

Kavita S. Kakirde, Ph.D.

I. Academic/Professional Background

A. Name: **Kavita S. Kakirde**

Title: **Senior Lecturer**

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>Thesis/Dissertation</i>
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

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

D. Other 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.

II. TEACHING

A. Teaching Honors and Awards:

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

B. Courses Taught:

Primary Instructor of Record: Texas State University

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

Graduate Teaching Assistant: Auburn University

General Microbiology Laboratory - BIOL 3200
Microbial Evolution and Diversity Laboratory - BIOL 6250
Principles of Biology Laboratory - BIOL 2100

C. Mentoring Undergraduate scholars

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

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

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

2015.

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, Wiggings, 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

Fall 2021	Chair and judge for oral presentations, ASM Texas Branch meeting
Spring 2021	Book review for CRC Press, Taylor & Francis Books
Fall 2020	Texas State University System - Title IX Committee
Spring 2020-present	COSE Undergraduate Scholarship Committee
Spring 2020	Manuscript review, PLOS ONE
Spring 2020	Manuscript review, Taibah University
Spring 2020	Judge, Biology Colloquium - PhD oral presentations.
Spring 2020	Judge, Women in Science and Engineering Conference.
Spring 2020-21	Committee member, Shelbie Powers, M.S. student, Texas State University
Fall 2019	Book Proposal Review, Chemical and Life Sciences
Fall 2019	Judge, Texas Branch of the American Society for Microbiology
Fall 2019-present	Member, Registration and Academic Calendar Coordinating Committee
Spring 2019	Manuscript review, Journal of Regulatory Science
Spring 2019	Judge, Texas Branch of the American Society for Microbiology

Spring 2019	Judge, Women in Science and Engineering Conference.
Spring 2019	Judge, Biology Colloquium - PhD oral presentations.
Spring 2017	Judge, Women in Science and Engineering Conference.
Spring 2017	Judge, Biology Colloquium - PhD oral presentations.
Fall 2016 – 2018	Faculty Advisor for the Student organization Women in Medicine
Fall 2016 - present	Committee member, Biology Department Course evaluation Committee, Texas State University
Fall 2016	Committee member, Candace Longoria graduated with M.S. Fall 2016, Texas State University
Summer 2016	Committee member, Avry Stolzman graduated with M.S. Summer 2016, Texas State University
May 2016 – present	Committee member, Biology Department Lecturer Evaluation Subcommittee, draft policy and propose criteria for the annual evaluation of NLF, Texas State University
May 2016	Member, Biology Department Strategic goals – Service Committee, Texas State University
May 2016	Member, Biology Department Strategic goals – Space Committee, Texas State University
Spring 2016	Committee member, Starla Thornhill graduated with M.S. -Spring 2016, Texas State University
Fall 2015	Reviewer, Content survey and comparative review for the non-majors Biology textbook, Freeman, Macmillan Education
Spring 2015	Judge, Oral presentations at the 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

Fall 2021	Canvas Toolkit: New Quizzes
Fall 2020	Texas State University System - Title IX training
Fall 2020	Canvas workshops and training, online teaching certification
Spring 2020	Faculty Development workshop, “Their Cheating Hearts: Tips for Maintaining Academic Integrity While Teaching Remotely”, (April 8, 2020)
Spring 2020-21	BOSS review training

- Spring 2019 FACULTY FOCUS WORKSHOP: The Nontenure Line
Faculty Committee presents: "Pedagogical Practices in
Large Classrooms". (April 4, 2019)
- Fall 2017 Conference, workshop and Certification
Engage Summit by Top Hat, in Chicago, IL, United States.
(October 1, 2017 - October 2, 2017).
- Fall 2017 FACULTY FOCUS WORKSHOP: Outcomes Assessment:
Refining Mission, Outcomes, and Methods, Texas State
University, San Marcos, TX, United States. (September 15,
2017).

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