Graduate Certificate in Life Science Innovation and Entrepreneurship

Overview

A certificate in Life Science Innovation and Entrepreneurship at the University of Missouri will broaden the training of graduate and professional students from the fields of business, engineering and medicine, among others. A collaborative program among MU's Trulaske College of Business, College of Engineering and School of Medicine, the program will prepare participants for a wider range of employment opportunities and provide core skills for entrepreneurial endeavors.

Interdisciplinary Curriculum

Through an interdisciplinary approach, the program will allow MU graduate and professional students to receive training to translate life science discoveries into products and services that will improve health.

Requirements

The program will require completion of three three-hour core curriculum courses designed to cover the life cycle of a translational science/ business venture, as well as elective courses for a total of 12 hours of course credit. The three-course sequence will be augmented by elective courses that round out the educational needs of particular students.

MPP 8000	Scientific Discovery Leading to Life Science Innovations	3
BIOL_EN 8100	Design and Development of Biomedical Innovations	3
MANGMT 8200	Commercialization of Life Science Innovations	3
MPP 8004	Regulatory Issues in Clinical Research and Clinical Trials	3

Program Objectives

- Know and understand the life sciences industry well enough to be familiar with terms, trends, issues, and industry culture in order to be able to recognize needs that may be commercially viable.
- Know and understand the three disciplines represented by the courses such that they are able to assess the commercial viability of a life sciences technological innovation.
- Know how to commercialize new life science discoveries into products and services to improve health in humans and/or animals.

Course Content

School of Medicine

- Nature of discovery
- Protecting intellectual property
- Reimbursement models in health care
- Life science methods and research tools
- Research with industry partners

College of Engineering

- Identification of clinical needs
- Concept screening and selection
- Regulatory pathways and the FDA
- Patents and intellectual property basics
- Design and prototypes

Trulaske College of Business

- Commercialization process
- Market assessment and competitive landscape
- Technology transfer, licensing, and startups
- Sources of capital
- Business plan and market strategy

Admission Requirements

The only prerequisite for the first course in the sequence will be good standing in a graduate/professional program or the consent of the instructor on a case-by-case basis. This certificate is also offered online (https://online.missouri.edu/degrees-programs/mu/medicine/life-science-innovation-and-entrepreneurship/grad-cert/).

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