

# Bioscience



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Information for Job Seekers



## The Tools You Need

Many occupations within bioscience require postsecondary education. Some Colorado programs to help get you started:

- The Community College of Aurora offers biotechnician training.
- University of Colorado at Colorado Springs has developed the CU Institute of Bioenergetics.
- University of Colorado's Fitzsimons Medical Campus offers a world-renowned computational bioscience program.
- Other related degrees:
  - Biological Sciences
  - Agricultural, Food & Nutrition Science
  - Biomedical Sciences & Engineering
  - Medical & Veterinary Sciences
  - Statistics



[www.connectingcolorado.com](http://www.connectingcolorado.com)

"Connecting Colorado, a place where individuals seeking employment and businesses seeking employees can be matched and brought together to fit each other's needs. The Colorado Department of Labor and Employment provides this site as a free resource to job seekers and employers who wish to use the Colorado Workforce Center system through a convenient and secure method."

## Sample Bioscience Employers:

Allos Therapeutics, Westminster, CO  
 Bodesix, Boulder, CO  
 SomaLogic, Boulder, CO  
 Sandoz Inc., Broomfield, CO

Baxa Corporation, Englewood, CO  
 Cytomation GTX, Inc., Fort Collins, CO  
 Roche Colorado Corporation, Boulder, CO  
 Gambro BCT, Lakewood, CO

Source: Colorado BioScience Association

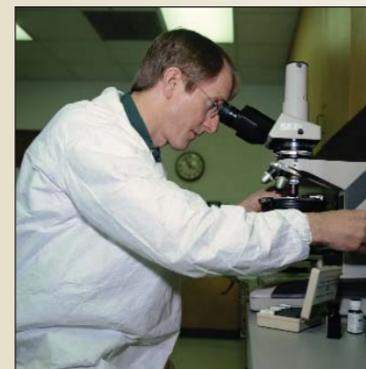
[www.coworkforce.com/lmgateway/](http://www.coworkforce.com/lmgateway/)

Providing specific information about Colorado's industries and occupations.

Brochure by Labor Market Information - Colorado Department of Labor and Employment

For information about jobs or training in this industry contact your local Workforce Center online at [www.coworkforce.com/emp/wfcs.asp](http://www.coworkforce.com/emp/wfcs.asp) or call 1-877-US2-JOBS (1-877-872-5627)

## Labor Market Information for Colorado



*There are more than 300 biotech drug products and vaccines currently in clinical trials. They target more than 200 diseases, including various cancers, Alzheimer's disease and AIDS.*

Source: Biotechnology Industry Organization U.S. Data



## The Science of Improving Lives

Bioscience in Colorado offers high-growth and high-paying job opportunities for those looking for a career, as well as life-enhancing products for the population as a whole. Bioscience encompasses any of the branches of natural science that focus on the structure and behavior of living organisms. Colorado bioscience firms use these sciences to research, develop and produce products that improve health. While not a large industry in Colorado today, future impact on both employment numbers and contributions to state revenue could be significant.

Bioscience has been identified as a vital component of Colorado's economy. The state has aggressively developed programs and grants to attract and retain companies. In 2006, the Colorado legislature dedicated \$2 million in grants to improve and expand the evaluation of new bioscience discoveries. In subsequent years, the funding for those programs has only increased. The state also offers tax incentives for purchases used for the research and development of biotechnology.

The Fitzsimons bioscience campus in Aurora will be one of the most advanced bioscience hubs in the world as it undergoes a \$4.3 billion transformation. At one square mile, it is the largest medical, bio-related redevelopment in the country and will be the center of the region's bioscience research. The Fitzsimons BioBusiness Incubator (FBBi) further promotes the growth of bioscience in Colorado by offering business planning, strategy assessment, intellectual property protection and access to capital for potential companies.

## Bioscience includes two industry groups:

For more details go to [www.coworkforce.com/lmgateway](http://www.coworkforce.com/lmgateway) and click on **Products**

### Pharmaceuticals & Biotechnology

- Pharmaceutical companies are commercial businesses licensed to research, develop, market and/or sell drugs.
- Biotechnology companies apply biological techniques to product research and development, many of which focus on healthcare.
- 9,542 people employed in Colorado, 2007.
- 487 businesses in this industry group in Colorado, 2007.

### Medical Devices & Instruments

- Medical device and instrument companies research, engineer and manufacture medical equipment.
- Examples of these products include I.V. accessories, oxygenators, cardiopulmonary equipment, and blood collection systems.
- 8,157 people employed in Colorado, 2007.
- 173 businesses in this industry group in Colorado, 2007.



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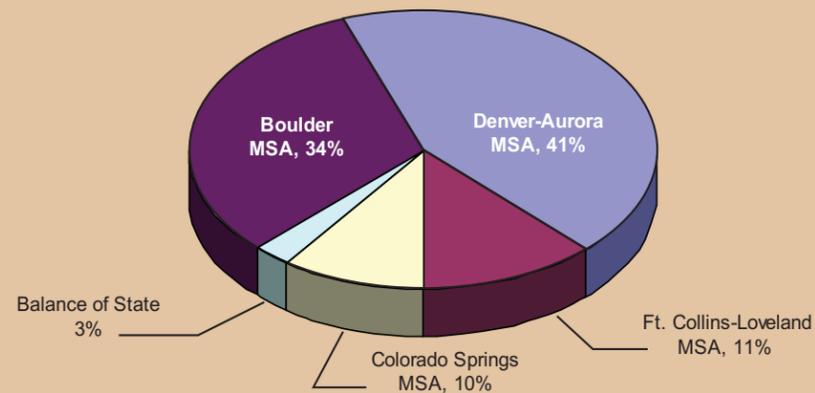


Colorado's existing base of biomedical companies, along with continued development of the University of Colorado Health Sciences Center Fitzsimons campus, creates an exceptional opportunity for growth.

- Governor Bill Ritter Jr.

Bioscience employment is concentrated along the Front Range. The Denver-Aurora Metropolitan Statistical Area (MSA) contains close to one-half of bioscience employment in Colorado. The Boulder MSA makes up about 7% of all employment in Colorado while containing a much higher amount (approximately 34%) of bioscience employment.

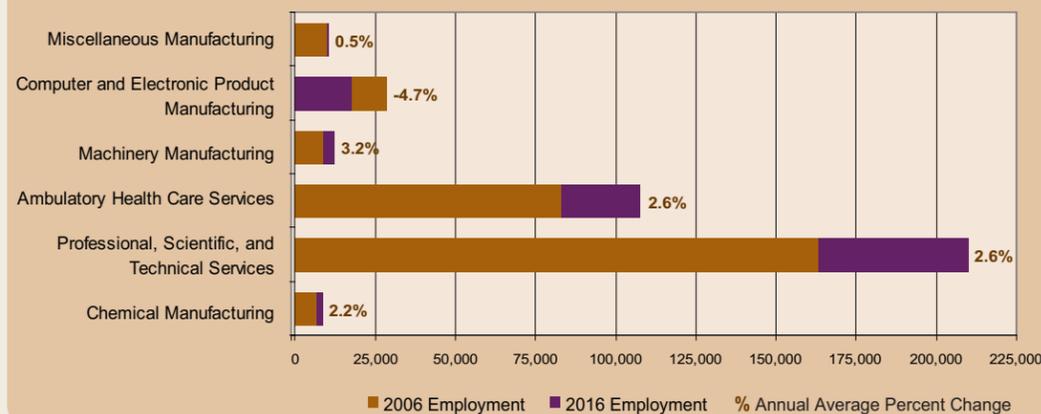
### Bioscience Employment by Region



Source: CDLE, Quarterly Census of Employment and Wages, 2007

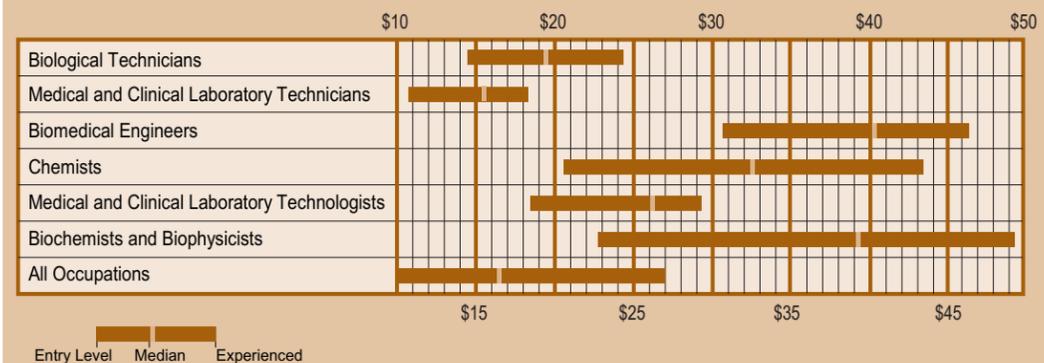
Bioscience employment fits into sub-categories of the industry groups shown below. Labor Market Information estimates projections at the industry group level to ensure a higher degree of accuracy. Over the projected period, many of the industry groups associated with bioscience are expected to grow faster than all industries combined, which will see a 2.1% average annual change through 2016.

### Industry Group Projections



The occupations listed below are a sample of those jobs associated with bioscience. While these occupations require some post secondary education, job opportunities exist at several levels of educational attainment. Generally, on-the-job experience in addition to educational background will result in higher wages. This chart includes wages paid to entry-level employees, highly experienced employees and everyone in-between. Notice the wage ranges for bioscience occupations and how they compare with the wage range for All Occupations.

### Wages for Occupations Associated with Bioscience



Source: CDLE, Occupational Employment Statistics, Statewide, 2007

As you can see, many jobs associated with bioscience are expected to grow at a faster pace than all occupations through 2016. Although some of the projected growth rates are higher than projected for All Occupations, remember that bioscience still makes up a small portion of Colorado's jobs at this time.

### Projected Growth of Occupations Associated with Bioscience

Occupation	Estimated Employment				Average Annual Openings		
	2006	2016	Change	Annual Average % Change	New Jobs	Replacements	Total Openings
Biological Technicians	2,217	2,843	626	2.5%	63	79	142
Medical and Clinical Laboratory Technicians	2,171	2,664	493	2.1%	49	33	82
Biomedical Engineers	244	345	101	3.5%	10	6	16
Chemists	1,741	2,075	334	1.8%	33	46	79
Medical and Clinical Laboratory Technologists	2,689	3,317	628	2.1%	63	41	104
Biochemists and Biophysicists	505	610	105	1.9%	11	10	21
All Occupations	2,482,548	3,046,586	564,038	2.1%	57,402	55,455	112,857

Source: CDLE, Occupational Employment Statistics, Statewide all industries, 2008



### Education

#### Associate Degree:

- Biological Technicians
- Medical and Clinical Laboratory Technician

#### Bachelor Degree:

- Biomedical Engineers
- Chemists
- Medical and Clinical Laboratory Technologists

#### Doctoral Degree:

- Biochemists and Biophysicists