HEALTH OUTCOMES RESEARCH, PH.D. & MEDICINE, M.D. DUAL DEGREE

As one of the few universities to offer such a degree, Saint Louis University has designed its M.D./Ph.D. dual degree program in health outcomes research to prepare students to be excellent doctors and clinical researchers.

A student with a Ph.D. in health outcomes research in addition to an M.D. will have a competitive edge when applying for residency and will be able to start a strong research career in medicine before they complete their training as a physician. Guided by outcomes research faculty with expertise in multiple areas of medicine, graduates leave the program prepared to provide excellent medical care and evaluate patient outcomes and preferences, compare the effectiveness of treatments and establish evidence to improve the final stages of care.

Scholarships and Financial Aid

For priority consideration for graduate assistantship, apply by Feb. 1.

For more information, visit the student financial services office online at https://www.slu.edu/financial-aid/index.php (https://www.slu.edu/financial-aid/).

Admission

Students must first be admitted to the School of Medicine to be considered for acceptance into the M.D./Ph.D. in health outcomes research program. Consideration for the program is available to all interested applicants to the School of Medicine, with a preliminary application provided upon request.

Most trainees are chosen in the early spring to begin their research training by mid-June before commencing their first year of M.D. studies in mid-August. Other qualified individuals may apply after starting their M.D. training.

Applicants to the M.D./Ph.D. program are screened by the steering committee for the M.D./Ph.D. program.

Requirements

Students begin their program by completing the first and second years of their M.D. studies. By the winter of their second year of medical studies, students will select a Ph.D. mentor from SLU’s Department of Health and Clinical Outcomes Research.

Completion of all Ph.D. candidacy requirements and oral defense of the doctoral dissertation is followed by a transitional clerkship that facilitates re-entry into the third and fourth years of M.D. studies.

Nine credits from the M.D. program will count towards the completion of the Ph.D. in health outcomes research.

Trainees in this program should complete all requirements for both degrees within seven to eight years and students are expected to complete both the M.D. and Ph.D. components on a full-time basis.

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EM 0410  Emergency Medicine  4
Acting Internship - choice of one 4 week AI  4
Intramural/Extramural Electives  30
CAP 0400  Required Capstone  2

Credits  44
Total Credits  197

**Ph.D. Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td></td>
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</tr>
<tr>
<td>ORES 5010</td>
<td>Introduction to Biostatistics for Health Outcomes</td>
<td>3</td>
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<tr>
<td>or HDS 5310</td>
<td>Analytics and Statistical Programming</td>
<td></td>
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<tr>
<td>ORES 5150</td>
<td>Multivariate Analysis for Health Outcomes Research</td>
<td>3-4</td>
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<tr>
<td>or HDS 5320</td>
<td>Inferential Modeling</td>
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<tr>
<td>ORES 5160</td>
<td>Data Management</td>
<td>3</td>
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<tr>
<td>ORES 5300</td>
<td>Foundations of Outcomes Research I</td>
<td>3</td>
</tr>
<tr>
<td>ORES 5320</td>
<td>Scientific Writing and Communication</td>
<td>3</td>
</tr>
<tr>
<td>ORES 5430</td>
<td>Health Outcomes Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ORES 6990</td>
<td>Dissertation Hours in Outcomes Research (taken over multiple semesters, 12hrs total)</td>
<td>0-6</td>
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**Elective Courses**

Select three courses from the following:  
- HCE 6120  Bioethics and the Law
- HDS 5230  High Performance Computing
- HDS 5330  Predictive Modeling and Machine Learning
- HMP 5000  Health Care Organization
- ORES 5400  Pharmacoeconomics
- ORES 5410  Evaluation Sciences
- ORES 5560  R Programming
- ORES 5550  SAS Programming I
- ORES 5260  Pharmacoepidemiology
- ORES 5440  Comparative Effectiveness Research
- ORES 6980  Advanced Graduate Readings in Outcomes Research

**Dual Degree Credit**

9 credits accepted from the M1/M2 of the MD curriculum, as follows:
- Principles of Pharmacology  3
- Fundamentals of Biomedical Science  3
- Biostatistics  1
- Elective in Clinical Research  1
- Health Care Ethics  1

**Total Credits**  48-49

**Continuation Standards**

Students must maintain a cumulative grade point average (GPA) of 3.00 in all graduate/professional courses.