

What Can I **Do** With a Major In...

Cell Biology & Neuroscience-Biomedical Sciences?

MSU graduates (Bachelor's degree) were hired in the following selected fields¹:

Administers Assistant – Montana Fish Wildlife and Parks	Physiologist – Montana State University
Anesthesia Tech – Deaconess Billings Clinic	Research Associate- Montana State University
Barista - Starbucks	Dental Assistant- Dr. Spain House Dental
Campaign Director (SW Montana) – Friends of Conrad Burns	Phlebotomist- Bozeman Deaconess Hospital; Legacy Health System
Cashier – Joe's Parkway	Registered Nurse – Bozeman Deaconess Hospital
Certified Nursing Assistant – Saint John's Lutheran Ministries	Research Technician- Center for Biofilm Engineering
Clinical Lab- Bozeman Deaconess Hospital	Marine Corps Officer
CNA- West River Regional Medical	Outdoors Sales Person – Fastenal Company
Dental Assistant – Children's Dental Care; Dr. Leslie A. Hayes; Community Health Partners	Realtor – Discover Whitefish
Farmer/ Rancher Labor	Rehabilitation Aide – Providence Valdez Medical Center
First Year Initiative Advisor- Montana State University	Research Scientist – Montana State University
Lab Aide – WWAMI Ed Program Montana State University	Sales Associate/Representative – Victoria's Secret; Sears Home Improvement
Lab Technician – Montana State University; BioScience Laboratories, Inc.	Ski Instructor/Fire Fighter – USDA Forest Service
Medical Assistant – Billings Clinic; Big Sky Ear Nose & Throat	Small Business Owner
Officer Candidate- Army	Staff Member – Campus Crusade for Christ
Operating Room Aid- Billings Deaconess Hospital	Substitute Teacher- Netrona County School District
Phlebotomist/ Medical Assistant- Gallatin Community Clinic	Surgical Technologist – Bozeman Deaconess Hospital
Research Assistant- Montana State University	Territory Account Manager – Xerox
	Unit Clerk & Patient Care Aide – Bozeman Deaconess Hospital
	Volunteer – Peace Corps
	Waitress – John Bozeman's Bistro

Salary averages of survey respondents: (# of respondents in parentheses)³

2007: MT: \$24,292 (10) Out of State: 32,482 (3)
2006: MT: \$34,223 (4) Out of State: Insufficient Data
2005: MT: \$19,439 (7) Out of State: Insufficient Data
2004: MT: \$22,221 (9) Out of State: Insufficient Data

Graduates from this program entered programs of further education at these institutions:

Johns Hopkins University WWAMI - University of Washington
University of Colorado University of Kansas

Licensure and Certification:

Individuals who pursue a medical degree and who have completed all of the academic requirements and wish to open their own practice must pass a licensing examination and provide evidence of good moral character.

Other Sources of Information:

Explore Health Careers.org: www.explorehealthcareers.org/en/index.aspx
The American Society for Cell Biology: <http://www.ascb.org/>
Society for Neuroscience: <http://www.sfn.org>
Department of Cell Biology & Neuroscience—Montana State University: <http://www.montana.edu/cbn>

For more information contact:



**MONTANA
STATE UNIVERSITY**

**Career, Internship, &
Student Employment
Services**

Montana State University
125 Strand Union Building
Bozeman, MT 59717
(406) 994-4353
www.montana.edu/careers/

¹University of Oregon. 2007. Created by intoCareers, a unit of the University of Oregon. Montana information Montana Career Information System. Discover: 2008 by ACT, Inc.

²Montana State University Department of Cell Biology & Neuroscience

³Montana State University Career & Internship Services

⁴Society for Neuroscience, <http://www.sfn.org/>, 2008

Number of graduates/number of respondents: 2004: 6/2; 2005: 4/3; 2006: 3/1; 2007: 7/2

What Can I Do With a Major In...

Cell Biology & Neuroscience-Biomedical Sciences?

Cell Biology and Neuroscience programs¹ teach the structure, function, and regulation of cells as individual units and as components of larger systems. You will also study organ systems, tissue structures, and whole bodies together with their cellular and structural components and dynamics. You will learn about the nature of DNA, how genes are regulated, and how humans and other living organisms are related. The program includes instruction in embryology, neuroanatomy, cell communication and nutrition, the life cycles of the cell, storage and transmission of genetic information, hormone generation, and the role played by cells and molecules in basic life processes such as growth and aging.

Neuroscience is the study of the nervous system -- including the brain, the spinal cord, and networks of sensory nerve cells, or neurons, throughout the body. Neuroscience, advances the understanding of human thought, emotion, and behavior. Neuroscientists use tools ranging from computers to special dyes to examine molecules, nerve cells, networks, brain systems, and behavior. From these studies, they learn how the nervous system develops and functions normally and what goes wrong in neurological disorders.⁴

Programs at Montana State University² are designed to fulfill the course requirements for admission to most medical, dental, optometry, and veterinary schools. It may also be used to prepare for other professional programs, or for biomedical research or teaching careers. A few graduates each year decide to become scientists and apply to graduate school in the fields of neuroscience, and computational biology or bioinformatics. It is in these areas that departmental research is very strong, and students who want to become scientists often begin their scientific investigations as undergraduates in faculty laboratories.

An internship or research experience will increase your chances of finding a job in this field. You might also consider related summer work in a laboratory or research institute in order to gain experience. Because this field is ever changing, you may need further training throughout your career.

Characteristics associated with success¹ in this major include a strong aptitude for science and a desire to help improve the physical and emotional well-being of others, an interest in in organisms and their development, in relationship to the broader human and environmental context.

Occupations in this field require the ability to¹:

- be a skilled problem solver
- use laboratory equipment
- work with computers
- analyze and interpret data and draw logical conclusions
- communicate well, both orally and in writing
- concentrate intensely under severe pressure
- have great physical stamina
- maintain emotional control in stressful situations
- think logically

Related occupations include¹:

- | | | |
|-----------------------|-----------------------------|-----------------------|
| • Molecular Biologist | • Anesthesiologist | • Physician Assistant |
| • Researcher | • Internist | • Psychiatrist |
| • Biologist | • Obstetrician/Gynecologist | • Surgeon |
| • Sports Physician | • Pathologist | • Chiropractor |
| • Radiologist | • Pediatrician | • Dentist |
| • Coroner | • Allergist | • Physical Therapist |
| • Pharmacologist | • Physician | • Pharmacist |