25)**
- **Ryan Smith ('25)**
- **Anirudh Venkanagari ('25)**
- **Khadijat Oyediran ('24)**
- **Kaylie Manglicmot ('23)**

GRADUATE STUDENTS MENTORED

- **Khadijat Oyediran:** VT-Wake Forest SBES Master's Program, New Horizons Scholar
- **Samantha Ferrao, PhD Candidate,** VT-Wake Forest SBES PhD Program, Pratt Graduate Fellowship
- **De Shanna Johnson, PhD Candidate,** VT-Wake Forest SBES PhD Program, New Horizons Scholar
- **Cristina Pokhrel, PhD Candidate,** Translational Biology, Medicine, and Health PhD Program, Ellen Wade Graduate Studies Fellowship
- **Edward Shangin,** VT-Wake Forest SBES PhD Program, National Science Foundation Graduate Research Fellow
- **Hailey Murphy,** VT-Wake Forest SBES Master's Program

OTHER MENTEES

- **Joshua Osemobor,** Southwest Virginia's Governor's High School, 2025-2026
- **Co-Mentor:** Senior Design Capstone, Multimedia, Hypertext, and Information Access (CS 4624), 2023-2024 (4 students, 1 project)

SERVICE AND LEADERSHIP

NATIONAL/FIELD

- **2026:** Special session, BlackinBME: Power of Mentoring Networking Session, Biomedical

Engineering Society

-
- **2025:** Session Chair, Physical Science of Cancer Special Session, Biomedical Engineering Society
- **2025:** Special session Co-chair, BME for All –Teaching in Unprecedented Times, Biomedical Engineering Society
- **2025:** Special session, BlackinBME: Power of Mentoring Networking Session, Biomedical Engineering Society
- **2025:** Co-chair, Physical Sciences of Cancer Gordon Research Conference Power Hour
- **2024-present:** Education Committee, Biomedical Engineering Society
- **2024-2025:** Organizing Co-chair, Afrobiotech Conference, American Institute of Chemical Engineers
- **2024:** Session Chair, Cancer Technologies, Tumor Microenvironment I, Biomedical Engineering Society
- **2024:** Session Chair, Cancer Technologies, Women's Health, Gynecological Health, Biomedical Engineering Society
- **2023- 2025:** Abstract Reviewer, Biomedical Engineering Society
- **2023-2025:** Abstract Reviewer, Biomedical Engineering Society
- **2023-2024:** Reviewer, Annals of Biomedical Engineering
- **2023:** Mock Chalk Talk Reviewer for Faculty Candidates, Society for Biomaterials
- **2022-2023:** Organizing Committee Member, Afrobiotech Conference Organizing Committee Member, American Institute of Chemical Engineers
- **2022:** Session Chair, Cancer Technologies, Tumor Microenvironment II, Biomedical Engineering Society
- **2021:** Session Chair, Cancer Technologies, Cell Migration in Cancer I, Biomedical Engineering Society

DEPARTMENTAL/UNIVERSITY

- **2026:** Commonwealth Health Research Board Grant Application Internal Reviewer
- **2026:** Office of Undergraduate Research (OUR) Advisory Board
- **2026:** BME Senior Research Administrator Search Committee
- **2025:** Faculty Participant, BMES 2014 Faculty Connection Event
- **2025:** BME Senior Design EXPO Judge
- **2025:** SBES Symposium Moderator & Judge
- **2025:** Cancer Research Center Moderator
- **2024-present:** BEAM Department Head Search Committee
- **2024:** Faculty Advisor, Virginia Tech Chapter of National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChe)
- **2023-present:** Undergraduate Curriculum Committee
- **2023-2024:** BEAM Graduate Admissions Committee
- **2023-2024:** Bio-MCL, Initiating Co-lead, Early Development & Strategy/Departmental Research Surveyor/Hiring Search Committee
- **2023:** Brain Cancer Faculty Search Committee
- **2023:** BME Senior Design EXPO Judge
- **2023:** SBES Symposium Presentation Evaluator & Emcee for Awards
- **2019-2020:** Biomedical Engineering and Mechanics (BEAM) Diversity Committee

COMMUNITY

- **2026:** Young Doctors, Roanoke, DC, and New York Chapter Outreach Event
- **2025:** Young Doctors, Roanoke, DC, and New York Chapter Outreach Event
- **2024:** STEAM Outreach at The STEAM Lab, Melrose Branch Library

- **2024:** Young Doctors Roanoke In-Lab Tour/Hands-on Activities
- **2023:** Virginia Tech Science Festival
- **2023:** Henrietta's Health Boutique Keynote Speaker, Melrose Branch Library
- **2022:** Brain School, Fralin Biomedical Research Institute
- **2021:** Breast Cancer Awareness Workshop speaker, Neweta Civic Organization
- **2020:** Virginia Tech Science Festival (Virtual)
- **2019:** Co-lead, Graduate School Workshop, VT National Society of Black Engineers
- **2019:** Virginia Tech Science Festival
- **2019:** STEAM Workshop
- **2019:** STEM-ability Workshop, Virginia Tech

THESIS COMMITTEES

PhD

Jennifer Hammel (Advisor: Jennifer Munson), VT-Wake Forest SBES PhD Program

Raffae Ahmad (Advisor: Jennifer Munson), VT-Wake Forest SBES PhD Program

Amirah Wright (Advisor: Pamela VandeVord), VT-Wake Forest SBES PhD Program

Rhea John (Advisor: Jennifer Munson), VT-Wake Forest SBES PhD Program

De'Yana Hines (Advisor: Blaise Costa/Pamela VandeVord), VT-Wake Forest SBES PhD Program

Yingshan Du (Advisor: Zhenhua Tian), VT-Wake Forest SBES PhD Program

Proxy

Aileen Suarez (Advisor: Raffaella De Vita), VT-Wake Forest SBES PhD Program

Sabrina Campelo (Advisor: Rafael Davalos), VT-Wake Forest SBES PhD Program

Zehrin Khan (Advisor: Scott Verbridge), VT-Wake Forest SBES PhD Program

Master's

Khadijat Oyediran (Advisor: Monet Roberts), VT-Wake Forest SBES Master's Program

Edward Shangin (Advisor: Caitlyn Collins), VT-Wake Forest SBES Master's Program

Amber Kaplan (Advisor: Arina Korneva), VT-Wake Forest SBES Master's Program

Accelerated Undergraduate/Graduate (UGG)

Hailey Murphy

Hannah Marrone

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

SOCIETY MEMBERSHIPS

Biomedical Engineering Society (BMES)

American Association for Cancer Research (AACR)

FACULTY AFFILIATIONS

Atrium Health Wake Forest Baptist Comprehensive Cancer Center (AHWFBCCC)

Faculty of Health Sciences

Faculty of Macromolecules Innovation Institute