

Xia Guo
August 2025 - August 2026
Assistant Professor
xia.guo@uthct.edu

CONTACT INFORMATION

No activities entered.

DEGREES

2014 Ph.D., Physiology and Pharmacology, University of Georgia , Athens, Georgia, United States
Dissertation: Characterization of A Novel in Vitro Model for Smooth Muscle Differentiation and the Role of Dedicator of Cytokinesis 2 in Smooth Muscle Differentiation, Phenotypic Modulation, and Vascular Remodeling

ACADEMIC APPOINTMENTS

Assistant Professor, Cellular and Molecular Biology, The University of Texas Health Science Center at Tyler, Tyler, Texas, Tenure (if applicable): Not Tenured, 2019-07-01, 2024-08-31

Associate Professor, Cellular and Molecular Biology, UT Tyler SOM, Tyler, Texas, Tenure (if applicable): Tenured, 2024-09-01, 2031-08-31

HONORS AND AWARDS

May 2026

Award For Excellence in Research, UT Tyler SOM, 2026 Basic Research Award

September 2025

Judge of scientific posters, 41st Southern Biomedical Engineering Conference, Review and Grade Posters for Award selection

PROFESSIONAL MEMBERSHIPS

International

April 2023 - Ongoing

American Heart Association (AHA) [Responsibility: Member]

AHA/ATVB/Chinese American Academy of Cardiology (CAAC) [Responsibility: Member]

American Society for Investigative Pathology (ASIP) [Responsibility: Member]

American Thoracic Society (2021-present) [Responsibility: Member]

CNAHA/ACRE/CAAC Joint Research Symposium [Responsibility: Member]

SERVICE ON COMMITTEES

UTT

August 2026 - Ongoing

IBC committee member [Responsibility: Member]

UTTSOM

January 2023 - August 2025

Thesis committee Advisor, Subcommittee : Javier Lopez [Responsibility: Member]

National

June 2026 - June 2026

NIH study section reviewer, Subcommittee : AVI: Atherosclerosis and Vascular Inflammation Study Section [Responsibility: Member by Nomination]

April 2026 - April 2026

NIH Study section reviewer, Subcommittee : IVBH-V (02) M: Integrative Vascular Biology and Hematology Special Emphasis Panel (SEP) [Responsibility: Member]

September 2025 - January 2026

NIH study section reviewer, Subcommittee : IVBH-D (02) the Integrative Vascular Biology and Hematology Special Emphasis Panel [Responsibility: Member]

International

June 2026 - August 2026

American Heart Association abstract/case report Reviewer [Responsibility: Member]

February 2026 - February 2026

Biomedical Research Proposal, Subcommittee : Georgia State University, University of Florida, and Novo Nordisk Foundation [Responsibility: Member]

EDITORIAL/BOARD APPOINTMENTS AND RESPONSIBILITIES

March 2026 - Ongoing

Scientific Reports, Editorial Board Member

February 2026 - Ongoing

Frontiers in Bioscience-Landmark, Editorial Board Member, Editorial Board Member

September 2023 - Ongoing

Atherosclerosis and Vascular Medicine for Frontiers in Cardiovascular Medicine, Editorial Board member

April 2023 - Ongoing

TEACHING ACTIVITIES

Title	Setting	Level of Learner	Number of Learners	Contact Hours	Type of Learning Activity	Teaching Methods	Start Month	End Month
BIOT5132 - Critical Reading II	Course	Doctoral/Master	6	14	Series	Seminar/Journal Club/Grand Rounds	August 2026	Ongoing
BIOT 5222 - Advanced Metabolism	Course	Doctoral/Master	11	8	Single Session	Lecture	February 2024	Ongoing
BIOT 5222L - Advanced Metabolism Lab	Lab	Doctoral/Master	11	8	Single Session	Laboratory	February 2024	Ongoing
BIOT 6311 - Biotechnology I	Course, Lab	Doctoral/Master	9	16	Single Session	Lecture, Laboratory	September 2023	Ongoing
BIOT 5310 - Fundamentals of Biomedical Research	Course	Doctoral/Master	11	1	Single Session	Lecture	August 2019	Ongoing

CURRICULUM DEVELOPMENT

Curriculum Name/Topic	Your Role and Degree of Responsibility	Curriculum Length	Level of Learner	Number of Learners	Start Month	End Month
BIOT 5222 - Advanced Metabolism Cardiovascular and metabolic diseases	Developer	Session(s)/lab(s)	Doctoral/Master	11	February 2023	Ongoing
BIOT 6311 - Biotechnology I	Developer	Session(s)/lab(s)	Doctoral/Master	11	August 2022	Ongoing

ADVISING/MENTORING/COACHING

Name of Individual	Level of Training	Purpose/Objective	Mentoring/Advising Activities	Start Month	End Month
Bon Kim	Undergraduate	Career advancement of individual	Formal, Research mentor/advisor/coach	July 2026	July 2026
Ava Le	Undergraduate	Career advancement of individual	Formal, Research mentor/advisor/coach	July 2026	July 2026
Ronggui Dai	Graduate	Development of individual	Formal, Research mentor/advisor/coach	June 2026	Ongoing
Andrea Sanchez Lozoya	Doctoral	Development of individual	Research mentor/advisor/coach	February 2026	February 2026
Grace Lee	Undergraduate	Development of individual	Formal, Research mentor/advisor/coach	November 2025	February 2026
Karina Galeon	Doctoral	Career advancement of individual	Formal, Research mentor/advisor/coach	November 2025	May 2026
Alexander Suarez,	Graduate	Development of individual	Formal, Research mentor/advisor/coach	October 2025	October 2025
Junlin Shi	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	June 2024	Ongoing
Ashoka Kumar	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	June 2024	Ongoing
Qinying Li	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	February 2024	February 2026
Javier Lopez	Graduate	Development of individual	Research mentor/advisor/coach	January 2024	August 2025
Oluwaseun Adeyanju	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	September 2023	December 2025
Yunzhuan Hou	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	September 2023	June 2026

EDUCATIONAL LEADERSHIP AND ADMINISTRATION

August 2026 - Ongoing

Instructor of Record for BIOT5132 - Critical Reading IJ Unit/Location: UT Tyler SOM, Your Role: Appointed

GRANTS

Funded - In Progress

Federal

R01: DOCK2 in pleural fibrosis, Funded by NIH/NHLBI (March 1, 2024 - February 29, 2028), awarded March 1, 2024 **\$1,480,000.00**), Funded - In Progress, March 2024, Coinvestigator Xia Guo (15%) [Type of Grant: Research]

R01: RUNX3 in vascular wall remodeling, Funded by NIH/NHLBI (January 1, 2024 - December 31, 2028), awarded January 1, 2024 **\$2,300,000.00**), Funded - In Progress, January 2024, PI Xia Guo (40%) [Type of Grant: Research]

SCHOLARLY CONTRIBUTIONS AND CREATIVE PRODUCTIONS

Journal Article

Completed/Published

Peer-reviewed

1. Olajuyin, A., Mandlem, V., Sunil, C., Hou, Y., Adeyanju, O., Petkar, S., Li, Q., Tucker, T. A., Idell, S., Chen, S.-Y. Y., Guo, X., & Qian, G. (2025). BRD4 Mediates Transforming Growth Factor- β -Induced Smooth Muscle Cell Differentiation from Mesenchymal Progenitor Cells. *International Journal of Molecular Sciences*, 26(16).

Abstract, Case Report

Completed/Published

Peer-reviewed

1. Qian, G., Kumar, A., Adeyanju, O., Hou, Y., Shi, J., Li, Q., Idell, S., Tucker, T. A., & Guo, X. (2026). TNIK mediates mesenchymal transition of pleural mesothelial cells. *American Journal of Respiratory and Critical Care Medicine*
2. Shi, J., Adeyanju, O., Hou, Y., Li, Q., Guo, X., & Qian, G. (2026). DOCK2 Promotes Lung Fibroblast Proliferation via AKT/GSK3 β / β -Catenin and mTORC1/p70S6K Signaling. *Research Day*.
3. Hou, Y., Adeyanju, O., Mandlem, V., Tang, H., Qian, G., & Guo, X. (2026). RUNX3 is a novel regulator for VSMC phenotypic modulation and vascular remodeling. *Research Day*.
4. Kumar, A., Adeyanju, O., Hou, Y., Shi, J., Li, Q., Idell, S., Tucker, T. A., Guo, X., & Qian, G. (2026). TNIK is a novel mediator of pleural mesothelial to mesenchymal transition. *Research Day*.
5. Kumar, A., Boddu, S., Hou, Y., Adeyanju, O., Guo, X., & Qian, G. (2025). DOCK2 mediates macrophage oxidative stress in obesity associated lung injury. *41st Southern Biomedical Engineering Conference*.
6. Guo, X., Lopez, J., Hou, Y., Adeyanju, O., & Qian, G. (2025). Targeting Bromodomain-containing Protein 4 in Abdominal Aortic Aneurysm. *41st Southern Biomedical Engineering Conference*.
7. Guo, X. (2025). The Novel Role of Dedicator of Cytokinesis 2 in Cardiovascular Diseases *41st Southern Biomedical Engineering Conference*.

Accepted

Peer-reviewed

8. Guo, X., Hou, Y., Lopez, J., & Qian, G. (2026). ARV-825, a BRD4 PROTAC that inhibits angiotension II-induced abdominal aortic aneurysm. *Circulation*.

Oral Presentations, Symposia, Seminars

Completed/Published

Peer-reviewed

1. Guo, X. (2025). The Novel Role of Dedicator of Cytokinesis 2 in Cardiovascular Diseases *41st Southern Biomedical Engineering Conference*.

Non-peer Reviewed

2. Kumar, A., Adeyanju, O., Hou, Y., Shi, J., Li, Q., Idell, S., Tucker, T. A., Guo, X., & Qian, G. (2026). TNIK is a novel mediator of pleural mesothelial to mesenchymal transition. *Research Day*.

Posters

Completed/Published

Peer-reviewed

1. Qian, G., Kumar, A., Adeyanju, O., Hou, Y., Shi, J., Li, Q., Idell, S., Tucker, T. A., & Guo, X. (2026). TNIK mediates mesenchymal transition of pleural mesothelial cells. *ATS Meeting*.
2. Kumar, A., Boddu, S., Hou, Y., Adeyanju, O., Guo, X., & Qian, G. (2025). DOCK2 mediates macrophage oxidative stress in obesity associated lung injury. *41st Southern Biomedical Engineering Conference*.
3. Guo, X., Lopez, J., Hou, Y., Adeyanju, O., & Qian, G. (2025). Targeting Bromodomain-containing Protein 4 in Abdominal Aortic Aneurysm. *41st Southern Biomedical Engineering Conference*.

Non-peer Reviewed

4. Kumar, A., Adeyanju, O., Hou, Y., Shi, J., Li, Q., Idell, S., Tucker, T. A., Guo, X., & Qian, G. (2026). TNIK is a novel mediator of pleural mesothelial to mesenchymal transition. *Research Day*.
5. Hou, Y., Adeyanju, O., Mandlem, V., Tang, H., Qian, G., & Guo, X. (2026). RUNX3 is a novel regulator for VSMC phenotypic modulation and vascular remodeling. *Research Day*.
6. Shi, J., Adeyanju, O., Hou, Y., Li, Q., Guo, X., & Qian, G. (2026). DOCK2 Promotes Lung Fibroblast Proliferation via AKT/GSK3 β / β -Catenin and mTORC1/p70S6K Signaling. *Research Day*.

Reviewer (Manuscript, Study Section)

Completed/Published

Additional Activities

1. Guo, X. (2026). AVI: Atherosclerosis and Vascular Inflammation Study Section. *NIH Study Section*.
2. Guo, X. (2026). IVBH-H (02) M, Vascular Pathobiology, Atherosclerosis, Hypertension. *NIH Study Section*.
3. Guo, X. (2026). Biomedical Research Proposal . *Politecnico Di Milano, Georgia State University/NBER, the University of Florida and Novo Nordisk Foundation*
4. Guo, X. (2026). IVBH-D (02) M, Vascular Biology and Diseases. *NIH Study Section*.

PROFESSIONAL DEVELOPMENT

May 2026 - May 2026

2025 ATS International Conference , American Thoracic Society, Orlando, FL.

April 2026 - April 2026

2026 Research Day, UTTSOM, UTHSCT

September 2025 - September 2025

41st Southern Biomedical Engineering Conference (SBEC), UT TYLER, UT TYLER

January 2025 - Ongoing

Weekly Research Faculty Seminar in UTHCT, The University of Texas at Tyler Health Science Center's Center for Biomedical Research, UTHCT Biomedical Research Center

September 2019 - Ongoing

Department Seminar, UTTSOM, UTHSCT