What Can I Do With a Biology Major?

(How can I participate in science even if I am not a science major?)

There are a variety of career and lifestyle options available to those with biology training. Students with a biology background are trained in basic biological knowledge, research techniques, and critical thinking skills. This skill set can be applied to a wide range of careers both inside and outside of the traditional fields of research and medicine.

Be introspective. What do you enjoy? Do you find biology interesting? Are you curious about the way living things are put together and how they work? What other disciplines do you enjoy? How do you work best? Do you like to work alone or with others? Do you like regular work hours or a more flexible work schedule? Do you like control over your project or would you prefer more guidance and leadership?

The following are some examples of the various fields and employment areas available to those with an education or interest in biology. Note that although each career is listed only once, many of these careers are employed by a variety of different agencies in different sectors.

<table>
<thead>
<tr>
<th>Education</th>
<th>Mycologist</th>
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<tbody>
<tr>
<td>Secondary teacher</td>
<td>Parasitologist</td>
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<tr>
<td>College or University</td>
<td>Physiologist</td>
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<tr>
<td>Instructor/Lecturer</td>
<td>Plant Biologist/Botanist</td>
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<tr>
<td>Professor</td>
<td>Toxicologist</td>
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<tr>
<td>Administrator</td>
<td>Zoologist</td>
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**Research** (note: those with the following job titles can work in a university, hospital, or company setting; as a principal investigator, a manager, a research assistant, or a laboratory technician)

- Biostatistician
- Bioinformatician/Computational biologist
- Biochemist
- Biophysicist
- Cell Biologist
- Developmental Biologist/Embryologist
- Ecologist
- Entomologist
- Geneticist
- Microbiologist
- Marine Biologist
- Molecular Biologist

**Archeology/Anthropology/Sociology**

- Ethnobotanist
- Forensic archaeologist
- Ethnopharmacologist

**Biotechnology/Pharmacology/Cosmetics /Food Science**

- Biotechnologist
- Pharmaceutical Sales Rep.
- Pharmacologist (retail, research, clinical, etc.)
- Quality Control Specialist
- Flavor Chemist
- Industrial Microbiologist (pharmaceutical, food, etc.)
Agriculture
Agronomist
Animal or Plant Breeder
Animal Scientist
Aquaculturist
Crop Physiologist
Horticulturist

Environmental Science and Related
Conservation Biologist
Ecologist
Environmental Impact Analyst
Environmental Consultant
Environmental Health Educator
Environmental Microbiologist
Natural Resources Manager
Naturalist (park ranger, zoo keeper, museum curator, etc.)
Fisheries Biologist
Forester
Wildlife Biologist

Medical
Clinical Pharmacist
Dentist
Epidemiologist
Genetic Counselor
Optometrist
Pathologist
Physician
Medical Social Worker
Medical Technician
Medical Record Technician
Physician Assistant
Physical Therapist
Public Health Officer
Registered Nurse
Sport/Exercise Physiologist
Veterinarian

Law
JD w/ specialties in Patent, Biotechnology, Regulatory, Conservation, Medical/Public Health, etc.
Patent Agent

Business
Biotech Management
Biotech/Pharmaceutical Marketing and Sales
Hospital Administrator

Government
Food and Drug Inspector (Registered Sanitarian)
Patent Specialist
Forensic Scientist
Science Policy Advisor

Art/Architecture
Medical/Scientific Illustrator
Landscape Architect/Environmental Designer

Writing/Library Science/History
Scientific Librarian
Scientific Database Manager
Science Historian
Science Writer (magazines, newspapers, books, technical manuals, etc.)
Journal Editor
101+ Career Choices:

Research in Biomedical and Biological Sciences

Ways you can be involved in research:
- Undergraduate student
- Graduate student
- Research technician
- University setting
- Pharmaceutical industry
- Biotechnology industry
- Agricultural industry
- Government research
- Private Research Institutes

Education/Teaching
- Elementary/Middle school
- Junior High school
- High school
- Undergraduates
- Graduate students
- Medical students
- Junior College
- Technical School

Government:
- local, state, national, international
- Environmental regulation:
  - Rivers, streams, & fish
  - Wildlife management
- Forest management
- Park Ranger/Park Interpreter
- Game warden
- Wildlife Biologist
- Lobbyist for science, technology, & science ed.
- Water quality control
- Waste management County
- Extension Agent Science
- policy analyst Science policy
- researcher Science policy
- administrator FDA: Drug approval
- FDA: Food inspection
- Inspectors of meat processing plants
- Occupational Health & Safety Officer
- Admin/research for international health group or nonprofit public interest group

Industry
- Market research (ie, food industry)
- Regulatory affairs
- Quality control
- Public relations
- Product development and testing:
  - Food industry
  - Agricultural industry
  - Pharmaceutical or biotechnology industry
- Sales and marketing:
  - Agricultural industry
  - Drug rep for pharmaceutical industry
  - Rep for scientific reagents and equipment

Science Writing
- Feature articles for science journals, News magazines, or newspapers
- Writer or Editor of textbooks
- Technical manuals
- Scientific/Medical illustrator
- Broadcast journalism (ie, dramas)
- Host of TV show about nature, animals, or science
- Writer of novels with biology or medical setting
- Copy editor

Healthcare Careers
- Medical Doctor or Doctor of Osteopathy
  - Clinical practice
  - Centers for Disease Control
  - National Institutes of Health
  - broadcast journalism—consultant for TV/internet clinical issues
  - teaching medical students
  - clinical research
  - clinical trials in practice
  - clinical trials, pharmaceutical industry
- MD-PhD
- Pharmacist, Podiatry, Optometry, Orthoptics, Dentist, Orthodontist, Dental Hygiene, Dental Assistant, Epidemiology, Public Health, Physician’s Assistant, Physical Therapy, Occupational Therapy, Genetics counselor, Medical Technology, Cytotechnician/Cytogenetics, Respiratory technician, In vitro fertilization technician, Sperm bank technician, Radiation therapy technician, X-ray technician, Sports testing, Sports medicine, athletic training, Magnetic resonance technician, Surgical technologist, Orthotics & Prosthetics Patient Care, Medical Appliance Technician, Exercise Physiology, Space Physiology (weightlessness), Emergency Medical Technician, Anesthesiology Assistant, Environmental Science & Protection Technician, Diagnostic Medical Sonography, Vascular technician, Perfusionist, Audiologist, Phlebotomist, Quality control in clinical laboratory, Clinical Trials Coordinator, Veterinarian: domestic, exotic, zoo, or laboratory animals, Veterinary technician/assistant, Animal trainer, Zookeeper, Aquarist

Administration/Management
- Grants administration for national government agency or nonprofit agency
- Administration University Office of Research
- University Compliance Officer
- Admin/Management of Biotechnology firm or Pharmaceutical firm
- Executive director of professional society

Miscellaneous
- Astronaut
- Scientific consultant
- Brewmaster/Vintner
- Patent research
- Environmental law
- Medical law
- Politician
- Financial analyst/science-based investment advisor
- Bioinformatics Biostatistics
- Entrepreneur/company founder
- Biofuelling
- Science/Medical Librarian
- Naturalist on cruise ship
- Museum curator

Careers for which Biology forms the foundation but that require a related degree
- Anthropology
- Paleontology
- Nursing
- Dietician
- Biomedical Engineering
- Health Care Administration: hospitals, clinics, nursing homes

Agricultural Sciences
- Animal Science
- Crop Science
- Soil Science
- Biofuels Research
- USDA: animal and plant research
- Apiarist
- Viticulture
- Fish farming
- Crop consultant/management
- Dairy/meat production
- “Pick your own” berry farm

Biology is the science of life and how living things work.
Websites that offer more information:

https://www.aibs.org/careers/

http://niu.edu/careerservices/career-resources/what-you-can-do.shtml


https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/biology

FBI lab
https://www.fbi.gov/services/laboratory