



CAREER PATH

# Health

CAREER CLUSTER  
Health Sciences

CAREER PATHWAY  
Biotechnology Research and Development



## MEDICAL SCIENTIST

Conduct research dealing with the understanding of human diseases and the improvement of human health. Engage in clinical investigation or other research, production, technical writing, or related activities. Include medical scientists such as physicians, dentists, public health specialists, pharmacologists, and medical pathologists.

### Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as a medical scientists are reinforced by taking rigorous and relevant courses, as well as participating in work-based experiences and student organization activities.

*(See the Sample Personal Plan of Study for suggested coursework, activities, and knowledge and skills to pursue in preparation of an occupation in this Career Cluster.)*

### Education Requirements

| Occupation                                 | Percent of Missouri employees aged 25 to 44 in the occupation whose highest level of educational attainment is: |              |                         |
|--|---|--------------|-------------------------|
|  | High School or Less   | Some College | Bachelor Degree or More |
| Medical scientists, except epidemiologists | 0.0%  | 0.0%         | 99.3%                   |
| Life scientists                            | 0.0%  | 8.6%         | 91.4%                   |
| Life, physical, and social science         | 5.6%  | 12.7%        | 81.7%                   |

Most Common Educational Level: Doctoral degree

Note: Be sure to learn whether your occupation has a specific requirement for education or licensing. Apprenticeships are available for more than 240 occupations. Visit [www.oa.doleta.gov/bat.cfm](http://www.oa.doleta.gov/bat.cfm)

### National and State Wage Information

| Location      | Pay Period | 2007     |          |               |
|---------------|------------|----------|----------|---------------|
|               |            | Entry*   | Median   | Experienced** |
| United States | Hourly     | \$22.37  | \$30.87  | \$44.21       |
|               | Yearly     | \$46,500 | \$64,200 | \$92,000      |
| Missouri      | Hourly     | \$24.06  | \$29.47  | \$37.62       |
|               | Yearly     | \$50,000 | \$61,300 | \$78,200      |

Based on (\*) lower 25% and (\*\*) upper 25% percentile of wages

### National and State Employment Trends

| Medical Scientists | Employment |         | Percent Change | Job Openings* |
|--------------------|------------|---------|----------------|---------------|
|                    | 2006       | 2016    |                |               |
| United States      | 87,400     | 105,000 | + 20%          | 4,470         |
| Missouri           | 2,000      | 2,600   | + 30%          | 100           |

\*The estimate for Job Openings includes both turnover that results from people who leave the occupation (e.g. quit, retire, death) and new jobs that are created.

### Educational Opportunities

*Note: This list may not be all inclusive. For more information about Missouri schools and programs, visit [www.dhe.mo.gov](http://www.dhe.mo.gov)*

#### Kansas City University of Medicine and Biosciences

Kansas City, MO  
(816) 283-2000  
[www.kcumb.edu](http://www.kcumb.edu)

#### Maryville University of Saint Louis

Saint Louis, MO  
(800) 627-9855  
[www.maryville.edu](http://www.maryville.edu)

#### Missouri Western State University

Saint Joseph, MO  
(816) 271-4200  
[www.missouriwestern.edu](http://www.missouriwestern.edu)

#### Rockhurst University

Kansas City, MO  
(816) 501-4000  
[www.rockhurst.edu](http://www.rockhurst.edu)

#### Saint Louis University

Saint Louis, MO  
(314) 977-2222  
[www.imagine.slu.edu](http://www.imagine.slu.edu)

#### University of Missouri - Columbia

Columbia, MO  
(573) 882-2121  
[www.missouri.edu](http://www.missouri.edu)

#### University of Missouri - St Louis

Saint Louis, MO  
(314) 516-5000  
[www.umsl.edu](http://www.umsl.edu)

(more-over)

**Washington University**  
- St Louis  
Saint Louis, MO  
(314) 935-5000  
www.wustl.edu

**William Jewell College**  
Liberty, MO  
(816) 781-7700  
www.jewell.edu



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