

Biological Technicians assist biological and medical scientists in laboratories with setting up, operating, and maintaining laboratory instruments and equipment, monitoring experiments, making observations, and calculating and recording results. Many assist scientists who conduct **medical research**—helping to find a cure for cancer or AIDS, for example. Those who work in **pharmaceutical companies** help develop and manufacture medicinal and pharmaceutical preparations. Those working in the field of **microbiology** generally work as lab assistants, studying living organisms and infectious agents. Biological technicians also analyze organic substances, such as blood, food, and drugs, and some examine evidence in criminal investigations. **Agricultural Biotechnology** is a collection of scientific techniques, including genetic engineering that is used to create, improve, or modify plants, animals, and microorganisms. Biological technicians working in laboratories use the knowledge and techniques gained from basic research by scientists, including gene splicing and recombinant DNA, and apply these techniques in product development.

Because computers and computer-interfaced equipment often are used in research and development laboratories, technicians should have strong computer skills. Communication skills are also important; technicians often are required to report their findings both through speaking and in writing. Additionally, technicians should be able to work well with others, because teamwork is common. Organizational ability, an eye for detail, and skill in interpreting scientific results are also important.

The United States is currently the world leader in the research, development, and commercialization of biotechnology products. These advances have brought to market life-saving health care products and microbial pesticides, healthier foods, disease and insect resistant crops, additional energy resources, environmental clean-up techniques, and more (National Health Museum, 2002).

Salary Information:

- Biotechnology, Associate in Applied Science
\$30,000 Median Salary (Follow-up Study, Monroe Community College Graduates, 2008)
- **Biological Technicians for the Rochester, New York area:**
\$37,400 Median Salary (Career One Stop, 2008)
\$40,900 Median Hourly Wage (U.S. Bureau of Labor Statistics, 2008)

[*Salary varies based on education/advanced degree, work-experience & setting/location]

Additional Information:

- Biotechnology Industry Organization: www.bio.org
- Bio-Link, ATE Center for Biotechnology: www.bio-link.org
- National Center for Biotechnology Information: www.ncbi.nlm.nih.gov

