Microbiology

Using information from the University of Maryland graduation survey, we have compiled information about Microbiology majors, such as where they work or go to graduate school post-graduation. Check out the topics below to learn more about planning for your career! For more information, follow the link to the University Career Center at CMNS (UCC@CMNS): go.umd.edu/uccatcmns

Industries and Career Paths

Microbiology majors are employed by governmental, industrial and academic organizations and non-academic settings. This specialization prepares students for graduate study; entry into professional schools (Medicine, Dental, and Law); careers in public health, forensic science, biotechnology, and the pharmaceutical Industry; as well as jobs in research labs and employment in governmental agencies developing public policy and/or overseeing/enforcing government regulations relative to food, drugs, and infectious disease of animals, plants, and humans.

Organizations

The following list showcases employers of UMD Microbiology undergraduates:

- Uniformed Services University of the Health Sciences
- U.S. Food and Drug Administration
- National Institutes of Health (NIH)
- Transnational Medicine Group
- Capital Integrative Health
- Tetracore
- American Yeast Sales
- U.S. Department of Agriculture
- Aeras
- Novavax, Inc
- CVS
- MOCO Movement Center
- Institute for In Vitro Sciences
- Institute of Human Virology
- Henry M. Jackson Foundation for the Advancement of Military Medicine
- University of Maryland

Job Titles

The sample job titles below exemplify positions Microbiology majors are qualified for upon graduation. This is not an exhaustive list, but a starting point for exploration.

- Laboratory Assistant/Technician
- Laboratory Manager
- Clinical Procedure Assistant
- ORISE Fellow
- Research Associate/Technician
- Peer Educator
- Project Manager
- Clinical Research Trial Recruiter
- Biologist
- Research Lab Assistant
- Biological Laboratory Technician
- Scientist
- Pediatric Therapy Aide

go.umd.edu/uccatcmns
Graduate Schools

The following is a list of schools where graduates are pursuing graduate degrees:

- Boston University
- Georgetown University
- Johns Hopkins University
- The Ohio State University
- Stanford University
- Tufts University Cummings School of Vet Med
- Uniformed Services University of Health Sciences
- University of Maryland
- University of Maryland, Baltimore
- University of Maryland, Baltimore County
- University of North Carolina, Chapel Hill
- University of Wisconsin, Madison

Skills Developed as a Microbiology Major

The University of Maryland will prepare each student with many different skills to take into the workplace. These skills will come from academic coursework as well as co-curricular experiential learning opportunities. For insight into what employers are looking for, review the skills inventory list (go.umd.edu/skillslist) to examine ways to include technical and cross-disciplinary skills on a resume, in interviews and on LinkedIn.

The following link highlights “must have” career readiness competencies, according to employers: (go.umd.edu/fourcompetencies).

This major will prepare you with the following technical and cross-disciplinary skills to:

1. define a research question and design an experiment to answer it in a meaningful and scientific way
2. gather and analyze data, to see relationships among different factors affecting the data, and to draw meaningful conclusions from these data
3. apply appropriate mathematical calculations and modeling to scientific problems
4. communicate via research proposals, journal papers, and oral presentations
5. collaborate efficiently and productively with other researchers
6. master computers and other technology, such as centrifuges, microscopes, spectrophotometers, and electrophysiological data collection equipment

Microbiology Major Resources

The following resources will help you explore relevant career paths, as well as job postings:

- American Institute of Biological Sciences: aibs.org
- American Society for Microbiology: asm.org
- Society for Industrial Microbiology and Biotechnology: simbhq.org
- Vault – Employer/Industry insights, rankings and reviews: vault.com
- Biology and Other Life Sciences Jobs: https://access.vault.com/recordurl?nid=9781438191782gpv&wid=256769&vid=1