

Buka Samten
August 2025 - August 2026
Associate Professor
(903)877-7665
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CONTACT INFORMATION

D wing 604 Biomedical Research Center
11937 USHWY 271
Tyler, Texas 75708-3154

DEGREES

1996	M.Sc., Immunology, Beijing University School of Medicine (Health Science), Beijing, China Dissertation: Targeted cancer immunotherapy
1987	M.D., Medicine, Xinjiang Medical University, Urumqi, Xinjiang, China

POST-GRADUATE TRAINING

Post-Doctorate, University of Texas Health Science Center , Infectious diseases , Tuberculosis and Immunity, Tyler, Texas, United States, March 1998, February 2002

ACADEMIC APPOINTMENTS

Associate Professor, Department of Cellular & Molecular Biology, UT Tyler School of Medicine, Tyler, Texas, Tenure (if applicable): Not Tenured, 2023-01-01
Instructor, Center for Pulmonary Infectious Disease Control, University of Texas Health Science Center at Tyler, Tyler, Texas, Tenure (if applicable): Not Applicable, 2002-11-30, 2005-12-01
Assistant Professor, Department of Pulmonary Immunology, University of Texas Health Science Center at Tyler, Tyler, Texas, Tenure (if applicable): Not Tenured, 2005-12-01, 2009-08-31
Associate Professor, Department of Pulmonary Immunology, University of Texas Health Science Center at Tyler, Tyler, Texas, Tenure (if applicable): Not Tenured, 2009-09-01, 2022-12-31

ADMINISTRATIVE APPOINTMENTS

Director of BSL3 facility, CMB , UT Tyler School of Medicine, Tyler, Texas, 2025-02-18

PROFESSIONAL MEMBERSHIPS

National

October 2005 - Ongoing

2. The American Association of Immunologists [Responsibility: Member]

SERVICE ON COMMITTEES

UTT**September 2025 - Ongoing**

- Biosafety Level 3 facility of Biomedical Research Center [Responsibility: Director]

September 2022 - Ongoing

6. Institutional Biosafety Committee (IBC) [Responsibility: Member]

April 2022 - Ongoing

4. Infectious Organism Research Review Committee (IORRC) [Responsibility: Chair]

Regional**October 2025 - Ongoing**

- Served as a judge for the Poster reviewer for the awards by American Society of Microbiology Texas Branch Fall Meeting held at UT Tyler [Responsibility: Poster judge for awards]

EDITORIAL/BOARD APPOINTMENTS AND RESPONSIBILITIES

April 2020 - Ongoing

3. Frontiers in Immunology (Associate Editor), International journal in the field of immunology

April 2017 - Ongoing

2. Abstract Reviewer for the Union World Conference on Lung Health, Organized by the International Union against Tuberculosis and Lung Diseases
the world's largest lung health conference

April 2008 - Ongoing

1. Ad hoc reviewer for several national and international scientific journals in the field of immunity and infection I have served as an ad hoc manuscript reviewer for more than twenty national and international scientific journals in the field of immunology and infectious diseases, such as PNAS, JI, I&I, etc, over the last 15 years of my career as a scientist in the field of immunology and infectious diseases and have reviewed more than 50 manuscripts.

TEACHING ACTIVITIES

Title	Setting	Level of Learner	Number of Learners	Contact Hours	Type of Learning Activity	Teaching Methods	Start Month	End Month
Immune Cell Biology and Human Immunology for PhD Integrated Biomedical Sciences Program	Course	Doctoral/Master	5	3	Series	Lecture	August 2026	Ongoing
6. Invaders Course for the Medical School Students	Course	Post Graduate	40		Single Session	Lecture	April 2025	Ongoing
5. Defense Course for Medial School Students	Course	Post Graduate	40		Single Session	Lecture	May 2024	Ongoing
4. Advanced Biotechniques (BIOT 6311)	Course, Lab	Doctoral/Master	9		Single Session	Lecture, Laboratory	April 2016	Ongoing
3. Advanced Immunology (BIOT 6334)	Course	Doctoral/Master, Post Graduate	10		Series	Lecture, Small Group (e.g.: Case-based discussion)	April 2013	Ongoing
2. Advanced Biotechniques in Protein Chemistry (BIOT 6312)	Course, Lab	Doctoral/Master	8		Single Session	Lecture, Laboratory	August 2012	Ongoing
1. Critical Reading II (BIOT 5132)	Course	Post Graduate	10		Series	Small Group (e.g.: Case-based discussion)	August 2006	Ongoing

ADVISING/MENTORING/COACHING

Name of Individual	Level of Training	Purpose/Objective	Mentoring/Advising Activities	Start Month	End Month
Brian Kempe	Graduate	Scholarly work	Formal, Research mentor/advisor/coach	January 2026	Ongoing
Eunji Choi	Doctoral	Scholarly work	Formal	October 2025	December 2025
Christian Albert Agyei Acheampong	Graduate	Scholarly work	Formal, Research mentor/advisor/coach	January 2025	Ongoing
Arong Fnu	Fellow or Post-Doc	Development of individual	Research mentor/advisor/coach	March 2024	Ongoing
Andy Omeje	Graduate	Scholarly work	Formal, Research mentor/advisor/coach	December 2023	Ongoing
I have hosted and trained close to 10 summer internship students in my lab	Undergraduate	Scholarly work	Informal, Formal, Research mentor/advisor/coach	July 2015	Ongoing

GRANTS

Funded - In Progress

Federal

Risk factors for active tuberculosis infection, Funded by NIH/CRDF Global (Indo-US VAP) (February 1, 2019 - September 30, 2024), awarded February 1, 2019 (**\$990,000.00**), Funded - In Progress, April 2024, CoInvestigator Buka Samten (10%) with PI RamaKrishna Vankayalapati [Type of Grant: Research]

Submitted for Review

Corporate

Evaluating post tuberculosis induced bronchiectasis with investigational DPP1 inhibitors and NTM infection, Funded by Insmmed Incorporated, New Jersey (August 30, 2026 - August 30, 2029), Submitted for Review, June 2026, CoPI Jennifer Honda (20%) [Type of Grant: Research]

Federal

Investigating Post-TB Bronchiectasis as a Risk Factor for NTM Lung Disease, Funded by NIH/NIAID (September 30, 2027 - August 30, 2029), awarded August 30, 2026, Submitted for Review, June 2026, CoPI Jennifer Honda [Type of Grant: Research]

Cell specific roles of Runx3 in immunity against tuberculosis infection, Funded by NIH/NIAID (December 1, 2025 - November 30, 2027) **\$409,750.00**, Submitted for Review, June 2025, CoPI Hua Tang (10%) [Type of Grant: Research]

Engineering bacteriophages for the treatment of drug-resistant Mycobacterium tuberculosis infections, Funded by NIH/NIAID (February 18, 2026 - February 20, 2031), awarded August 18, 2026, Submitted for Review, June 2025, PI Guohua Yi with CoInvestigator Buka Samten [Type of Grant: Research]

Role of Runx3 in tuberculosis infection, Funded by NIH/NIAID (July 1, 2025 - June 30, 2027) **\$409,750.00**, Submitted for Review, February 2025, CoPI Hua Tang (25%) [Type of Grant: Research]

SCHOLARLY CONTRIBUTIONS AND CREATIVE PRODUCTIONS

Journal Article

Completed/Published

Peer-reviewed

1. Das, D. N., Balnadupete, A., Shetty, R., Gopu, V. P., Sajjan, R., Bhandary, Y. P., Marudamuthu, A. S., Oliver, C., Patel, A., Patel, A., Samten, B., Iwakura, Y., Tang, H., Citrin, D. E., Peters, J., & Shetty, S. (2026). Interleukin-17A Orchestrates Lung Injury and Remodeling Through p53 and uPA System Crosstalk. *International Journal of Molecular Sciences*, 27(Issue 4).

PROFESSIONAL DEVELOPMENT

August 2000 - Ongoing

Attended annual meetings of AAI and presented my research American Association of Immunologists, Washington DC, Description: I have attended annual meetings of American Association of Immunologists, American Thoracic Society Meetings and Key Stone tuberculosis symposium and several international conferences on immunology and infection