

Linking Majors to Careers

BIOCHEMISTRY

Biochemistry

Biochemistry is the study of biomolecules such as DNA, RNA and protein and their role in the chemical reactions of life. Molecular biology is focused on the new techniques used in the restructuring of molecules that program living cells. Together, these two disciplines are among the most rapidly growing and exciting fields in science today. The recent explosion of discoveries in these two disciplines has led to a dramatic re-thinking of our traditional ideas about the treatment of cancer, the human genome project, forensic investigations using DNA evidence, the understanding of inheritable diseases, and the design of new drugs.

This major provides students with the tools to work in these areas and allows them to pursue advanced degrees in various biochemically-related fields such as medicine or physical and biological sciences.

SKILLS: The person who majors in **Biochemistry** at Regis University has the opportunity to learn a variety of essential **skills** such as:

- Collecting and analyzing data
- Conducting research
- Preparing/writing reports
- Learning methodology
- Developing ideas
- Making oral presentations
- Gathering information
- Computational analysis of data
- Writing technical reports/proposals
- Critical thinking and decision making

SOME TIPS ON GETTING A JOB IN THIS FIELD:

1. Do an internship in the area of your interest.
2. Do undergraduate research with one of your professors.
3. Become a lab or teaching assistant.
4. Attend national or local scientific association meetings recommended by your professors or become a student member
5. Gather information about jobs in your area by talking with your professors and contacting Career Services staff, who will be happy to get you started.

RELATED JOBS: Students with a bachelor's degree in biochemistry have opportunities in education, research, business and industry. A doctorate is needed for most positions in college teaching, independent research, and administration. A master's degree will do for some jobs in the field such as those found in industry. Many scientists choose this route to start careers early that often lead to administrative, supervisory, or middle management roles. A bachelor's degree is needed and for teaching in a public school system. The federal government has many positions for scientists at all levels. Listed below are typical career fields Biochemistry majors enter:

environmental analyst	laboratory assistant
lobbyist	medical technologist*
biochemist*	microbiologist*
biomedical engineer	molecular biologist*
cellular biologist*	pharmaceutical sales
marine biologist*	pharmacist*
patent lawyer*	pharmacologist*
dietitian*	physician*
environmental analyst	physician assistant*
epidemiologist	research assistant*
genetic counselor*	safety and health inspector
geneticist*	teacher
immunologist*	veterinarian (internist)*
industrial hygienist	writer – technical/scientific

* Usually requires a degree beyond the bachelor's level or additional training in a specific field

WEB SITES RELATED TO BIOCHEMISTRY:

Science Careers	www.recruit.sciencemag.org/
Pharmaceutical Jobs from Hirehealth	www.hirehealth.com/ci/servlet/com.ci.home.Home
Careers in Biotechnology	www.bio.org/speeches/pubs/er/
Life Sciences World	www.lifesciencesworld.com
American Society for Biochemistry and Molecular Biology	www.asbmb.org

CAREER RESOURCES IN:

- CAREER SERVICES LIBRARY (CS)
 - DAYTON MEMORIAL LIBRARY (DM)
 - ON THE INTERNET
-

Career and Occupational Information

Occupational Outlook Handbook (CS, DM, and <http://www.bls.gov/oco>)

ONET <http://online.onetcenter.org>

Adams Jobs Almanac (CS, DM)

Dictionary of Occupational Titles (CS, DM)

Great Careers for... series (CS)

Careers for ... series (CS)

Careers in ... series (DM)

Encyclopedia of Career and Vocational Guidance (DM)

Liberal Arts Career News (CS)

Professional Organizations

National Directory of Non-Profit Organizations (DM)

Denver Meets (DM)

Encyclopedia of Associations (link on DM online catalog)

Internet Public Library listing at: <http://www.ipl.org/div/aon>

Employer Directories

Reference USA (link on DM online catalog)

Denver Business Journal Top 25 Book of Lists (CS, DM)

Colorado Business Directory (DM and available via link on DM online catalog)

Directory of Colorado Manufacturers (DM)

Rocky Mountain High Tech. Directory (DM)

Almanac of American Employers (DM)

Job Banks for US cities (CS, DM)

Standard & Poor's Register of Corp. Directory (link on DM online catalog)

Thomas Register of American Manufacturers
<http://www.thomasregister.com>

Directory of Colorado Non-Profits (DM and <http://www.coloradonoprofits.org>)

Employment Outlook

Occupational Outlook Quarterly (CS, DM)

Job Rated Almanac (DM)

CAM report (CS)

Employment Outlook for Colorado (DM)

Internships

Internships are placements with employers that give Regis students with a GPA of 2.5 or better the opportunity to combine coursework with real-life experience while earning academic credit. Internships enhance academic knowledge, personal development and professional preparation. In addition, a successful internship can give students an edge when hiring decisions are made because employers seek applicants with practical experience in their field. Students interested in an internship need to register with the **Academic Internship Program** for help with determining a site placement, learning objectives and academic criteria.

Graduate School Information

Real Guide to Grad School (CS, DM)

Peterson's Graduate and Professional Programs (CS, DM and <http://www.petersons.com>)

Gorman Report (CS)

Graduate School Admissions Advisor (CS)

Getting what you came for (CS)

Educational Rankings Annual (DM)

College Blue Book (DM)

Directory of Post-Secondary Institutions (DM)

Salary Information

Colorado Occupational Wages
(<http://www.coworkforce.com/lmi/wages/wages.asp>)

Compensation & Working Conditions (DM)

NACE Salary Survey (CS)

Salary.com - <http://Salary.com>

Alumni Career Network

One of the best resources for career information is people who work in the field you are considering. Contact information for Regis Alumni who have agreed to talk with students investigating career fields is available on the Alumni Career Network, a program located under "Alumni" at <http://www.ecampusrecruiter.com/regis>

World Wide Web Sites

Regis Career Services: <http://www.regis.edu/careerservices>

Dayton Memorial Library article and research database:

<http://www.regis.edu/libdatabase.asp?sctn=lib&p1=empty>

JobWeb (NACE): <http://www.jobweb.org>

Career Magazine: <http://www.careermag.com>

America's Job Bank: <http://www.ajb.dni.us>