



CAREER PATH

Health

CAREER CLUSTER
Health Sciences

CAREER PATHWAY

Biotechnology Research and Development



MICROBIOLOGIST

Investigate the growth, structure, development, and other characteristics of microscopic organisms, such as bacteria, algae, or fungi. Include medical microbiologists who study the relationship between organisms and disease or the effects of antibiotics on microorganisms.

Knowledge and Skills Needed

In addition to courses required for high school graduation, essential skills and knowledge needed for a career as a microbiologist 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
Microbiologists	1.0%	5.9%	93.2%
Life scientists	2.0%	8.7%	89.3%
Life, physical & social science	6.7%	14.3%	78.9%

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

National and State Wage Information

Location	Pay Period	2008		
		Entry*	Median	Experienced**
United States	Hourly	\$23.23	\$30.94	\$41.85
	Yearly	\$48,300	\$64,400	\$87,000
Missouri	Hourly	\$21.46	\$28.62	\$39.59
	Yearly	\$44,600	\$59,500	\$82,300

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

National and State Employment Trends

Microbiologists	Employment		Percent Change	Job Openings*
	2008	2018		
United States	16,900	18,900	+ 12%	750
Missouri	240	300	+ 25%	10

*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

Northwest Missouri State University

Maryville, MO
(660) 562-1212
www.nwmissouri.edu

Saint Louis University - Main Campus

Saint Louis, MO
(314) 977-2222
www.imagine.slu.edu

University of Missouri - Columbia

Columbia, MO
(573) 882-2121
www.missouri.edu

University of Missouri - Kansas City

Kansas City, MO
(816) 235-1000
www.umkc.edu

William Jewell College

Liberty, MO
(816) 781-7700
www.jewell.edu



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ELEMENTARY AND SECONDARY
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