

## Pharmacologist

### ■ Job Description

Pharmacologists are professional specialists in modern drug research which is aimed at understanding how drugs act. Through basic research, teaching health professionals, drug development and safety, environmental monitoring, and clinical testing, pharmacologists contribute to biological knowledge with applications in medicine and health. Pharmacologists possess a wide range of skills and interdisciplinary expertise for successfully investigating drug-related issues in today's world.

### ■ Job Settings

Universities, governmental agencies, private foundations, and pharmaceutical industries

### ■ Projected Need

Specific information about the outlook for pharmacologists is not available. However, they are part of the larger group of "medical scientists." Nationally, the number of jobs for medical scientists is expected to increase faster than average through the year 2010.

Much of this growth is expected to come from increased medical research. Research related to health issues is expected to expand. Funding for AIDS, cancer, and Alzheimer's disease research will also result in employment growth.

Despite this growth, competition will be keen for basic research positions. Many factors will create this competition. One, funding sources such as the federal government will be awarding smaller grants. As a result, fewer medical scientists will be hired under each grant. Two, the number of newly trained scientists will increase faster than current scientists are retiring. Thus, more people will be trying to win the same number of grants. Finally, growth of new biotechnology companies has begun to slow down. Individuals with the most advanced and up to date education will have the best opportunities.

### ■ Salaries

According to an American Association of Pharmaceutical Scientists survey, average base

salary (excluding bonuses) for pharmacologists working in industry is \$89,100 per year, and \$79,500 per year for those in government. Normally, higher-salaried pharmacologists are those who supervise teams of people in larger laboratory or university settings, or are senior faculty in academic departments of pharmacology.

### ■ Related Careers

Medically oriented careers in health care and related biomedical sciences such as biochemistry, molecular biology, physiology, or toxicology

### ■ Differences in Training

Pharmacologists typically enter a doctoral program in pharmacology where they complete their thesis research and receive instruction in the fundamentals of the discipline and related biological fields. The breadth of study provides a core of knowledge in the biomedical sciences. They may study in a pharmacology department in either a school of pharmacy or a school of medicine. Many have a combined program with toxicology. Individuals with the MD degree may enter training programs in clinical pharmacology.

### ■ Related Educational Programs

The programs of study listed below are the recommended areas of study to pursue for this occupation. Clicking on these will lead to files that show in-state and national schools that offer these programs.

*The following link(s) will take you to CIS for more information. CIS requires an ID and password that can be obtained at <http://cis.ilworkinfo.com/loginhelp/>. You must log into CIS prior to clicking on the links below.*

### [Pharmacology and Toxicology](#)

### ■ Resources

American Society for Pharmacology and  
Experimental Therapeutics  
9650 Rockville Pike  
Bethesda, MD 20814-3995  
Phone: 301.634.7060  
E-mail: [info@aspet.org](mailto:info@aspet.org)  
<http://www.aspet.org>  
Click on "About Pharmacology."

The society provides summer laboratory research fellowships of \$2,000 to undergraduate students who are interested in pharmacology.