REHABILITATION SCIENCE (PHD)

Overview

The PhD in Rehabilitation Sciences is an interdisciplinary graduate school program housed within CU Physical Therapy.

The Rehabilitation Science PhD program is comprised of core and associated faculty, postdoctoral fellows, students and research assistants with a broad background, including physical therapy, medicine, psychology, engineering, and public health, all working together to improve the lives of people who live with disabilities.

The environment is highly collaborative, with strong mentors and state of the art facilities. While in the PhD Program, students develop a wide range of skills, including research and teaching; presenting nationally, and learning to write grants and publish manuscripts.

Admission Requirements

Applicants must submit the following:

- Online CU Denver|Anschutz Graduate School application (included in the application is the Research Statement, Professional Background, and Future Goals Statement, and Colorado residency form)
- One (1) official transcript of all academic work completed to date. To be consider "official," the transcript must come from the issuing institution directly to the Rehabilitation Sciences PhD program at:

  University of Colorado Denver
  Graduate School
  Mail Stop C296
  Fitzsimons Building, C5000
  13001 E. 17th Place
  Aurora, CO 80045

  For electronic transcripts (preferred):
  graduate.school@cuanschutz.edu

- A non-refundable application fee, $50 for domestic applicants, $75 for international applicants [credit card (online only), check, or money order]. No application will be processed unless this fee is paid
- Three (3) letters of recommendation
- GRE Scores (optional), use GRE code 4875.
- A list of one-to-three faculty members with whom the student is interested in working. Applicants are strongly encouraged to contact potential mentors prior to submitting their application.

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

Degree Requirements

In addition to the coursework below, students must also take:

- 5-8 credits of Specialization Electives
- at least 1 credit of Statistics/Data Management Elective

First Year

Year 1

Fall		Hours
RHSC 7000	Foundations in Rehabilitation Science (May also be taken in Fall, Year 2)	2
RHSC 7001	Rehabilitation Science Seminar	1
RHSC 7910	Research Practicum in Rehabilitation Science I	3
BIOS 6601 or BIOS 6611	Applied Biostatistics I or Biostatistical Methods I	3
RHSC 7002	Professional Skills in Academia (May also be taken in Fall, Year 2)	2
PHCL 7605 or CLSC 7150	Responsible Conduct of Research (May also be taken in Spring, Year 1) or Ethics and Responsible Conduct of Research	1
RHSC 8990	Doctoral Thesis	1-10
	Hours	**13-22**
Spring		
RHSC 7911	Research Practicum in Rehabilitation Science II	3
BIOS 6602 or BIOS 6612	Applied Biostatistics II or Biostatistical Methods II	3
PHCL 7605 or CLSC 7150	Responsible Conduct of Research (May also be taken in Fall, Year 1) or Ethics and Responsible Conduct of Research	1
RHSC 8990	Doctoral Thesis	1-10
	Hours	**8-17**
Summer		
RHSC 8990	Doctoral Thesis	1-10
	Hours	**1-10**
	Total Hours	**22-49**

Second Year

Year 2

Fall		Hours
RHSC 7000	Foundations in Rehabilitation Science	2
RHSC 7001	Rehabilitation Science Seminar	1
RHSC 7002	Professional Skills in Academia	2
Specialization Electives		
RHSC 8990	Doctoral Thesis	1-10
	Hours	**6-15**
Spring		
Statistics/Data Management Elective		
Select 1 course from the following:		
CLSC 7101	Grant Writing I	
IDPT 7200	Scientific Writing for Doctoral Students	
NRSC 7661	Grant Proposal Writing Workshop	
RHSC 8990	Doctoral Thesis	1-10
	Hours	**1-10**

Summary

Summer		
RHSC 8990	Doctoral Thesis	1-10
	Hours	**1-10**
	Total Hours	**8-35**

Third Year & Beyond

Code	Title	Hours
Year 3 Fall, Spring, Summer, & Beyond:		
RHSC 8990	Doctoral Thesis	1-10

Learning Objectives

The goal of the Rehabilitation Science (RHSC) Program at the University of Colorado is to prepare future generations of researchers to advance the science and practice of physical rehabilitation. Upon completion of the Rehabilitation Science PhD Program, students will be able to:

1. Critically analyze and integrate research findings from specialized disciplines to address complex problems of physical disablement
2. Design and implement rigorous, innovative, and ethical research that will advance theoretical and/or applied principles of clinical practice in rehabilitation
3. Disseminate findings of original research using standard scientific oral and written formats
4. Compete for funding from national agencies to support interdisciplinary research and educational initiatives in rehabilitation
5. Teach graduate level courses in a selected area of specialization within the field of rehabilitation
6. Effectively communicate with clinicians, research scientists, and students in the field of rehabilitation and its affiliated disciplines using the common language of disablement
7. Serve in leadership roles for professional activities that will advance the science and practice of rehabilitation medicine.

Courses

BIOS 6601 - Applied Biostatistics I (3 Credits)
Applied biostatistical methods including descriptive and statistical inference; odds ratio and relative risk, probability theory, parameter estimation, tests for comparing statistics of two or more groups, correlation and linear regression and overviews of: multiple and logistic regression and survival analysis.
Grading Basis: Letter Grade
A-PUBH1 Graduate students and public health certificate students only.
Typically Offered: Fall, Spring, Summer.

BIOS 6602 - Applied Biostatistics II (3 Credits)
A continuation of BIOS 6601 extending the basic principles of descriptive and inferential statistics to modeling more complex relationships using linear regression, logistic regression, and Cox regression. The statistical package SAS is used extensively. Multiple optional lab sessions offered.
Prerequisite: BIOS 6601
Grading Basis: Letter Grade
A-PUBH1 Graduate students and public health certificate students only.
Typically Offered: Spring.

BIOS 6611 - Biostatistical Methods I (3 Credits)
This first course in applied statistics covers basic descriptive methods and probability; parametric and nonparametric inference for the one- and two-sample location problem; ANOVA, ANCOVA, and multiple linear regression. Matrix notation, R, and SAS are used. Prerequesite: differential calculus or permission of instructor
Grading Basis: Letter Grade
A-PUBH BIOS
Typically Offered: Fall.

BIOS 6612 - Biostatistical Methods II (3 Credits)
This is a continuation of BIOS 6611 covering univariate linear modeling and emphasizing multiple regression and analysis of variance. Logistic regression and methods for correlated data are also covered. Matrix algebra and the statistical package SAS will be used. Prereq: BIOS 6611.
Grading Basis: Letter Grade
A-PUBH1 Graduate students and public health certificate students only.
Typically Offered: Spring.

CLSC 7150 - Ethics and Responsible Conduct of Research (1 Credit)
Course provides overview of the field of ethics in clinical research. Topics include historical background, current regulations, IRB requirements on human subjects protection issues. Students will learn how to develop approaches to conduct ethical human subjects research in an optimal manner.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

IDPT 7200 - Scientific Writing for Doctoral Students (2 Credits)
Scientific writing course for students engaged in research. Focuses on critical thinking, analytical writing, and oral presentation. Taught as a writing workshop, the course emphasizes effective communication with both professional and non-technical audiences. Restrictions: Must have passed preliminary examination; permission of instructor.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

NRSC 7661 - Grant Proposal Writing Workshop (1 Credit)
Course is practical workshop in grant-writing culminating in a mock review panel including course participants. Students will examine various proposal types/formats, then write their own proposal in the format of NRSA fellowship application. Restriction: Students with adequate neuroscience background. Prereq: NRSC 7610.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

PHCL 7605 - Responsible Conduct of Research (1 Credit)
The Department of Pharmacology in the University of Colorado School of Medicine organizes and offers an interactive course during the fall semester entitled "Responsible Conduct of Research". The course is designed to inform students, trainees and faculty to the NIH requirements for ethical and responsible research.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

RHSC 7000 - Foundations in Rehabilitation Science (2 Credits)
This course provides an overview of the field of Rehabilitation Science and an introduction to disablement frameworks with an emphasis on biopsychosocial models of the enabling-disabling process across the life span. Restrictions: Instructor permission required for students not enrolled in the RHSC Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

RHSC 7001 - Rehabilitation Science Seminar (1 Credit)
Students will attend contemporary research seminars presented by established scientists, and will participate in group discussions to assess the implications of seminar topics on the full spectrum of disablement constructs in Rehabilitation Science ranging from pathophysiology to community participation. Prerequisites: RHSC 7000 Foundations in Rehabilitation Science or Instructor Permission. Restrictions: Instructor permission required for students not enrolled in RHSC Program.
Grading Basis: Letter Grade
Repeatable. Max Credits: 1.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

RHSC 7002 - Professional Skills in Academia (2 Credits)
This course provides an overview of instructional methods and professional skills for academic educators and scientists. Topics include instructional methods for graduate education, and development of professional skills in communication, management, networking, and promotion for academic careers in Rehabilitation Science. Restrictions: Instructor permission required for students not enrolled in RHSC Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Spring.

RHSC 7910 - Research Practicum in Rehabilitation Science I (3 Credits)
This research practicum exposes students to a variety of experimental tools and techniques available to Rehabilitation scientists. Mentored practicum experiences are selected by each student with permission from faculty mentor(s). Prerequisites: Instructor permission. Restrictions: Instructor permission required for students non enrolled in RHSC Program.
Grading Basis: Letter Grade
A-GRAD Restricted to graduate students only.
Typically Offered: Fall.

RHSC 8990 - Doctoral Thesis (1-10 Credits)
Doctoral thesis work in Rehabilitation Science. Prerequisites: Instructor permission. Restrictions: Enrollment in RHSC Program.
Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 10.
A-GRAD Restricted to graduate students only.
Additional Information: Report as Full Time.
Typically Offered: Fall, Spring, Summer.

Policies

Research Practicum: Before selecting a thesis advisor, students will complete a research practicum rotation with members of the RHSC Training Faculty in their first two semesters of enrollment. In special instances a third practicum may be completed during the summer of the first year, with permission of the GTC. Rotations can only be completed with RHSC affiliated faculty, except with special permission from the GTC. Students may choose to complete their two rotations with the same or different faculty mentors. Rotations are arranged by the student through consultation with the Program Director and subsequent discussions with the Program faculty member.

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

Contact Us

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