

Biotechnology Career Information

Biotechnology is technology based on biology - biotechnology harnesses cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet. Modern biotechnology provides breakthrough products and technologies to combat debilitating and rare diseases, reduce our environmental footprint, feed the hungry, use less and cleaner energy, and have safer, cleaner and more efficient industrial manufacturing processes. Currently, there are more than 250 biotechnology health care products and vaccines available to patients, many for previously untreatable diseases. More than 18 million farmers around the world use agricultural biotechnology to increase yields, prevent damage from insects and pests and reduce farming's impact on the environment. And more than 50 biorefineries are being built across North America to test and refine technologies to produce biofuels and chemicals from renewable biomass, which can help reduce greenhouse gas emissions. Biotechnology is a growing field, consisting of applied biology and bioprocesses in engineering, technology, and medicine.

CAREER OPTIONS

There are hundreds of career options for biotechnology professionals, below are some of the most popular career areas:

- ✦ Biomedical Research
- ✦ Biomedical Engineering
- ✦ Aquaculture
- ✦ Bioinformatics
- ✦ Biofuels
- ✦ Biomanufacturing
- ✦ Biomaterials
- ✦ Biopharmaceuticals
- ✦ Bioprocessing
- ✦ Cell Culture
- ✦ Drug Discovery
- ✦ Food Safety
- ✦ Genomics
- ✦ Lab Safety
- ✦ Marine Biotechnology
- ✦ Medical Devices
- ✦ Quality Control
- ✦ Pharmaceutical Sales

BIOTECHNOLOGY COMPANY LISTINGS

See **BOOK OF LISTS** in the Career Resource Room @ Career Services

BioPharmGuy – Bay Area & Northern California

<http://biopharmguy.com/links/company-by-name-northern-california.php>

BioPharmGuy – San Diego & Southern California

<http://biopharmguy.com/links/company-by-name-southern-california.php>

San Diego Biotechnology Network

<http://sdbn.org/directory/>

Forbes – The Country's Biggest Biotechs

<http://www.forbes.com/pictures/gihk45g/the-countrys-biggest-biotechs/>

Forbes – The World's Largest Drug & Biotech Companies

<http://www.forbes.com/sites/liyanchen/2015/06/04/2015-global-2000-the-worlds-largest-drug-and-biotech-companies/>

GRADUATE SCHOOL

Biotechnology graduate programs are largely programs focused on an applied science. Students in graduate programs in biotechnology study both biology and technology to try to understand cellular and molecular processes to learn how to create technologies that may improve human and animal life, as well as the environment. Masters Programs in Biotechnology such as a MS Bioscience Technologies or Ph.D Doctorate Programs in Biotechnology and online Graduate Certificate in Biotechnology programs are available. Students interested in enrolling in a biotechnology graduate school will benefit from having a background in the sciences or technology, but individuals from a wide variety of backgrounds can also be very successful. Biotechnology degree programs may prepare students to pursue potential career opportunities in agriculture, research, healthcare, medical science, food science, public policy and more.

GRADUATE SCHOOL RESOURCES

This is not an exhaustive list of graduate programs. It's important to do extensive research on programs of interest and connect with admissions staff.

GradSchools.com

<http://www.gradschools.com/programs/biomedical-science/biotechnology>

BiotechnologyDegrees.org

<http://www.biotechnologydegrees.org/page/biotechnology-degree-search>

Peterson's

<http://www.petersons.com>

Molecular, Cellular, and Developmental Biology

<http://www.mcdb.ucsb.edu/grad/courses/pharmacology-biotechnology>

CSU Channel Islands – MS Biotech/MBA Dual Degree

<http://ext.csuci.edu/ms-biotechnology-mba-dual/>

Cal Poly Pomona – Department of Biological Sciences

<http://www.cpp.edu/~scil/biological-sciences/pabs/index.shtml>

Fresno State – Biotechnology Master's Program

<http://www.fresnostate.edu/csm/biology/degrees/graduate/biotech/>

UC Riverside – Department of Bioengineering

<http://bioeng.ucr.edu/education/graduate/ms.html>

UC Irvine – Biotechnology Management

<http://merage.uci.edu/biotechmanagement/>

Brown University – BioMed: Biotechnology

<http://www.brown.edu/academics/gradschool/programs/biomed-biotechnology>

University of San Francisco – PSM in Biotechnology

<https://www.usfca.edu/arts-sciences/graduate-programs/biotechnology>

Keck Graduate Institute – Master of Bioscience

<http://www.kgi.edu/academic-programs/master-of-bioscience-%28mbs%29>

Columbia University – Biological Sciences

<http://www.columbia.edu/cu/biology/pages/ma-biotech/pro/intro/index.html>

JOB SEARCH RESOURCES

UCSB CAREER SERVICES

<http://career.sa.ucsb.edu>

UCSB CAREER SERVICES LIBRARY @ CRR

Indeed.com

<http://www.indeed.com>

TheScientist

<http://career.the-scientist.com>

BioSpace

<http://www.biospace.com/jobs/homepage/>

Biotech Careers

<http://biotech-careers.org>

BioPharmGuy

<http://biopharmguy.com/links/company-by-location-southern-california.php>

biojobnet

<http://www.biojobnet.com>

medzilla

<http://www.medzilla.com>

tinytechjobs

<http://www.tinytechjobs.com>

PharmaOpportunities

<http://www.pharmaopportunities.com>

NewScientist

<http://jobs.newscientist.com>

National Institutes of Health

<http://www.jobs.nih.gov>

Biotechnology Institute

<http://www.biotechinstitute.org/go.cfm?do=Page.View&pid=23>

