

# Biology



## Career Pathways

### School of Sciences

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#### Overview:

Biology is the study of life and living organisms. For professional scientists and public citizens alike, scientific discoveries continually reshape our knowledge of living things. The field of biology is constantly advancing and has many different branches. The core foundation of biology includes the study of cells, evolution, genetics, homeostasis, and energy. Biology majors learn to apply scientific methods to set up experiments and utilize equipment. They learn laboratory techniques and procedures. Biology majors also know how to gather, organize, and analyze data.

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#### Acquired Skills MOST Valued by Employers:

- Application of Biological Principles
  - Evaluation of Scientific Issues and Findings
  - Laboratory Research Skills and Techniques
  - Biologist Professional Skills
  - Critical Thinking/Problem Solving
  - Oral/Written Communications
  - Teamwork/Collaboration
  - Digital Technology
  - Leadership
  - Professionalism/Work Ethic
  - Career Management
  - Global/Intercultural Fluency
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#### Common Pathways:

- Biological technician
- Medical and health service coordinators
- Genetic counselors
- Health educator
- Pharmaceutical/medical equipment sales
- Health communications representative
- Pharmacy technician
- Zoologist or wildlife technician
- Laboratory technician
- Dentistry
- Optometry
- Podiatry
- Veterinary technician
- Nuclear Medicine
- Physical Therapy
- Research and development technician

*Please note that some of these pathways require an advanced post bachelor's degree*

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#### Common Industries:

- Federal, state, and local health departments
  - Private testing laboratories including forensics
  - Public health departments
  - Private research institutions
  - Hospitals/Healthcare
  - Insurance companies
  - Pharmaceutical companies
  - Chemical manufacturing
  - Education
  - State and local public health departments
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#### Sample of Employers of Stevenson University students:

- Bay Country Veterinary Hospital
- Brookeville Animal Hospital
- Irvine Nature Center
- Johns Hopkins School of Medicine
- Johns Hopkins University
- McCormick Spice Company
- MD State Police Forensic Science Lab
- MDSPCA
- Sinai Hospital of Baltimore
- Unum Life Insurance Company

### Internship Sites for Stevenson Students:

- Action Physical Therapy
- Baltimore County Department of Recreation and Parks
- Collaborate Care Pharmacy & Wellness Center
- Cosmetic and Advanced Dentistry
- Emergency Veterinary Clinic Ellicott City
- Falls Road Animal Hospital
- Greater Baltimore Medical Center
- Hunt Valley Physical Therapy
- Johns Hopkins Health System
- Kennedy Krieger Institute
- Maryland Laser, Skin, & Vein Institute
- Medstar Union Memorial Hospital
- Mount Washington Pediatric Hospital
- Noxilizer, Inc
- Physiotherapy Associates
- Premier Orthopedic Associates
- Sinai Hospital
- St. Joseph Medical Center
- The Neuroscience Research Institute at SUNY College of Old Westbury
- University of Maryland - Nathan Schnaper Summer Intern Program in Cancer Research (NSIP)
- University of Maryland Medical Center
- University of Maryland School of Medicine Howard Hughes Medical Institute/ Center for Vaccine Development
- University of Maryland Shock Trauma
- Walter Reed Army Institute of Research
- Wildlife Diversity Program - Alaska
- Dept. of Fish & Game (REU program)

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### Graduate Schools Attended by Stevenson Alumni:

- Towson University
- University of Maryland Baltimore
- Penn State Hershey School of Medicine
- Campbell University
- Kansas State Veterinary School
- Carnegie Mellon University
- Boston University
- Stevenson University
- Franklin Pierce University
- Auburn University
- Sacred Heart University
- West Virginia University
- University of Pennsylvania
- University of Virginia

### An Employer's Perspective:

According to the U.S. Bureau of Labor and Statistics, employment of biological scientists is projected to grow 21 percent over the 2008–18 decade, much faster than the average for all occupations, as biotechnological research and development continues to drive job growth. (Occupational Outlook Handbook, 2010–2011)

[http://www.asbmb.org/uploadedFiles/ProfessionalDevelopment/Professional\\_Development/ASBMB\\_2011CareerText\\_Web\\_Final.pdf](http://www.asbmb.org/uploadedFiles/ProfessionalDevelopment/Professional_Development/ASBMB_2011CareerText_Web_Final.pdf)

### Salaries:

According to the NACE Salary Survey, the average starting salary for biological sciences majors nationwide was \$64,250. However, salaries are dependent upon the industry, level of position, and geographical region. A few good resources for researching salaries of specific jobs within various industries are [www.salary.com](http://www.salary.com) and [www.payscale.com](http://www.payscale.com). The Bureau of Labor and Statistics also has a very good source of information at <http://www.bls.gov/ooh/life-physical-and-socialscience/>.

