

# MICROBIOLOGIST

Microbiologists study microorganisms that are found in various environments. They examine bacteria, fungi, viruses and other parasites to see how they grow and interact with the environment in which they are located.

## WHAT RESPONSIBILITIES WILL I HAVE?

- Isolate and make cultures of bacteria and other microorganisms in order to look at growth of samples
- Conduct tests on food and water samples in order to detect harmful microorganisms and work to identify the source of pollution
- Provide laboratory services for human and animal health providers in order to help determine illness and treatment options
- Research trends in disease outbreaks in order to determine the best method to control spread
- Prepare reports and recommendations based on research results
- Observe microorganisms' reaction to chemicals and other stimuli
- Monitor and identify microorganisms
- Develop new technologies and processes
- Assist in planning to prevent the spread of disease
- Plan and implement new clinical trials
- Oversee the work of laboratory staff
- Provide scientific advice and consultation
- Review product release data



## WHAT EDUCATION & TRAINING IS REQUIRED?

Doctorate in microbiology

## THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, animal science, chemistry, biology, physics, mathematics, writing courses

## TYPICAL EMPLOYERS

Universities/colleges, research firms, government agencies, pharmaceutical or animal health companies

## FUTURE JOB MARKET/OUTLOOK



## SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- American Society for Microbiology
- US Animal Agriculture Alliance
- American Society for Clinical Laboratory Science
- Laboratory Safety Institute

## AVERAGE ANNUAL FULL-TIME SALARY

\$53,000