HEALTH SERVICES RESEARCH IN PHARMACY, PH.D.

The Health Services Research in Pharmacy (HSRP) provides a rigorous background in a range of disciplines critical to preparing the next generation of health services researchers. The program's interdisciplinary approach combines theories and concepts from fields such as economics, sociology, psychology, management sciences, education, epidemiology, industrial/safety engineering, history, and law. The UW–Madison Division of Health Services Research in Pharmacy, which administers the degree, has a national reputation for its research productivity, extramural funding support, publication record, and teaching. See faculty information and research interests (https://pharmacy.wisc.edu/sasd/faculty-research). The HSRP Graduate Program at UW-Madison has educated generations of researchers who have taken challenging leadership and advisory positions in academia, industry, and government. Our faculty members and graduates have provided influential roles in communicating research findings to the public, policy makers, pharmacists, and other health care professionals to improve health outcomes, patient care, medication use, and the healthcare system. UW–Madison’s Sonderegger Research Center (https://pharmacy.wisc.edu/src)(SRC) is housed at the School of Pharmacy and complements graduate student interactions with faculty, enriching student exposure with other researchers in the field.

About the Program

The program was renamed from the Social and Administrative Sciences in Pharmacy (SAS) Ph.D. Program. Students who earn degrees in the Fall of 2019 and later will earn the degree name Health Services Research in Pharmacy.

The objective of the HSRP graduate program is to prepare students for independent, theory-based research, leading to new knowledge and understanding of medication use, patient and provider communication and behaviors, health outcomes, patient safety, and healthcare systems. Further, it evaluates the need for pharmacists to fulfill various roles, such as clinical practitioner, drug consultant, and drug distribution system manager, in order to meet the needs of diverse patients, providers, and organizations that use pharmacy services. This is accomplished by integrating knowledge of pharmacy and pharmaceuticals with theories and concepts from numerous disciplines. The name change to HSRP was driven by faculty recognition of the policy orientation of much of its work, whether related to standards of care, practice innovations, reimbursement, safety, or a focus on patient-centeredness. There was also acknowledgement of the division’s scholarship as involving the examination of multiple health services, and being significantly broader than “pharmacy” research only. The new name better reflects the training offered and the career trajectory of its graduates.

Why Consider a Graduate Degree in Health Services Research in Pharmacy at the University of Wisconsin–Madison

Students in the HSRP graduate program have the advantages of studying at a world class institution of higher learning. Courses may be taken from a wide range of academic units, providing access to top instructors and researchers. The HSRP graduate program has considerable curricular flexibility, and can be tailored to individual student interests. As program faculty have a broad range of knowledge and expertise, students can specialize in diverse areas of emphasis.

UW–Madison (https://www.youtube.com/watch?v=XTJASalrisQ&feature=youtu.be) is one of the nation's most prolific research universities, located on the shores of Lake Mendota in the state's vibrant capital city. The city of Madison (https://madison.wisc.edu) is consistently recognized as one of the best cities in the nation in multiple categories for quality of life. Visit grad.wisc.edu (http://grad.wisc.edu) to learn more about the many reasons to choose UW–Madison for graduate study.


POST-GRADUATE INFORMATION

Placement information for recent HSRP alumni is updated yearly; see the program website. (https://pharmacy.wisc.edu/programs/sas/student-outcomes) HRSP has a rich history of creating future pharmacy educators, as Wisconsin HRSP PhD alumni are faculty members at schools and colleges of pharmacy across the United States and abroad. Prospective students interested in careers in academic pharmacy are encouraged to explore resources from the American Association of Colleges of Pharmacy (https://www.aacp.org/sites/default/files/2015_ashp_mcm_slides_final.pdf). Beyond academia, common career setting options are in the pharmaceutical industry, contract research organizations, managed care, nonprofit research centers, and government entities. In non-academic settings, alumni have titles such as director for health economics and outcomes research; health researcher for patient safety and quality; social researcher; research scientist; director of pharmacy; director for global market access, pricing, and policy.

ADMISSIONS

GRADUATE SCHOOL ADMISSIONS

Graduate admissions is a two-step process between academic degree programs and the Graduate School. Applicants must meet requirements of both the program(s) and the Graduate School. Once you have researched the graduate program(s) you are interested in, apply online (https://grad.wisc.edu/admissions).

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Deadline</td>
<td>January 3</td>
</tr>
<tr>
<td>Spring Deadline</td>
<td>This program does not admit in the spring.</td>
</tr>
<tr>
<td>Summer Deadline</td>
<td>This program does not admit in the summer.</td>
</tr>
<tr>
<td>GRE (Graduate Record Examinations)</td>
<td>May be required in certain cases; consult program.*</td>
</tr>
<tr>
<td>English Proficiency Test</td>
<td>Every applicant whose native language is not English or whose undergraduate instruction was not in English must provide an English proficiency test score and meet the Graduate School minimum requirements (<a href="https://grad.wisc.edu/apply/requirements/english-proficiency">https://grad.wisc.edu/apply/requirements/english-proficiency</a>).</td>
</tr>
<tr>
<td>Other Test(s) (e.g., GMAT, MCAT)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

*GRE and MCAT scores may be submitted to your program(s) when available. This program does not admit in the summer.
Academic backgrounds in public health, sociology, industrial/systems engineering, or economics are well suited for graduate study in HSRP. A professional degree in pharmacy is helpful, but not required. Those with pharmacy-type work experience or a degree in a related field are invited to inquire about the compatibility of their background for admissions purposes. If you seek to apply your knowledge and skills to pharmacy or medication-related research at the highest levels, contact us. You can earn the Ph.D. in Health Services Research in Pharmacy with emphasis in any of the diverse areas of concentration within our program.

Please see admissions (https://pharmacy.wisc.edu/programs/sas/admissions) on the program website for a link to the application and a description of the required supplementary materials. Applications are only considered at the yearly January deadline, for matriculation in the following fall semester. Applications are not reviewed at any other time during the year. If one does not hold a research-based master’s degree at the time of application, but is interested in the Ph.D. degree, that Ph.D. intent should be in the application (and if admitted, such students would typically pursue an M.S. in HSRP on the way to the Ph.D.).

FUNDING

GRADUATE SCHOOL RESOURCES

Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information (https://grad.wisc.edu/funding) is available from the Graduate School. Be sure to check with your program for individual policies and processes related to funding.

PROGRAM RESOURCES

HSRP faculty (https://pharmacy.wisc.edu/sasd/faculty-research) believe in supporting graduate students in their quest for knowledge and research expertise; maintaining a range of graduate student funding mechanisms is a high priority. Graduate students are typically provided with tuition remission and stipend (salary) support as either teaching assistants, research assistants, or fellows. The minimum graduate stipend for 2018-19 is $18,350 for the academic year (Sept-May); note that these levels are adjusted annually. Such appointments include health insurance; see the Graduate Coordinator for details. In addition, incoming students are provided with new laptop computers for their learning and research endeavors and access to state-of-the-art statistical software. Travel grants (https://pharmacy.wisc.edu/handbook-sas/travel-support) facilitate graduate student participation at national meetings. The Sonderegger Research Center is another source for funding, with the availability of annual dissertation grants. HSRP graduate students who are licensed pharmacists are typically encouraged to continue practicing part-time (e.g., on weekends), to maintain ties to the profession. See the School’s webpage for the latest on HSRP graduate funding (https://pharmacy.wisc.edu/programs/sas/tuition-financial-support).

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/policiesandrequirementstext), in addition to the program requirements listed below.

MAJOR REQUIREMENTS

MODE OF INSTRUCTION

Table: Mode of Instruction Definitions

<table>
<thead>
<tr>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

- **Evening/Weekend**: These programs are offered in an evening and/or weekend format to accommodate working schedules. Enjoy the advantages of on-campus courses and personal connections, while keeping your day job. For more information about the meeting schedule of a specific program, contact the program.
- **Online**: These programs are offered primarily online. Many available online programs can be completed almost entirely online with all online programs offering at least 50 percent or more of the program work online. Some online programs have an on-campus component that is often designed to accommodate working schedules. Take advantage of the convenience of online learning while participating in a rich, interactive learning environment. For more information about the online nature of a specific program, contact the program.
- **Hybrid**: These programs have innovative curricula that combine on-campus and online formats. Most hybrid programs are completed on-campus with a partial or completely online semester. For more information about the hybrid schedule of a specific program, contact the program.
- **Accelerated**: These on-campus programs are offered in an accelerated format that allows you to complete your program in a condensed time-frame. Enjoy the advantages of on-campus courses with minimal disruption to your career. For more information about the accelerated nature of a specific program, contact the program.

CURRICULAR REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Detail</th>
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</thead>
<tbody>
<tr>
<td>Minimum Credit Requirement</td>
<td>51 credits</td>
</tr>
<tr>
<td>Minimum Residence Credit Requirement</td>
<td>32 credits</td>
</tr>
<tr>
<td>Minimum Graduate Coursework Requirement</td>
<td>At least half of degree coursework (at least 26 credits out of 51 total credits) must be in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (<a href="http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle">http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle</a>).</td>
</tr>
<tr>
<td>Overall Graduate GPA Requirement</td>
<td>3.00 GPA required for graduate-level courses (numbered 300 and above, excluding research) to receive a degree.</td>
</tr>
</tbody>
</table>
Other Grade Requirements
Candidates may be dropped from the program if they receive more than 7 credits of grades at the BC level or lower. This applies to formal courses, seminars, and research credits.

Assessments and Examinations
Doctoral students must pass both written and oral preliminary examinations to achieve dissertation status (see https://pharmacy.wisc.edu/handbook-sas/phd-degree-requirements/preliminary-exams/). The written preliminary examination is evaluated on a pass/fail basis. The oral preliminary examination must be completed within six months after having passed the written preliminary examination.

A dissertation and final oral defense are required. See https://pharmacy.wisc.edu/handbook-sas/phd-degree-requirements/dissertation-final-exams/ for details.

Language Requirements
Candidates with an emphasis in the history of pharmacy are required to achieve competence in two foreign languages (one in addition to the language acquired for the M.S. degree). Contact the school's graduate programs coordinator for more information.

Doctoral Minor/Breadth Requirements
All doctoral students are required to complete a minor. Students completing option B minors must complete a minimum of 9 credits outside of HSRP, reflecting a cohesive and logical combination of courses for specialization emphasis. For Option B, the doctoral minor is developed by the student and faculty advisor as a plan for specialization. In HSRP, the student's committee approves the minor Option B plan. The minor supports the theoretical foundations for the Ph.D. and should consist of a majority of courses that are theory-focused (i.e., not focused on research methods or analytical/statistical techniques); that is, theoretical courses should comprise all or most of the minor plan.

REQUERED COURSES
Completion of a set of courses is required. At least 14 credits in core courses (seminar, core principles, and core methods), 15 credits in research and analysis (additional research methods, analytic techniques), and 22 credits in specialty/advanced courses is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Courses</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Core Seminar</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>S&amp;A PHM 911</td>
<td>Research Seminar in Social &amp; Administrative Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>Core Methods and Principles</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>S&amp;A PHM 711</td>
<td>Research Methods for Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>S&amp;A PHM 715</td>
<td>Pharmaceutical Outcomes and Policy Research</td>
<td>1</td>
</tr>
<tr>
<td>&amp; S&amp;A PHM 715</td>
<td>Social Behavioral Theories in Pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>Behavior</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Methods of Research &amp; Analysis</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Methods (Select from approved list in consultation with major professor.)</td>
<td>3-9</td>
<td></td>
</tr>
<tr>
<td>Analytic Techniques (Select from approved list in consultation with major professor.)</td>
<td>6-12</td>
<td></td>
</tr>
<tr>
<td>Specialty/Advanced Courses</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

Non-minor
Select in consultation with major professor.

Minor (Option A or Option B)

Research (credit varies)

Foreign Languages (History Concentration only). Ph.D. students with a history concentration must achieve reading ability in two foreign languages and take a minimum of 3 credits in methods of research and analysis.

Total Minimum Credits: 51

1 S&A PHM 911 Research Seminar in Social & Administrative Pharmacy is in transition and will become a 2 credit course (currently, it is 1 cr). It is a repeatable course and will be a sequence of four themed lectures. After the course credit amount is changed, PhD students will be expected to take the course four times to earn 8 credits.

POLICIES

GRADUATE SCHOOL POLICIES
The Graduate School's Academic Policies and Procedures (https://grad.wisc.edu/acadpolicy) provide essential information regarding general university policies. Program authority to set degree policies beyond the minimum required by the Graduate School lies with the degree program faculty. Policies set by the academic degree program can be found below.

MAJOR-SPECIFIC POLICIES

GRADUATE PROGRAM HANDBOOK
The Graduate Program Handbook (https://pharmacy.wisc.edu/handbook-sas) is the repository for all of the program's policies and requirements.

PRIOR COURSEWORK

Graduate Work from Other Institutions
If accepted into the HSRP Ph.D. program with a master's degree equivalent to an M.S. (HSRP) degree and with program approval, students are allowed to count no more than 24 credits of graduate coursework from other institutions (the student must have graduate student status on the other institution's transcript at the time the courses were taken) towards the Ph.D. at UW–Madison. Such courses should be presented to program faculty prior to one's first graduate semester and require the review/approval of at least two program faculty members. coursework earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements.

UW–Madison Undergraduate
No credits earned as a UW–Madison undergraduate may be used toward achieving the 24 credits beyond the M.S. that are required for the Ph.D. in HSRP.

UW–Madison University Special
No credits earned as a UW–Madison Special student may be used toward achieving the 24 credits beyond the M.S. that are required for the Ph.D. in HSRP.
PROBATION
A semester GPA below 3.0 will result in the student being placed on academic probation. If a semester GPA of 3.0 is not attained during the subsequent semester of full-time enrollment (or 12 credits of enrollment if enrolled part-time) the student may be dismissed from the program or allowed to continue for one additional semester based on advisor appeal to the Graduate School.

ADVISOR / COMMITTEE
All students in the Ph.D. program are required to have a major professor/advisor through the duration of their studies. Students should select a permanent major professor before the end of the second semester enrolled in the program. Program graduate faculty monitor the progress of Ph.D. students annually.

Composition requirements of the HSRP Ph.D. oral preliminary examination committee are presented at this link (https://pharmacy.wisc.edu/handbook-sas/phd-degree-requirements/preliminary-exams); this same committee typically also serves as the dissertation final oral defense committee.

CREDITS PER TERM ALLOWED
15 credits

TIME CONSTRAINTS
A candidate for a doctoral degree who fails to take the final oral defense and deposit the dissertation within five years after passing the preliminary examinations may be required to take another preliminary examination and to be admitted to candidacy a second time.

OTHER
Program faculty believe in supporting graduate students and a range of funding mechanisms are possible: graduate students are often provided with tuition remission and funding support either as teaching assistants, project assistants or fellows. In addition, new students are provided with new laptop computers for their learning and research endeavors, access to state-of-the-art statistical software and support, and travel grants to present their research at national meetings.

PROFESSIONAL DEVELOPMENT

GRADUATE SCHOOL RESOURCES
Take advantage of the Graduate School’s professional development resources (https://grad.wisc.edu/pd) to build skills, thrive academically, and launch your career.

HRSP faculty conduct comprehensive annual reviews of each HSRP graduate student, providing confidential feedback to each student’s own self-assessment. This combination provides a great launch for a meaningful goal setting. HRSP faculty are committed to coaching graduate students to grow as instructors and to mentoring them in this dimension, complementing the wealth of campus resources for teaching and learning. The School of Pharmacy’s Sonderegger Research Center regularly hosts “Brown Bag” lunches where HSRP graduate students can interact informally with SRC staff. There is increased emphasis to connect current students to PhD alumni (e.g. via Skype “informational interviews”) for career discussions and mentoring. The School of Pharmacy student body, along with those from other UW-Madison health professional schools, participates in a number of annual “Lunch and Learn” events throughout the academic year to build community and talk about other challenges regarding diversity, equity, inclusivity, and climate in higher education.

LEARNING OUTCOMES

1. Demonstrate critical knowledge and in-depth understanding of principles in the core area of the program and the student’s area of expertise.
2. Identify important research questions, formulate testable hypotheses, and design experiments to test those hypotheses.
3. Conduct original research that contributes to the student’s field of study.
4. Communicate, both orally and in writing, scientific knowledge and research results effectively to a range of audiences.
5. Demonstrate ability to teach core concepts and principles to a range of audiences.
6. Apply ethical principles in conducting scientific research.