

Pharmaceutical Science



WHAT IS PHARMACEUTICAL SCIENCE?

Pharmaceutical Sciences is a dynamic and interdisciplinary field that aims to integrate fundamental principles of physical and organic chemistry, engineering, biochemistry, and biology to understand how to optimize delivery of drugs to the body and translate this integrated understanding into new and improved therapies against human disease.

Disciplines of pharmaceutical sciences may include medicinal chemistry, pharmaceuticals, pharmacogenetics, pharmacology, biotechnology, pharmacoconomics, pharmacoepidemiology, pharmacokinetics/clinical pharmacokinetics, clinical pharmacy/pharmacotherapy, patient safety, regulatory science, health informatics, outcomes, and public health aspects of drug discovery and optimization.

CAREER OPTIONS WITH A PHARMACEUTICAL SCIENCE DEGREE

- Research and Development: Scientists, Senior Scientists, Principal Scientist. (It's likely a specialization will be mentioned in the title e.g., pharmacology, neuroscience, oncology)
- Regulatory Affairs: Regulatory Affairs Specialist, Regulatory Affairs Officer
- Clinical Trials: Clinical Scientists, Clinical Research Associate
- Business Development: Business Development Manager

- Sales and Marketing: Medical Sales Representative, Account Manager,
- Product Manager, Brand Manager
mendeley.com/careers/news/careers-jobs-field/what-are-career-options-phd-pharmaceutical-industry

COMMON PHARMACEUTICAL SCIENCE SUBDISCIPLINES

- Medicinal Chemistry
- Pharmacology
- Toxicology
- Pharmaceuticals
- Social Administrative Sciences
- Clinical Pharmacy and Translational Sciences
- Regulatory Affairs
- Regulatory Science

PH.D. IN PHARMACEUTICAL SCIENCE PROGRAMS

- University of Southern California School of Pharmacy
- University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences
- Nova Southeastern University College of Pharmacy
- University of Hawai'i at Hilo
- Northeastern University Bouvé College of Health Sciences
- University of Michigan College of Pharmacy
- The University of North Carolina at Chapel Hill
- Rutgers Ernest Mario School of Pharmacy
- Oregon State University College of Pharmacy
- University of Pittsburgh School of Pharmacy

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ADDITIONAL RESOURCES

- American Association of Colleges of Pharmacy: AACP.org
- PharmCAS : [PharmCAS.org/school directory/#/graduate](http://PharmCAS.org/school_directory/#/graduate)
- American Association of Pharmaceutical Scientists: AAPS.org