

BIOMEDICAL SCIENCES

Leadership

Mark Voigt, Ph.D.

Pharmacology and Physiology Chairperson

Enrico Di Cera, M.D.

Biochemistry and Molecular Biology Chairperson

Willis K. Samson, Ph.D.,

Biomedical Science Graduate Program Director

Carole Vogler, M.D.,

Pathology Chairperson

William S. M. Wold, Ph.D.

Molecular Microbiology & Immunology Chairperson

Overview

In addition to contributing strongly to the first two years of the Doctor of Medicine degree curriculum, the pre-clinical, medical-science departments offer post-baccalaureate work leading to the Ph.D. degree. Four offerings, each affiliated with an individual department or center, are available; however, most students admitted for direct Ph.D.-degree study take a common, first-year core in the basic biomedical sciences. Furthermore, studies toward the Ph.D. degree in a medical-science field may be combined with the M.D.-degree curriculum, and the two degrees pursued concurrently by selected students. M.S. (Research or non-Research) and Ph.D. degrees are offered by the Center for Anatomical Science and Education. M.A. (Research or non-Research and Ph.D. degrees are offered by the Medical Family Therapy Program.

Approximately 90 faculty members in the programs of biochemistry and molecular biology, molecular microbiology and immunology, pharmacology and physiology and pathology provide an almost unlimited variety of research project choices for students. In recognition that successful graduates need a broad background in biomedical science and flexible skills, the first year also includes interdisciplinary lecture courses, small-group discussions and participation in a colloquium series where contemporary developments in the biomedical sciences are presented and discussed. Informed by their experiences in this first year, students then select a Ph.D. mentor in a specific program, such as biochemistry and molecular biology, and continue with their Ph.D. training in that specific program.

Admission to the four Ph.D. degree programs in the biomedical sciences is by application to the core program in basic biomedical science. This interdisciplinary offering is intended for all students who are interested in biomedical research and/or teaching careers. Its objectives are to provide students with a strong foundation in all aspects of basic biomedical science and the freedom to explore diverse research opportunities during the first year of training.

The first-year curriculum combines lectures, small group discussion sessions, and seminars to develop self-confidence and familiarity with a breadth of biomedical science and technology that spans the disciplines of anatomical, biochemical, cellular, molecular, developmental, genetic, and physiological sciences.

At the end of this integrated first-year program, students select a dissertation research topic and mentor, and enter into one of four departmental programs in the School of Medicine: biochemistry and molecular biology; molecular microbiology and immunology; pathology; pharmacology and physiology.

The subsequent requirements for completion of the Ph.D. degree vary with the individual program and include specialized advanced courses and the performance of original research leading to completion of the dissertation.

Programs

- Biochemistry and Molecular Biology, Ph.D. (<http://catalog.slu.edu/colleges-schools/medicine/biomedical-science/doctor-philosophy-biochemistry-molecular-biology>)
- Biochemistry and Molecular Biology, Ph.D. & Medicine, M.D. Dual Degree (<http://catalog.slu.edu/colleges-schools/medicine/biomedical-science/doctor-philosophy-doctor-medicine-dual-degree>)
- Molecular Microbiology & Immunology, Ph.D. (<http://catalog.slu.edu/colleges-schools/medicine/biomedical-science/doctor-philosophy-molecular-microbiology-immunology>)
- Pathology, Ph.D. (<http://catalog.slu.edu/colleges-schools/medicine/biomedical-science/doctor-philosophy-pathology>)
- Pharmacology & Physiology, Ph.D. (<http://catalog.slu.edu/colleges-schools/medicine/biomedical-science/doctor-philosophy-pharmacology-physiological-science>)

Faculty

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Molecular Microbiology & Immunology

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