



WELCOME TO MICROBIOLOGY

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<http://web.bio.utk.edu/micro>

On-Line Career Search Sites:

Careers in Microbiology

www.microbe.org/careers/careers.asp

Careers in Biotechnology and
Pharmaceutical

<http://recruit.sciencemaq.org>

Careers in Science and Engineering

www.nap.edu/

Guide to Non-traditional careers in
Science

www.aibs.org/

Current Areas of Research Interest

Bacterial/Fungal Physiology

Bioinformatics

Microbial Pathogenesis

Immune Regulation

Molecular Immunology

Molecular Virology

Microbial Ecology

Parasitology

Prokaryotic/Eukaryotic

Molecular Genetics

Research Faculty

[Jeff Becker](#) - Fungal physiology/pathogenicity

[Gladys Alexandre](#) - Bacterial responses

[Alison Buchan](#) - Microbial ecology

[Igor Jouline](#) - Bioinformatics

[Thandi Onami](#) - Immunology

[Todd Reynolds](#) - Fungal physiology/pathogenicity

[Mark Sangster](#) - Virology and immunology

[Gary Saylor](#) - Microbial ecology

[Pamela Small](#) - Bacterial pathogenicity

[Tim Sparer](#) - Molecular virology

[Chunlei Su](#) - Parasitology

[Steven Wilhelm](#) - Microbial ecology

[Erik Zinser](#) - Microbial ecology

Departmental Mission

The Department of Microbiology at UT Knoxville is dedicated to providing the quality education, through both teaching and research, necessary to meet the needs of this growing field. Our faculty members aggressively pursue research in many areas of the science: immunology; virology; microbial ecology; microbial pathology; microbial genetics; and others. Research projects are continuously conducted through collaboration with and support from various prominent sources, such as the National Institutes of Health (NIH), the United States Department of Energy (DOE), Environmental Protection Agency (EPA), and National Science Foundation (NSF), among others. Undergraduate students gain valuable experience in the lab by working under a professor; faculty also work extensively with post-graduate level students, often publishing numerous articles on their collaborative experimentation and study. Focus may be on such notable areas as virus research, the impact of microbes on marine and freshwater food webs, or how microbes cause disease.

What Microbiologists Do

Microbiologists work in almost every industry—from food, agriculture and pollution control to biotechnology, pharmaceuticals and health. They also work in government agencies and labs, such as the National Institutes of Health, the Environmental Protection Agency, water treatment facilities, and hospitals. And they work in education as teachers and researchers.

4-Year Sample Curriculum

Freshman Year

English Composition	6
Math 141, 142 or Math 151, 152	6-8
Biology 130, 140	8
Chemistry 120, 130	8

Sophomore Year

Biology 240, 250	8
Chemistry 350, 360, 369	8
Physics 221, 222	8
Foreign Language	6
General Electives	2

Junior Year

Foreign Language/Gen. Electives	6
BCMB 401	4
Microbiology 310, 319	5
Microbiology 329	2
Humanities	3
Non-US History Sequence	6
Upper Level Distribution	3

Senior Year

Microbiology (major)	12
Social Sciences	6
Humanities	3
Upper Level Distribution	3
Upper Division Electives	3
General Electives	3-5

Microbiology majors are encouraged to take advantage of the many opportunities to conduct original research under the guidance of microbiology faculty by enrolling in courses such as Microbiology 400 (laboratory problems in microbiology), 401 (undergraduate research in microbiology) and Microbiology 402 (advanced undergrad research in microbiology). For more information about the Microbiology department and Microbiology concentration see: <http://web.bio.utk/micro/>