The Pharmaceutical Sciences Ph.D. Program at the University of Wisconsin-Madison School of Pharmacy provides a rigorous background in a range of scientific disciplines that are critical to the preparation of the next generation of pharmaceutical scientists. With 28 faculty members and approximately 50 graduate students, the program’s interdisciplinary training combines pharmaceutically relevant aspects of classical disciplines such as chemistry, biology and engineering. Students earn a Ph.D. in Pharmaceutical Sciences, concentrating in one of three research cores: Drug Discovery, Drug Action, or Drug Delivery.

Recent program graduates have found employment in a variety of industrial, academic and regulatory positions. These vary from research and development for pharmaceutical, chemical, and biotechnology companies to academic research positions; some graduates eventually achieve faculty positions at small colleges or at larger research institutions. By partnering with other units on campus, we have increased career services such that our students can sharpen their professional and communication skills and reach a larger network of potential employers. The program graduated 39 PhDs from 2010-14; over ninety percent of these recent alumni were professionally placed (i.e., working in their field) within six months of graduation.

Research in Drug Discovery focuses on areas related to medicinal chemistry, such as small molecule development, natural products isolation and characterization, organic synthesis, chemical biology and rational drug design.

Drug Action focuses on areas related to pharmacology, toxicology, cellular differentiation, development, and disease. Interests include the impact of drugs and toxins on biological systems, mechanisms of normal biology, and mechanisms of disease. These are studied at the cellular, genetic, molecular, and biochemical levels using diverse model systems.

Drug Delivery emphasizes principles in physical chemistry and drug transport, aiming for advances in formulation, drug targeting, and multi-modal therapy. Delivery research includes the solid state chemistry of drugs, nano-pharmacy, biocompatibility, molecular recognition, computational chemistry, pharmacokinetics, and molecular imaging.

The UW-Madison Pharmaceutical Sciences Division has been recognized for its research productivity, extramural funding support, publication record and teaching. The School of Pharmacy is housed in Rennebohm Hall, a seven-story, state-of-the-art facility.

Accepted graduate applicants commonly have strong scientific backgrounds, a passion for research, and significant laboratory experience. Students with undergraduate degrees in the physical or biological sciences, engineering, pharmacy and related fields are encouraged to apply.

UW-Madison is one of the nation’s most prolific research universities, located on the shores of Lake Mendota in the state’s vibrant capital city. UW-Madison remains extremely competitive in the national research landscape, ranking fourth place in research spending among U.S. universities. The city of Madison is consistently recognized as one of the best cities in multiple categories for quality of life. Visit grad.wisc.edu to learn more about the many reasons to choose UW-Madison for graduate study.

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