Kavita S. Kakirde, Ph.D.

I. Academic/Professional Background

A. Name: **Kavita S. Kakirde** Title: **Senior Lecturer**

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
Ph. D.	2012	Auburn University, AL	**Microbiology**	Functional Metagenomics of Soil Bacteria for Antimicrobial Discovery
M.S.	2005	Mumbai University	**Analytical Chemistry**	None
B.S.	2003	Mumbai University	**Microbiology**	None

C. University Experience

Position	*University*	*Dates*
Senior Lecturer and Lab Coordinator	Texas State University-San Marcos	Fall 2012 - present
Teaching Assistant	Auburn University, AL	2008-2011

D. Relevant Professional experience

Consultant at Concordas Informatics India Pvt. Ltd., Mumbai, India – 2006-07

Research Assistant, Quality Assurance Lab at Lubrizol India Pvt. Ltd., Turbhe, Navi Mumbai, India – 2005-06

E. Other Research Experience

CMB (Cell and Molecular Biology) rotation research:

Identifying diverse antimicrobial resistance determinants from an activated sludge microbial assemblage and are encoded on bacterial, plasmid, and bacteriophage metagenomes (Supervisor: Dr. Mark Liles, Auburn University).

Identification of Tn5 insertion sites in a cystic fibrosis isolate of Pseudomonas aeruginosa (Supervisor: Dr. Laura Silo-Suh, Auburn University).

G. Internships/Training

Bhabha Atomic Research Centre (BARC), Mumbai, India
Project: Application of modern instrumental methods of analysis, including Neutron Activation Analysis, X- Ray Fluorescence, Electro –Analytical Methods, Spectral, Thermal and Chromatographic Methods.

Anchrom Applications Research Lab (CAMAG recognized), Mumbai, India
Training in high performance thin layer chromatography.

Department of Microbiology, Bombay Veterinary College, Mumbai, India
Project: Techniques in biotechnology. This included diagnosis of diseases like Rabies, Listeria, Brucellosis and techniques in disease diagnosis, viral cultivation using tissue culture and chick embryo.

Department of Microbiology, Ramnarain Ruia College, Mumbai, India
Project: Isolation and characterization of Lipase producing organisms from soil samples.

H. Other Professional Credentials (licensure, certification, etc.)

Top Hat Advanced Certification at Engage 2024, Top Hat. (Feb. 29, 2024)
Teaching Online @ TxState, ODEL. (August 2020).
Top Hat Certification at Engage 2017 Summit, Top Hat. (October 2, 2017)

II. TEACHING

A. Teaching Honors and Awards:

Alpha Chi Favorite Professor for 2021
Alpha Chi Favorite Professor for 2018
Alpha Chi Favorite Professor for 2015
Alpha Chi Favorite Professor for 2014

B. Courses Taught:

Primary Instructor of Record: Texas State University

Microbiology – BIO 2400	(2014 - present)
Medical Microbiology – BIO 5366/4366	(2016 - present)
Medical Microbiology lab – BIO 5166/4166	(2016)
Modern Biology II – BIO 1421	(Fall 2012 – Fall 2017)
Principles of Microbiology – BIO 2440	(Fall 2012 – Summer 2014, Spring 2019)

Graduate Teaching Assistant: Auburn University
General Microbiology Laboratory - BIOL 3200
Microbial Evolution and Diversity Laboratory - BIOL 6250
Principles of Biology Laboratory - BIOL 2100

C. Directed Student Learning (theses, dissertations, exit committees, etc.)

At Texas State University:
Committee member, Aron Valdez (M.S.) - 2023
Committee member, John Howard (M.S.) - 2023
Committee member, Priti Ambokar (M.S.) - 2023
Committee member, Shelbie Powers (M.S.) - 2021
Committee member, Avry Stolzman (M.S.) - 2016
Committee member, Candace Longoria (M.S.) - 2016
Committee member, Starla Thornhill (M.S.) - 2016

Kelly Braddock. Evaluating various multi-purpose surface cleaner formulations for bacterial disinfection. Biology Department, Texas State University, Spring 2015.

At Auburn University:
Paul Bergen (Major advisor – Dr. Mark Liles). The genetic and biochemical analysis of an antibiotic-producing soil metagenomic clone, 2009-2012

Andrew Wiggins (Major advisor – Dr. Mark Liles). Transformation of a shuttle vector in different Gram negative bacteria, PCR screening and Pulse Field Gel Electrophoresis, 2008-2009

III. SCHOLARLY/CREATIVE

A. WORKS IN PRINT

Nasrin, S, Ganji, S, Kakirde, KS, Jacob, MR, Wang, Mei, Ranga, RR, Cobine, PA, Khan, IA, Wu, CC, Mead, DA, Li, XC, and Liles, MR (2018), "Chloramphenicol Derivatives with Antibacterial Activity Identified by Functional Metagenomics." Journal of Natural Products 81 (6):1321-1332.

McLean, RJ, Kakirde KS (2013), "Enhancing metagenomics investigations of microbial interactions with biofilm technology." International Journal of Molecular Sciences 14(11), 22246-22257.

Kakirde, KS (PA), Parsley, LC, and Liles, MR (CO) (2010). "Size does matter: Application-driven approaches for soil metagenomics." Soil Biology and Biochemistry 42(11):1911-1923.

Kakirde, KS (PA), Wild, J, Godiska, R, Mead, DA, Wiggings, AG, Goodman, RM, Szybalski, W, and Liles, MR (CO) (2011). "Gram negative shuttle BAC vector for heterologous expression of metagenomic libraries." Gene 75(2):57–62.

Parsley, LC (PA), Consuegra, EJ, Land, AM, Kakirde, KS, Harper, WF Jr., and Liles, MR (CO). (2010). "Discovery of diverse antibiotic resistance determinants from bacterial, plasmid, and bacteriophage metagenomes in an activated sludge community." Applied and Environmental Microbiology 76(11): 3753-3757.

B. WORKS NOT IN PRINT - (co-author presentations not included)

Kakirde, KS, Mead, DA, Wu, C, Nasrin, S, Staley, M, Jasinovica, S, Godiska, R, Liles, MR. "Construction and screening of large insert soil metagenomic library for discovery of anti-MRSA compounds." Society for Industrial Microbiology Annual Meeting, New Orleans, LA (2011)

Kakirde, KS, Capps, NK, Rhodes B, Bergen, PM, Vest, KE, Cobine, PA, Liles, MR. " Identification and characterization of recombinant clones producing an antimicrobial activity from a soil metagenomic library." ASM General Meeting, San Diego, CA (2010)

Kakirde, KS, Capps, NK, Rhodes B, Liles, MR. "Screening a Soil Metagenomic Library to identify Recombinant Clones producing an Antimicrobial activity." ASM Southeastern Branch Meeting, Savannah, GA (2009)

Kakirde, KS, Wiggins, AG, Wild, J, Szybalski, W, Liles, MR. "Development of a Novel Gram-negative Shuttle BAC Vector as a Tool for Molecular Microbiology." ASM Southeastern Branch Meeting, Jacksonville, FL (2008)

C. FELLOWSHIPS, AWARDS, HONORS

First Place, Poster Presentation, Society for Industrial Microbiology Annual Meeting (2011)

COSAM Student Travel Award, Auburn University (2009)

Cellular and Molecular Biosciences Doctoral Fellowship, Auburn University (2007-2008)

Certificate of merit for securing the top score in MS (Analytical Chemistry), SNDT University, Mumbai, India (2005)

IV. SERVICE

Spring 2024	Chair, COSE Undergraduate Scholarship Committee
Spring 2024	Member, Biology Undergraduate Scholarship Committee
2023 – 2024	Member, Biology department – microbiology cluster hire
2023 – present	Member, Pre-health advising committee
2023 – present	Member, Suspension appeals committee
2023 – 2024	Member, NLF evaluation committee

Spring 2021	Book review for CRC Press, Taylor & Francis Books
2020 - present	Texas State University System - Title IX Committee
2020 - present	COSE Undergraduate Scholarship Committee
Spring 2020	Manuscript review, PLOS ONE
Spring 2020	Manuscript review, Taibah University
Fall 2019	Book Proposal Review, Chemical and Life Sciences
2019 - present	Member, Registration and Academic Calendar Coordinating Committee
Spring 2019	Manuscript review, Journal of Regulatory Science
2019 - 2022	Judge, Texas Branch of the American Society for Microbiology
2017 - 2020	Judge, Women in Science and Engineering Conference.
2016 – 2017	Faculty Advisor for the Student organization Women in Medicine
Fall 2016	Committee member, Biology Department Course Evaluation Committee, Texas State University
May 2016 – 2022	Committee member, Biology Department Lecturer Evaluation Subcommittee
May 2016	Member, Biology Department Strategic goals – Service Committee, Texas State University
May 2016	Member, Biology Department Strategic goals – Space Committee, Texas State University
Fall 2015	Reviewer, Content survey and comparative review for the non-majors Biology textbook, Freeman, Macmillan Education
2015 - Present	Judge, Annual Biology Student Colloquium, Texas State University
Spring 2015	Committee member, New Textbook Selection Committee for Non-Majors Biology Courses, Texas State University
Fall 2014	Reviewer, Microbiology textbook for undergraduate majors, published by Wiley

Fall 2014	Manuscript review, Journal of Food Science (JFS)
Fall 2014	Search Committee member for the position of Assistant Professor, Microbiology (Search 2)
Spring 2014	Search Committee member for the position of Senior Lecturer, Microbiology
Spring 2014	Search Committee member for the position of Assistant Professor, Microbiology (Search 1)
Fall 2013	Search Committee member for the position of Senior Lecturer, Microbiology
Fall 2013	Judge, The Travis Elementary Science Fair – 5th grade projects
Fall 2012	Judge, Fourth International Research Conference for Graduate Students, Texas State University
2010 – 2011	Judge, GEARSEF Science Fair, Auburn University
2009 – 2010	Judge, Oral Presentations at Undergraduate Research Forum, Auburn University
2008 – 2011	Co-ordinated exhibitions and lab activities for middle school children as a part of the outreach department of Auburn University (AU Explore)
2008 – 2011	Coordinator, Experimental Design and Bio-Process Lab events for Science Olympiad, Auburn University
2010	Judge, Poster presentation and Model Design at South's BEST Robotics Competition

V. PROFESSIONAL DEVELOPMENT

2024	Understanding Students on the Autism Spectrum
2024	OPENtxst: Finding Openly Licensed Media & Educational Resources for Research, Teaching, & Publication
2024	Conference, workshop, and Advanced Certification Top Hat Engage, in New Orleans, LA, United States.
2024	What's In Your Wallet? Teaching Tips That Pay Off for You and Your Students

2024	Annotate, Collaborate, Elevate: A Recipe for Student Success This Semester
2023	ASM Distinguished Lecturer: Steve Diggle, Ph.D. / Lecture Title- Ancient Biotics: Medieval Medicine and Modern Applications
2023	Norton Biology's workshop on Success in the Microbiology Classroom: How can we better support students?
2023	Dr. Joshua Eyler - How Humans Learn: Effective and Compassionate Teaching and Learning
2023	Bite-Sized Ways to Motivate Your Students
2023	How to Talk to Your Students About All Things AI
2023	Let's Chat About ChatGPT
2023	McCoy Conversation: Thought Leadership in AI
2023	The Strength Within: Activating Community Cultural Wealth to Increase Success for Students of Color in STEM Disciplines
2023	Top Hat: 10 Things You Didn't Know You Could Do with Top Hat
2023	YuJa Advanced: Editing and Captions
2022	Canvas Toolkit: New Quizzes
2020-24	BOSS review training
2020	Texas State University System - Title IX training
2020	Canvas workshops and training, online teaching certification
2020	Faculty Development workshop, “Their Cheating Hearts: Tips for Maintaining Academic Integrity While Teaching Remotely”
2019	FACULTY FOCUS WORKSHOP: The Nontenure Line Faculty Committee presents: "Pedagogical Practices in Large Classrooms”
2017	Conference, workshop, and Certification Engage Summit by Top Hat, in Chicago, IL, United States.

2017	FACULTY FOCUS WORKSHOP: Outcomes Assessment: Refining Mission, Outcomes, and Methods, Texas State University, San Marcos, TX, United States.

ORGANIZATIONS OF WHICH I AM OR HAVE BEEN A MEMBER:

Professional:
American Society for Microbiology
American Society for Microbiology, Texas Branch
American Association for the Advancement of Science
Microbiology club at Texas State University
Microbiology club at Auburn University