RESEARCH MANAGEMENT AND COMPLIANCE (CERTIFICATE)

Overview
The one-year Graduate Certificate Program in Research Management and Compliance (ReMC) is designed to provide students with focused training on central issues related to an effective research enterprise. Principle investigators are busy with mentoring trainees, writing and reviewing grants and writing papers as well as tending to other issues that require the attention of people with their expertise. Being able to hire professional research assistants who are familiar with the composition and requirements of writing IRB and IACUUC applications (BSBT 6802 Reg Env of Life Science Innovation - Drug Discovery), basic components of tech transfer and innovation (BSBT 6801 Biomedical Entrepreneurship), responsible conduct of research (BSBT 6065) as well as professional project management (BSBT 6061), should be very helpful for their research enterprise. Knowledge in statistics for biomedical sciences (BSBT 6067) should be valuable for data analyses. Depending on the students’ prior training, they will have to enroll in either training in scientific writing or in R programming. This knowledge and skills should help certificate holders to obtain positions as professional research assistants inside and outside academia.

Admissions Requirements
- A bachelor’s degree with a minimum GPA of 3.0
- Complete transcripts of undergraduate work and any previous graduate work
- A completed application to Graduate Studies
- Two academic letters of recommendation
- Prior science training and, ideally, some research experience

To apply for admission applicants must submit the following:

- Online Graduate School application
  - Personal Statement: A one-page personal statement describing the applicant’s career goals and purpose for studying biomedical sciences and biotechnology
  - Resume: The applicant’s current resume or curriculum vitae, including professional work/practice since graduating with a bachelor’s degree (or equivalent).
  - Personal statement.
  - Two recommendation letters from people who know your professional, academic and/or personal achievements or qualities well.
- Application Fee: A nonrefundable application fee of $75.00 (U.S. dollars). Checks or money orders should be made payable to the University of Colorado.
- Transcripts: Official transcripts from all post-secondary colleges and/or universities should be sent directly to:

Graduate Admissions
University of Colorado Denver
Campus Box 163
PO Box 173364
Denver, CO 80217-3364

International students must meet ALL of the requirements above and those required by International Admissions.

Certificate Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BSBT 6061</td>
<td>Project Management</td>
<td>2</td>
</tr>
<tr>
<td>BSBT 6065</td>
<td>Case Studies in Responsible Conduct of Research</td>
<td>1</td>
</tr>
<tr>
<td>BSBT 6067</td>
<td>Statistics for Biomedical Sciences</td>
<td>2</td>
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<tr>
<td>BSBT 6801</td>
<td>Biomedical Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>BSBT 6802</td>
<td>Reg Env of Life Science Innovation - Drug Discovery</td>
<td>3</td>
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Total Hours: 11

Learning Objectives
Upon successful completion of their studies, students enrolled in the Research Management and Compliance Graduate Certificate program will be able to:

- Employ basic tools of R programming.
- Classify data and use statistical tools to test hypotheses.
- Explain the central components of successful business strategies in biotechnology and create a business plan.
- Explain the scientific implications and issues of quality control and regulatory affairs related to drug development, and create a project plan.
- Recognize challenges in biomedical sciences and biotechnology in real-world settings and contribute to their solutions and advancements.
- Understand and apply appropriate forms of management that are central for the successful completion of a project

Courses

BSBT 6061 - Project Management (2 Credits)
Provides training in initiating, executing & closing a project, including the management of scope, time, cost, human resources, communication, risk and more. Highly interactive intensive course prepares students for Certified Project Management exam (internationally recognized certification). Taught by Project Management Professional.
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6065 - Case Studies in Responsible Conduct of Research (1 Credit)
Anyone conducting research using federal funding must study RCR. You’ll learn expectations and regulations that permeate science. You’ll understand consequences of violations to individuals and society. We’ll explore misconduct through interactive video, written and video case studies, and other engaging activities.
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.
BSBT 6067 - Statistics for Biomedical Sciences (2 Credits)
Learn how and when to apply statistical procedures to answer scientific questions relevant to biomedicine, and how to critically assess statistical data for validity.
Grading Basis: Letter Grade
Typically Offered: Fall, Spring, Summer.

BSBT 6071 - Introduction to R Programming (1 Credit)
Introduction to the statistical programming language R geared primarily to biomedical science students with little to no previous programming experience. Basic features of R as a programming language and as scientific computing platform. Basics of data cleaning, visualization, and analysis.
Grading Basis: Letter Grade
Typically Offered: Spring.

BSBT 6801 - Biomedical Entrepreneurship (3 Credits)
The course addresses the essential elements of bioscience and health innovation and entrepreneurship. Prerequisites: An undergraduate degree in science, technology, business, engineering or math. Cross-listed with ENTP 6801
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

BSBT 6802 - Reg Env of Life Science Innovation - Drug Discovery (1.5 Credits)
This course is designed to familiarize biomedical scientists and those interested in the business of science with the fundamentals of U.S. and international regulatory affairs regarding drug development. Focus is the development of products, such as drugs, devices, diagnostic tests, and health information software, to receive U.S. and international regulatory clearance or approval for commercialization.
Grading Basis: Letter Grade
Typically Offered: Fall, Summer.

Policies
Please refer to the Graduate School Policies page (http://catalog.ucdenver.edu/cu-anschutz/schools-colleges-programs/graduate-school/#policies).

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