

WHAT CAN I DO WITH MY MAJOR IN

BIOLOGY

OVERVIEW OF MAJOR

Concordia University offers both undergraduate and graduate programs in biology. At the undergraduate level it offers honours and specialization programs in biology, cell and molecular biology and ecology, as well as major and minor programs in biology. Graduate degrees include both Master/Magisteriate of Science and doctoral programs in biology as well as a Graduate Diploma in Biotechnology & Genomics. A PhD enables one to teach and do research at the university level. The latest information on both undergraduate and graduate programs can be explored in depth on Concordia University's website http://biology.concordia.ca.

EXAMPLES OF JOBS ACQUIRED BY CONCORDIA GRADUATES

The following job titles are representative of the types of entry-level positions for which Concordia University students are qualified for upon graduation. Note that the numbers following each job title refer to Canada's National Occupational Classification (NOC) code. For details on these titles go to http://www5.hrsdc.qc.ca/NOC/.

- Assistant Technical Coordinator
- Clinical Data Analyst
- Clinical Research Coordinator Assistant
- Community Health Educator
- Coordinator, Specifications and Implementation
- Environment Specialist
- Event Planner/Coordinator, Pharmaceutical Industry
- Genetics Research Coordinator
- Industrial Policy Analyst Intern
- Laboratory Technician
- Medical Editor
- Medical Writer
- MRI (Magnetic Resonance Imaging) Reader
- Pharmaceutical Project Coordinator
- Product Safety Officer
- Project Assistant, Women and Health
- Quality Control Inspector
- Quality Control Technician
- Researcher, Biotechnology Regulations
- Researcher, Genetically Modified Organisms
- Sales Representative
- Specialist, Scientific Information

CELEBRATED BIOLOGY MAJORS

Rachel Carson. Marine Biologist and Author of "Silent Spring"

<u>Susan Morrall.</u> Concordia Graduate. Co-writer of Film, "Puckoon"

Albert Murray Fallis. Father of Canadian Parasitology

Earl Godfrey. Author of "Birds of Canada" the Bird-

Watcher's Bible

Libbie Hyman. Zoologist Noted for her Texts on

Invertebrates and Vertebrates

David T. Suzuki. Geneticist and Science

Communicator

<u>Lap-Chee Tsui.</u> Found the Gene Causing Cystic

Fibrosis

<u>James Watson.</u> Co-discoverer of the Structure of the

DNA Molecule

MORE JOB TITLES

Many biologists work in research and development primarily in private industry, universities and government laboratories. Some students use their biology degree as foundation to build a career in health care and others go on to earn a teaching certificate to enable them to pursue jobs in teaching at an elementary or secondary school level. Still others pursue careers in sales and marketing in science-related industries. The titles below are not meant to be exhaustive but are representative of fields which biology majors pursue. Keep in mind that some occupations require further education (e.g., a higher degree, second degree, diploma). Note that the numbers following each job title refer to Canada's National Occupational Classification (NOC) code. For details on these titles go to http://www5.hrsdc.gc.ca/NOC/.

- Agricultural Researcher Anatomist (2121)
- Animal Scientist
- Bioinformatician
- Biology Teacher, High School (4141)
- Biostatistician (2161)
- Botanist (2121)
- Cell Biologist (2121)
- Chiropractor (3122)
- Clinical Research Associate (4165)
- Dentist (3113)
- Dietitian (3132)
- Ecologist (2121)
- Epidemiologist (2161)

- Food and Drug Inspector
- Florist (0621)
- Forester (2122)
- Geneticist (2121)
- Histologist (2121)
- Horticulturalist (2225)
- Hospital Administrator (0014)
- Immunologist (2121)
- Marine Biologist (2121)
- Massage Therapist (3235)
- Medical Doctor (3112)
- Medical Illustrator (5241)
- Medical Laboratory Technician (3212)
- Medical Librarian (5111)
- Medical Researcher
- Medical Technologist (3211)
- Microbiologist (2121)
- Mortician (6272)
- Mycologist (2121)
- Nurse (3152)
- Pharmaceutical Salesperson (6221)
- Physical Therapist (3142)
- Physiologist (2121)
- Research Assistant
- Soil Conservationist (2123)
- Scientific Writer (5121)
- Toxicologist (2121)
- Veterinarian (3114)
- Wildlife Biologist (2121)
- Zoologist (2121)

POTENTIAL WORK SETTINGS

Biologists work across key segments of the economy with many being employed in educational institutions, government departments, nonprofit foundations and research. To research specific employers who hire those in the field, there are many resources available in such locations as the Career Resource Centre, the Webster Library, Vanier Library and the Internet.

- Biotechnology Industries
- Chemical Manufacturers
- Conservation Agencies
- Elementary and Secondary Schools
- Environmental Consulting Firms
- Environmental Regulatory Agencies
- Fertility Clinics
- Food Processing Manufacturers
- Government Greenhouses and Nurseries
- Hospitals Laboratories
- Manufacturing Firms
- Medical Supply Companies
- National and Provincial Parks
- Pharmaceutical Companies

CON'T. - POTENTIAL WORK SETTINGS

- Pulp and Paper Industries
- Research Centres Universities
- Zoos and Aquariums

SKILLS AND CHARACTERISTICS

Those entering the field should possess the ability to work with precision, thoroughness and attention to detail. In addition, students will find the following skills, interests, values and other characteristics valuable for succeeding in the field.

- Analytical and Quantitative Abilities
- Data Collection, Organization & Presentation
- Command of Laboratory Techniques
- Computer Literate
- Concentration
- Critical Thinking
- Curiosity
- Detail Oriented
- Independent
- Knowledge of Plant and Animal Life
- Numerical Computation
- Operate Scientific Equipment
- Patience
- Precision
- Problem-Solving
- Self-Discipline
- Team Worker
- Thorough
- Written Technical Communication
- Good Oral Communication
- Excellent Health for Field Work

PROFESSIONAL ASSOCIATION AND OTHER LINKS

Making wise career decisions requires exploring your field. A multitude of Internet sites and other resources will help you do this to the best of your ability. Professional association sites, in particular, are very useful for their career descriptions and job hunting tips. Moreover, these authoritative sites frequently provide links to Internet sites which announce job openings and list potential employers. A few recommended sites are included below.

CANADIAN

Association des biologistes du Québec

http://www.abq.qc.ca

This site provides a forum for Quebec professionals to discuss biological issues. Members can participate in an annual congress, conferences and/or symposia. The association has a membership category for biology students.

Biotalent Canada

http://www.biotalent.ca/

Formerly known as the Biotechnology Human Resource Council, this site is Canada's leading source for human resource information and biotechnology skills development. Click on Career Tools to explore jobs and career options. Canadian

Association of Pathologists

http://cap-acp.org/

Site provides job listings as well as useful links. Click on Resources to start. Through its journal one can be kept updated on important developments in laboratory medicine.

Canadian Botanical Association

http://www.cba-abc.ca

Provides listings of Careers.

Canadian Society for Molecular Biosciences

http://www.csbmcb.ca

The Society holds an annual meeting, sponsors a symposia and administers a number of awards. The site maintains links to online journals and Canadian university bio departments. Of interest are Student Activities and Jobs.

Canadian Society of Microbiologists

http://www.csm-scm.org

This site provides Career Opportunities and Meet the Microbiologist. Click on the site map to locate. One can research university programs under Students.

Canadian Society of Zoologists

http://www.csz-scz.ca/

Click on Employment for jobs with a M.Sc., Ph.D., or Post-doctoral degree. One can also find jobs for professors as well. Click on Careers for information on careers in zoology.

CREATE YOUR AMAZING CAREER – CAREER RESROUCE CENTRE TITLES

For those who need more help with their career and educational planning, the Career Resource Centre (CRC) offers books, pamphlets, DVDs and recommended Internet sites. It is located in the Hall Building, H-440, at 1455 de Maisonneuve Blvd. West. The following titles are just a few of the titles available in the CRC.

- Academic Scientists at Work
- At the Helm: A Laboratory Navigator
- Biomedical Graduate School: Planning Guide to the Admissions Process
- Canadian Biotechnology Industry Guide
- Career Opportunities in Science
- Career Planning for Research Bioscientists

CON'T. – CREATE YOUR AMAZING CAREER CAREER RESROUCE CENTRE TITLES

- Careers for Plant Lovers & Other Green Thumb Types
- Careers in Biology: Panel Discussion. DVD format
- Careers in Horticulture & Botany
- Careers in Medicine
- Careers in Public Health
- Careers with Dogs
- Careers with Horses
- Chicago Guide to Landing a Job in Academic Biology
- Great Jobs for Biology Majors
- On Becoming a Biologist
- Success Strategies for Women in Science
- What Can I Do With a Major in Biology?
- Working with Wildlife: A Guide to Careers in the Animal World