The hallmarks of a University of Iowa pharmacy degree are patient-centered practice, strong grounding in science and evidence-based practice, exploration of career choices through required and elective courses, and exposure to leadership opportunities within the college, the University, and the profession. Career options may include community and/or hospital pharmacy, public service, consulting and long-term care, teaching and research in academia, managed care, pharmaceutical industry, or research careers.

The University of Iowa's Pharm.D. program synthesizes basic scientific principles and practice through caring and communication in an integrated professional program. The role of a pharmacist ranges from managing medication for individuals to shaping national health care policy. Students learn to manage aspects of practice, to solve problems, make clinical decisions, clearly communicate ideas, practice ethically, and become leaders in their communities and profession. Students study with professors who, in many cases, are pioneering the development of new drugs and defining the appropriate use of others to solve chronic health problems.

The College of Pharmacy Ph.D. program offers four areas of graduate study: pharmaceutics, clinical pharmaceutical sciences, medicinal and natural products chemistry, and health services research. The major emphasis of these graduate programs is on research and coursework.

The College of Pharmacy collaborates with the College of Public Health to offer the combined Doctor of Pharmacy/M.P.H. degree, and with the Graduate College to offer the Doctor of Pharmacy/M.S. in informatics degree. In addition, a professional Certificate in Palliative Care also is available.

### College Organization

The College of Pharmacy’s faculty and programs are organized in two academic units. These units provide coursework for the Doctor of Pharmacy curriculum and for the college's graduate programs.

#### Pharmacy Practice and Science

Faculty in Pharmacy Practice and Science (PPS) provide expertise and education in the professional practice of pharmacy. They specialize in a wide variety of clinical pharmacy practices; conduct research on patient and population outcomes related to medication therapy; contribute to the scholarship of teaching and learning in pharmacy education; and provide instruction in the pharmacist’s professional role and the safe, effective use of medications.

This unit offers Master of Science and Doctor of Philosophy curricula in health services research, which encompasses the behavioral, economic, social, and administrative sciences; and elements of pharmacy practice. It offers coursework through its Applied Clinical Sciences Division and its Health Services Research Division.

#### Applied Clinical Sciences (ACS) Division

Teaching and research in this division focus on the delivery of care and related services to patients and the education of student and resident pharmacists in practice settings. Courses are offered in pharmacotherapy, communication and practice skill development, clinical problem solving, and patient care. Professional practice mentoring and education are provided in introductory and advanced pharmacy practice experiences.

#### Health Services Research (HSR) Division

Teaching and research in this division involve economic, social, behavioral, and administrative components of pharmacy practice and medication use. Courses are offered on the health care system, practice management, the professional and business aspects of pharmacy practice, and on learning and applying economic and social psychological theories to the study of health services and medication use.

To learn more about the department and its two divisions, visit Pharmacy Practice and Science on the College of Pharmacy website.
Pharmaceutical Sciences and Experimental Therapeutics

Faculty in Pharmaceutical Sciences and Experimental Therapeutics (PSET) provide expertise and education in areas that include the fundamental basis for drug therapy outcomes in patients, factors responsible for specific drug actions in individual patients and larger patient populations, drug metabolism, pharmaceutical toxicology, organic synthesis, structure-activity relationships, drug design, computer-aided drug discovery, bioanalytical chemistry, biopolymeric drugs, molecular pharmacology, dosage form development and performance, pharmaceutical applications of nanotechnology, industrial and manufacturing pharmacy, pharmacokinetics, and pharmacodynamics.

In addition to its educational roles in the Doctor of Pharmacy program, PSET offers Ph.D. and M.S. degrees in three graduate areas: clinical pharmaceutical sciences, medicinal and natural products chemistry, and pharmaceutics. Clinical pharmaceutical sciences focuses on investigating drug therapy outcomes in patients and identifying factors responsible for specific drug actions in individual patients, related patient groups, and large patient populations. Medicinal and natural products chemistry includes aspects of drug design, organic synthesis, structure-activity relationships, drug metabolism, pharmaceutical toxicology, computer-aided drug discovery, bioanalytical chemistry, biopolymeric drugs, and molecular pharmacology. Pharmaceutics focuses on characterization of pharmaceuticals and their component materials, development of new dosage forms and drug delivery systems, pharmaceutical applications of nanotechnology, and the pharmacokinetic and pharmacodynamic evaluation of drug actions and interactions.

The department also offers multidisciplinary opportunities with programs in medicine, chemistry, biochemistry, pharmacology, engineering, dentistry, and public health. Its national and international collaborations further enhance the breadth of research activities available to students.

To learn more, visit Pharmaceutical Sciences and Experimental Therapeutics on the College of Pharmacy website.