Research programs in the Department of Bacteriology encompass a variety of areas including prokaryotic and lower eukaryotic genetics, gene expression and regulation, microbial physiology and diversity including microbial photosynthesis, nitrogen fixation, molecular structure–function, nucleic acid synthesis, microbial ecology, plant–microbe interactions, symbiosis, natural products synthesis, biotechnology/industrial microbiology, food microbiology, immunology and mechanisms of pathogenesis.

The Department of Bacteriology offers a Ph.D. degree through the microbiology doctoral training program. The Department of Bacteriology and the Department of Medical Microbiology and Immunology in the School of Medicine and Public Health serve as lead departments for the joint cross-campus microbiology doctoral training program.

Incoming students have the opportunity to do laboratory rotations with any of the primary faculty, affiliate faculty, or trainers from multiple departments. This group includes more than 90 faculty members in numerous departments and programs involved in microbiology research and graduate training. In addition to this breadth of opportunities in microbiology research training, the program encompasses graduate courses offered by both departments. Please refer to the separate Microbiology listing in this catalog for more detailed information, or visit the program website.

### DEGREES/MAJORS, DOCTORAL MINORS, GRADUATE/PROFESSIONAL CERTIFICATES

- Bacteriology, M.S. (http://guide.wisc.edu/graduate/bacteriology/bacteriology-ms)
- Microbiology, Doctoral Minor (http://guide.wisc.edu/graduate/bacteriology/microbiology-doctoral-minor)
- Microbiology, M.S. (http://guide.wisc.edu/graduate/bacteriology/microbiology-ms)
- Microbiology, Ph.D. (http://guide.wisc.edu/graduate/bacteriology/microbiology-phd)

### PEOPLE

**Faculty:** Professors Kaspar (chair), Ané, Currie, Donohue, Filutowicz, Forest, Gourse, Johnson, Keller, Landick, Mansfield, McMahon, Thomas, Wassarman, Yu; Associate Professors Pringle, Wang. In addition, many faculty members from other departments supervise training of graduate students.