The Program in

Structural Biology & Biochemistry

Student Handbook
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Structural Biology and Biochemistry Webpage

Information contained in this handbook is subject to change upon approval by the GTC

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STRUCTURAL BIOLOGY AND BIOCHEMISTRY MISSION

- Provide scientific training and career development for outstanding scientists in structural biology and biochemistry
- Foster scientific excellence and innovation in the field of biomolecular structure and function.
- Develop and advance expertise and technology to support cutting-edge research in biomedical sciences
- Identify and characterize molecular targets and develop innovative therapeutics and diagnostic tools
- Exploit discoveries and intellectual properties through strategic partnerships with industry.

PROGRAM LEADERSHIP AND ORGANIZATION

Program leadership is organized into several committees as follows:

Steering Committee
This committee will meet at least once a year to oversee the direction of the program and its operation. The Graduate Training Committee will make recommendations to the Steering Committee regarding changes to the operation of the Program for approval by the Steering Committee. The Steering Committee, through the Program Director, will make recommendations to the Dean of the School of Medicine. The Director of the Program represents the program on the Graduate School Executive Committee.

Director of the Program
External Student Advisor
Chair of Biochemistry and Molecular Genetics
Chair of Pharmaceutical Sciences
External Advisor

Graduate Training Committee
The Director of the Program in Structural Biology and Biochemistry will form a Graduate Training Committee that coordinates the day-to-day activities of the program. This committee will be appointed annually by the Program Director and will include the Chairs or Faculty Advisors from each of the other committees. This Committee will meet monthly to oversee the direction of the Program and its operation.

Student Admission and Recruitment Committee
The primary focus of the Program in Structural Biology and Biochemistry is student education. The Student Admissions and Recruitment Committee is charged with making policy proposals to the Graduate Training Committee and the faculty, as well as implementing the approved policies to enable recruitment of the top students in the country that seek graduate education in the diverse structure-oriented fields represented by our "training faculty" (see Program Membership). The committee is charged with devising strategies for "promoting the program," for informing prospective applicants and advisors of the advantages of our program, for actively pursuing qualified students who express an interest in structural biology and biochemistry, for collecting application materials, coordinating student interview visits, informing faculty and students of the purpose of these visits in order to maximize their recruiting utility, for making admissions decisions, and for conducting post-admissions surveys to allow our recruiting to improve in the future. The committee should coordinate efforts with the Student Advisory Committee so that special conditions, deficiencies, etc. can be recognized and rectified or accommodated. Membership to this committee is restricted to training faculty and student representatives.

Faculty Membership and Recruitment Committee
Maintaining a faculty who are committed to graduate education, who effectively lead research programs, and who are professional role models for the student body is critical to the health of the program. The Faculty Membership and Recruitment committee will recruit faculty interested in structural biology and

biochemistry to the University of Colorado Denver | Anschutz Medical Campus. The committee serves as the initial contact regarding inquiries for membership, advises potential applicants of the program requirements and criteria for membership. The Committee is also charged with a yearly review of all training faculty in three main areas: 1) Program participation 2) Mentorship 3) Professionalism. (*Note: members of the Faculty Membership and Recruitment Committee will be reviewed by the Graduate Training Committee.) This committee will advise the Graduate Training Committee on the entrance and retention of training faculty in the program. Membership to this committee is open to training faculty.

Student Advisory Committee
The Student Advisory Committee advises students on rotations, individual curricula, and program and graduate school regulations. Members of the student advisory committee will reach out to and meet with students regularly to discuss their progress, problems, questions, concerns and suggestions. Membership on this committee is open to training faculty.

Seminar Committee
The structural biology and biochemistry seminar series is a key element that bonds the program on a regular basis. It should be organized to maximize participation and be an enjoyable, scientifically stimulating experience for the speakers and the audience. This committee is charged with soliciting suggestions from students and participating faculty regarding potential seminar speakers, formulating policy recommendations regarding the seminar program, selecting quality outside speakers that will give the audience a balanced and interesting seminar series. Membership on this committee is open to all members of the program.

Curriculum Committee
Membership on this committee is open to training faculty. The curriculum offered to our students should provide them with a foundation in basic knowledge and an opportunity to develop the skills necessary to continue their education throughout their careers. Coursework should provide students with skills necessary to critically evaluate the literature. With beginning students, these skills will need to be further developed with the assistance of their respective advisors and Thesis Advisory Committees. Course work should provide a firm foundation to enable this development. The Curriculum Committee is charged with making recommendations to the Graduate Training Committee (and the faculty) regarding course offerings for trainees. The committee should annually evaluate the quality of our current courses, make specific recommendations to the course directors and instructors and evaluate proposals for new courses. The committee should evaluate the curriculum and make recommendations for improvement. The committee's responsibilities also include running the annual structural biology and biochemistry mini-course or one-day symposium, including coordinating student participation, registration and timely announcements regarding the course or symposium. The committee should solicit input from faculty, students and graduates in evaluating our didactic accomplishments and needs.

Diversity, Equity and Inclusion Committee
The STBB Diversity, Equity, and Inclusion Committee (DEI) is open to all members of the program. However, it is generally a student led committee that works to empower all community members by fostering diversity, equity, and inclusion, providing resources to promote equal access and opportunity, and advocating for policies in support of diversity in the STBB program and our community.

Retreat Committee
Third year students will work with the Retreat Committee chair to plan either the retreat or the symposium (each held every other year).

TIMELINE AND MILESTONES

Year 1	Checklist	Activities	Milestones
Fall	☐ Orientation and on-boarding ☐ Register for classes ☐ Pre-rotation 1 proposal ☐ Enroll in health insurance ☐ Begin establishing residency ☐ Pre-rotation 2 proposal	• Weekly Seminar • Fundamentals and core course work • Rotation 1 • Rotation 2	• Rotation 1 talk
Spring	☐ Register for classes ☐ Pre-rotation 3 proposal	• Weekly Seminar • Biophysical methods • Elective • Rotation 2 • Rotation 3	• Rotation 2 talk • Rotation 3 talk • Preliminary Exam
Summer	☐ Register for research ☐ File petition for residency	• Research • Form comps committee	• Join thesis lab
Year 2	**Prepare**	**Activities**	**Milestones**
Fall	☐ Register for classes ☐ Enroll in health insurance	• Research • Weekly Seminar • Molecular Structure Courses • Ethics Course	
Spring	☐ Register for classes	• Research • Weekly Seminar • Advanced Topics Course • Elective Course • Form TAC	• Second Year Seminar
Summer	☐ Register for research ☐ Submit comprehensive exam forms	• Research	• Pre-comps meeting
Year 3	**Prepare**	**Activities**	**Milestones**
Fall	☐ Register for classes/research ☐ Enroll in health insurance	• Research • Weekly Seminar • Elective course (if needed)	• Comprehensive Exam
Spring	☐ Register for research	• Research • Weekly Seminar	• Update talk and committee meeting • Plan program retreat
Summer	☐ Register for research	• Research • Weekly Seminar	
Years 4+	**Prepare**	**Activities**	**Milestones**
Fall	☐ Register for classes ☐ Enroll in health insurance	• Research • Weekly Seminar	• Year 4: Plan symposium
Spring	☐ Register for classes	• Research • Weekly Seminar	• Update talk and committee meeting
Summer	☐ Register for research	• Research	
Thesis Defense (see page 15 for full checklist)			

ADMINISTRATIVE PROCEDURES

Orientation and on-boarding

The following outlines the steps important during the first few weeks of the first year.

Orientation

All new students must review and complete the online orientation per School of Medicine rules.

ID Badge

Every person on campus must carry a UCD issued picture ID. This ID serves many purposes, including enabling students to access the laboratory areas on the Anschutz Medical Campus, the library, the parking lots, and to attend special University functions. Students will need to provide an ID photo to the School of Medicine that meets passport expectations . The Program Administrator will send out instructions via email on how to upload this photo before orientation week.

Payroll

It is important to establish a checking account as soon as possible. The University issues all paychecks, including student fellowship and stipends, as direct deposits. Students should provide a voided check when filling out payroll forms. Each student is required to produce a driver's license (or other government issued ID) and a social security card for payroll purposes.
https://www.cu.edu/employee-services/payroll/student-employee-payroll

Taxes

Students are encouraged to stay informed as to their tax liability based on their funding source. For more information visit the Payroll and Benefits website at:
https://www.cu.edu/employee-services/payroll/student-employee-payroll

Establishing Residency

New students who are not residents of Colorado must immediately obtain documentation to support the Petition for State Residency. First-year students must make collecting this documentation a priority. Funding will be available only if the student qualifies as an in-state resident after the first year of study. To be awarded in-state tuition status at the beginning of the second year it is essential to establish state residency for a full year and established several kinds of "connections" to the state. It is important that these connections be established immediately upon arriving in Colorado to show the one-year history required by state law. For complete directions on establishing Colorado in-state residency for tuition purposes please consult the Registrar's website at:
https://www.cuanschutz.edu/registrar/residency/current-students

Prior to the start of the second academic year students must fill out and have notarized the Petition for In-State Tuition Classification and submit this along with supporting documentation to the office of Admissions. Petition forms are available online and in the Admissions office. Notaries can be found in the Financial Aid Office, the Chancellor's office, as well as at any bank.

Failure to complete the in-state tuition classification process could jeopardize continued financial support in the Structural Biology & Biochemistry program.

Registering for Classes

Log into the UCD Access Portal –Register for Classes
The Student Center is the central location for viewing personalized information about things like grades, class schedules, and financial aid. The Student Center can also be used to register for classes, post payments, see class schedules, check financial account status, view and update contact information, find information on advisors, and view admissions information. The portal uses the same credentials established for university email accounts. Log in at
https://portal.prod.cu.edu/UCDAccessFedAuthLogin.html.

Enrolling in Healthcare

Student Health Insurance
All degree and specific, approved, certificate-seeking students enrolled in five or more credit hours must take the School of Medicine's Student Health Insurance (SHI) Plan unless they can prove enrollment in other comparable insurance. As a fully supported PhD student, the University pays for the cost of your health insurance. Students must however annually complete the plan selection form by the September 1. Additional information can be found here:
http://www.ucdenver.edu/life/services/studentlife/healthandrecreation/HealthInsurance/Pages/default.aspx

Communication

Email
Instructions for obtaining an account in the system, workstation hardware requirements, and accessing the system are available. In addition to remote access, computer workstations are located at the University of Colorado Strauss Health Sciences Library, Anschutz Medical Campus in the Learning Resources Center.
https://library.cuanschutz.edu/

Email is the primary method of communication on campus and students are expected to check their email daily and respond within a 24-hour period. If you will be out of the office with limited email access, you must set an away auto-response.

Email Listservs
After receiving your firstname.lastname@CUAnschutz.edu email account, you will be added to the STBB mailing list by the Program Administrator. This list will inform students of pertinent program information.

Program Website
https://www.cuanschutz.edu/graduate-programs/structural-biology-and-biochemistry

Mailing Address

University of Colorado School of Medicine
Structural Biology & Biochemistry Program
MS 8300
12800 East 19th Avenue
Aurora, CO 80045

DEGREE REQUIREMENTS AND COURSEWORK

Academic Calendar

https://www.cuanschutz.edu/registrar/academic-calendars

Required Courses

The Structural Biology & Biochemistry Program requires a minimum of 30 semester credit hours of required courses and 30 semester credit hours of doctoral thesis research. Students may transfer up to 20 semester hours from prior institutions with the approval of the program director.

First-year Biomedical Sciences "Core" Courses
This is a set of interdisciplinary courses required for all first-year graduate students enrolled in basic science Ph.D. programs at UCD|AMC. The objective of the courses is to provide the basic science information and introduction to the skills required for a successful research career in all disciplines of modern biomedical sciences. Topics cover the fundamentals of biochemistry, molecular biology, cell biology, developmental biology, molecular genetics and biomolecular structure. Specialty topics required by individual programs are usually taken during the spring semester of the first year, and in some cases in the second year to round out the curriculum.

Biomedical Sciences Core Course	Course Information	Credits
BMSC 7806	Foundations in Biomedical Sciences	6
BMSC 7810 (choose appropriate section)	Core Topics A* in Biomedical Sciences (Held for 3 weeks-starting in November)	1 to 2
BMSC 7810 (choose appropriate section)	Core Topics B* in Biomedical Sciences (Held last 3 weeks of the semester starting after Thanksgiving)	1 to 2

*Students MUST take "Discovering Protein Structure and Function" in the CORE TOPICS A section. Topic B is the student's choice.

Pre-comps students must register for the following every fall and spring semester

STBB 7660—Structure Seminar 1 Credit Hour
This seminar series provides a forum for the presentation of research in structural biology and biochemistry by external and internal faculty, postdoctoral fellows, and graduate students.
AND
STBB 7650—Research in Structural Biology & Biochemistry 1-10 variable Credit Hours
Research work in Structural Biology and Biochemistry pre-comps (except summer).

In the summer pre-comps students must register for
STBB 8990—Doctoral Thesis 1-10 variable Credit Hours
Doctoral thesis work in Structural Biology and Biochemistry post-comps (also summers pre-comps).

Post-comps students must register for the following every fall, spring, and summer semester
STBB 8990—Doctoral Thesis 1-10 variable Credit Hours
Doctoral thesis work in Structural Biology and Biochemistry post-comps.

Additional Required Program Specific Courses

Students are required to take STBB 7608, STBB 7609, one of Molecular Structure courses, and the ethics course.

STBB 7608—Molecular Interactions 3 Credit Hours
THIS COURSE IS CURRENTLY BEING REORGANIZED

STBB 7609—Biophysics & Spectroscopy 3 Credit Hours
The Biophysics and Spectroscopy course will teach fundamentals of modern molecular spectroscopies and biophysical techniques as applied to biomolecules.

STBB 7631—Molecular Structure A (NMR) 1.5 Credit Hours
Gain an in depth understanding of the underlying principles of an NMR experiment, so that student can turn NMR theory into NMR practice for their research.

STBB 7632—Molecular Structure B (X-ray Crystallography) 1.5 Credit Hours
Understand the theory and practice of structural determination using x-ray crystallography.

STBB 7633—Molecular Structure C (Mass Spectrometry) 1.5 Credit Hours
The purpose of this course is to provide students with a concise understanding of biological mass spectrometry and it application to study and characterize various classes of biomolecules in state of the art research.

STBB 7634—Molecular Structure D (Cryo-EM) 1.5 Credit Hours
The course will provide an introduction to conceptual and practical aspects of macromolecular cryo-electron microscopy (cryo-EM). A combination of lectures and hands-on experiences will give students a working understanding of cryo-EM and its application for structural analysis of biological macromolecules.

BMSC 7811 – Responsible Conduct of Research 1 Credit Hour
The course is designed to inform students about the NIH requirements for ethical and responsible research.

Elective Courses
An extensive list of electives is available in other departments/programs in the University of Colorado Graduate School (https://catalog.ucdenver.edu/cu-anschutz/courses-a-z/). Electives should be chosen to meet the research interests of the student and should be made in consultation with the student's thesis mentor and the STBB student advisor or program director. STBB offers two elective courses:

STBB 7620—Advanced Genome Analysis 2 Credit Hours
An introduction to the theory and practice of genomics. Topics include sequencing and mapping overview of genomes, transcriptomes, bioinformatics and statistics, population-level variation, ethics, evolutionary genomics, epigenomics, proteomics, metagenomics, and function genomics.

STBB 7670—Independent Study in Structural Biology 1-3 Variable Credit Hour(s)
This course is listed for the benefit of the advanced student who desires to pursue one or more topics in Structural Biology & Biochemistry in considerable depth. Supervision by a full-time faculty member is necessary.

Sample Schedule

1st Year Curriculum				
Fall	**Course**	**Title**	**Credits**	**Total**
	BMSC 7806	BMSC 7806 Foundations in Biomedical Sciences	6	
	BMSC 7810	BMSC 7810 Core Topics in Biomedical Sciences A: Discovering Protein Structure and function	2	
	BMSC 7810	BMSC 7810 Core Topics in Biomedical Sciences B	1 or 2	
	STBB 7650	Research in Structural Biology and Biochemistry (Rotation #1)	1	
	STBB 7650	Research in Structural Biology and Biochemistry (Rotation #2)	1	
	STBB 7660	Seminar	1	
				14/15
Spring	**Course**	**Title**	**Credits**	**Total**
	STBB 7608/09	Molecular Interactions or Biophysics & Spectroscopy	3	
	STBB 7650	Research in Structural Biology and Biochemistry (Rotation #3)	1	
	STBB 7660	Structural Seminar	1	
	Varies	Elective Course	1-2	
				6-8
Summer	**Course**	**Title**	**Credits**	**Total**
	STBB 8990	Doctoral Thesis	1	
				1
2nd Year Curriculum				
Fall	**Course**	**Title**	**Credits**	**Total**
	STBB 7631/2/3/4	Choose 2: Molecular Structure courses *Note can take in Year 3 if desired are offered then, sub in electives	3	
	STBB 7650	Research in Structural Biology and Biochemistry	1	
	STBB 7660	Seminar	1	
	BMSC 7811	Ethics in Research	1	
				6
Spring	**Course**	**Title**	**Credits**	**Total**
	STBB 7608/09	Molecular Interactions or Biophysics & Spectroscopy	3	
	STBB 7650	Research in Structural Biology and Biochemistry	2	
	STBB 7660	Seminar	1	
	Varies	Elective Course	1-2	
				7-8
Summer	**Course**	**Title**	**Credits**	**Total**
	STBB 8990	Doctoral Thesis	1	
				1
Years 3-5 Curriculum & Milestones				
Fall/Spring	Varies	Elective Course if needed	1-2	
All semesters	STBB 8990	Doctoral Thesis** (5 credits in fall/spring, 1 credit in summer)	11 credits/year	

Notes:
*** Total Credits = 60 (30 from didactic coursework and research plus 30 from Doctoral Thesis)**
***Do not take more than 10 STBB 8990 Thesis credits before taking the Comprehensive exam.**
***You must complete 30 credits of STBB 8990 before or in the semester you defend**

Students must receive a B or higher in all STBB and required coursework. If a minimum grade is not received, then the student must discuss with the program director how this low grade would be resolved. A B minus is not an acceptable grade.

Weekly Seminar

Students are required to attend seminar, scheduled every Wednesday at 12pm, for all years of their tenure. In Year 1 and 2 students should register for STBB 7660 to receive academic credit for seminar. The grade is based on attendance.

Seminar will vary between outside and internal research talks, journal club, or program discussions.

Starting in the second year, students will give research in progress talks during this weekly seminar once per year. Students should work closely with their mentor to develop this seminar, however an informal guideline provided by the Graduate School is below.

Public Seminar Guidelines from the graduate school
Although public presentations are not separately "graded", there are certain things that the faculty who attend will be looking for and will influence their assessment of how well you did. The following is a list of things that they may consider.

1. Were the project background and rationale adequately presented?
2. Was the hypothesis clearly stated?
3. Was the experimental approach adequately explained?
4. Were the data analyzed appropriately?
5. Were conclusions rationally drawn from data presented?
6. Were slides displaying data clear and easy to understand?
7. In general, were slides well organized and simple?
8. Did you add value to the slides rather than reading them?
9. Were your voice, volume, and mannerisms appropriate?
10. Did you respond appropriately to comments and questions from the audience?

Research Rotations

PhD students are required to complete three 1-credit research rotations starting in the fall semester of the first year. (MSTP students will do two rotations total, during the summers of the first and second year of Medical School.) Research rotations are designed to introduce students to research methodologies, to teach approaches to scientific problem solving, and to provide the opportunity to explore various laboratories as potential homes for completing their thesis research. Students should approach the research rotations with the primary goal of identifying their future thesis advisors. Research rotations also provide students with the opportunity to accumulate a variety of different research experiences.

Students will work with the Student Advisory committee to plan their research rotations. They will then be advised to directly contact faculty they are interested in to discuss the possibility of a rotation.
Students start their first rotation in the fall semester, spending approximately three months in each of three laboratories. The STBB program encourages students to set up their first rotation prior to arriving on campus. Please reach out to the Program Administrator and the chair of the Graduate Committee regarding selection of rotation mentors. Note that an individual faculty member cannot have more than one STBB student rotating in their laboratory at any given time. There are several considerations which a student should keep in mind when choosing a rotation advisor. 1) Rotations must be performed with a Core Member of the program training faculty (see page 25) 2) The mentor should be planning on accepting a student the

following year, 3) The student should be interested in potentially joining the laboratory (i.e. rotations should not be used to just gain a research experience).

The student will work with the rotation mentor to decide on an appropriate project for the rotation. A Rotation Proposal must be submitted to the Program Director within the first week of the rotation**.** This proposal should be no more than one page and follow a Specific Aims Page format with a brief background, description of the unknown, and aims to address this.

At the completion of each rotation, students must present a post-rotational seminar during the regular Wednesday Seminar Series. The actual dates of the post-rotational seminar will be provided by the Program Administrator. In the post-rotational seminar, the student presents the rationale, methods, and results obtained from the rotation project, as well as an interpretation and a discussion of the rotation project results. The post-rotational presentation usually lasts 10-15 minutes with several minutes at the end for questions.

Each rotation is assigned a letter grade and formally evaluated (see *Appendix A*). The fist rotation mentor in the semester assigns an initial grade, which may be adjusted up or down based on input from the second rotation mentor.

The possibility of a fourth rotation during the summer between first and second year will be considered for students unable to decide upon a thesis mentor after three rotations. However, this must be discussed with the Program Director and Program Administrator beforehand, and is not guaranteed.

Preliminary Exam

The University of Colorado School of Medicine requires two exams from program students: a preliminary exam and a comprehensive exam. Continuation in the program is dependent on the outcome of the preliminary exam. All first-year students are expected to take the exam in May-June of their first year. This is an oral exam designed to test the general knowledge base of the student, with particular emphasis on areas deemed necessary to pursue studies in structural biology and biochemistry. The goal of the exam is to identify any deficiencies and provide an evaluation of each student. These deficiencies can then be addressed by the mentor/mentee pair prior to the comprehensive exam.

Two months prior to the exam, students will be presented with a set of 4-5 broad topics that they will be expected to discuss during the examination. In general, these topics will be gleaned from the learning objectives of the coursework the student completed during their first two semesters in the Program.

A committee consisting of 3-4 faculty members from the program will administer the exam to all students individually in a given year. During the exam, the student will be asked to answer questions and explain concepts based on the topics from their course work.
There are three possible outcomes of the Preliminary Exam

1. Pass (no conditions)
2. Conditional Pass (conditions must be detailed)*
3. Fail (the student must leave the graduate program)**

*If the conditions of a conditional pass are met in the timeline requested by the committee, this will be converted to a pass. It is important to remember that a conditional pass is not a fail. **If a student fails and are allowed to retake, they should do so in the following 1-3 months. The examination committee may choose to reexamine only a single area of concern or may choose to reexamine the student more generally. The committee may choose to request a written review of a particular area in which the student's knowledge

level was weak (in lieu of another oral examination). The expectations of the committee will be clearly communicated to the student in written form.

Entering a Thesis Laboratory

Selecting a Mentor

An important aim of the rotations is to enable students to find a thesis mentor. Within one month of the completion of the three rotations, the student should come to a mutual agreement with a faculty member to act as their thesis mentor. Each student must select a thesis mentor from among the Core Training Faculty (see page 25).. If a student has not found a good mentoring fit during their rotations, they should discuss options with the program director. The student should discuss the possibility of joining a mentor's laboratory directly with the mentor. Once agreed upon between mentor and student the Program Director and mentor's home department must approve. Under some circumstances, a co-mentor may be required by the STBB program. Any co-mentoring plans must be approved by the Student Advisor and Program Director. Official transfers to thesis labs take place on July 1st. Under exceptional circumstances and at the discretion of the Program Director and Program Administrator, a student may be allowed to perform an additional rotation for enhancing their mentor selection process.

In the unlikely event that a student is unable to select a thesis mentor prior to the beginning of the fall semester of the second year of graduate training, the program reserves the right to dismiss the student from the program.

Thesis Advisory Committee (TAC)

Shortly after selecting a thesis mentor, the student (in collaboration with the mentor) shall assemble a Thesis Advisory Committee (TAC). The final composition of the committee is subject to the approval of the Graduate Training Committee and Program Director. The TAC shall consist of a minimum of five (5) Graduate Faculty members including the mentor. The majority the members, including the chair, must be STBB core training faculty. At least one of the members must be outside STBB faculty. The mentor should not chair the committee unless approved by the program director. There must be no financial or perceived conflict of interest between committee members and the student.

The TAC will serve an advisory function to the student and mentor and will help monitor progress in generating and/or collecting data to be used in the writing of the doctoral thesis. The TAC will also give formal permission to write the doctoral thesis once sufficient data have been collected and analyzed. The student must meet with the TAC at least once each year. These meetings are usually held shortly after a research in progress talk (see Yearly Seminar below). Records of the meetings and of research progress should be documented by the TAC chair with the Program Administrator. Failure to have a TAC meeting in the preceding 12 months will result in a student not being permitted to register for Spring Semester, or subsequent academic terms. In such cases, students will be permitted to register only after they hold a TAC meeting but may have to pay a late registration fee out of pocket.

The student must take the initiative to schedule TAC meetings. After each meeting, the TAC chair will complete a meeting report which will be sent to the student.

Second Year Seminar

No more than 12 months after entering a thesis laboratory, each student will schedule a Second Year Seminar. During this seminar they will outline the proposed thesis project and any progress to date. The student's Thesis Advisory Committee (TAC) and members of the faculty, student body and staff attend this seminar. The open attendance provides both the student and the advisor with an opportunity to receive ideas

and constructive criticism from a broad spectrum of individuals, ensuring that the proposed project is both suitable and achievable.

Comprehensive Exam

The University-based Comprehensive Examination is an orally defended research proposal taken at or near the end of the second year or beginning of the third year. It must be completed no later than the end of Fall semester of the 3rd year.

The Comprehensive Exam consists of three major components:

1. A written research proposal
2. A research proposal presentation
3. An oral defense of the proposal

The written proposal is usually based on the student's thesis work but can include other areas of study as well. The overarching question, hypothesis, approach and innovation will then be presented and defended orally. The student should demonstrate a workable knowledge of the field and related techniques of study to assure that independent work is imminent. The student's comprehensive exam committee judges the quality of the examination and makes recommendations for further academic advancement.

Under extenuating circumstances, and with the recommendation of the Program Director and concurrence of the Dean, the examination may be taken during spring of third year. A student cannot take the comprehensive examination with less than a 3.00 G.P.A. or before the Graduate School application is submitted and approved. The student must have 30 credit hours of coursework (not including STBB 8990) in order to take the comprehensive exam. Classes with less than a B- will not be accepted on the comprehensive application. If the student has any questions regarding which classes count, they can contact the Program Administrator.

The complete policy and procedure for taking the comprehensive exam is listed on the Graduate School website at https://graduateschool.ucdenver.edu/forms-resources/resources.

The student must be registered for at least one credit hour of Doctoral Thesis (STBB 8990) during the semester in which the examination if they have over 30 credit hours. No more than 10 credit hours should be taken. If the student does not have over 30 credit hours they can apply to their comprehensive exam, they need to register for STBB 7650 during the semester of their examination to count for the overall accepted credits.

Steps for preparation of the Comprehensive Examination

The necessary steps to schedule and take the comprehensive exam are as follows:

1. *Specific Aims Page and Pre-comps Meeting*
   Generally, the TAC acts as the Comprehensive Examination Committee, however the committee can be different if appropriate. The committee shall consist of a minimum of five (5) Graduate Faculty members. The majority, including the chair, must be from the STBB core training faculty. The thesis advisor may not chair the examination committee. At least one of the members must be from outside the STBB faculty.

   The student should first put together a specific aims page and organize a pre-comps meeting of the full committee plus the mentor. At the meeting the specific aims page will be discussed, and any changes suggested by the committee. The date for the exam should also be set at this meeting.

2. *Complete the Graduate School Comprehensive Examination Forms*

The Graduate School requires three forms be submitted before taking the University Comprehensive Exam. The student should work with the Program Administrator to ensure all forms are submitted appropriately. All forms and information are located at http://www.ucdenver.edu/academics/colleges/Graduate-School/current/Pages/resources.aspx

The following must be submitted to the graduate school at least 4-weeks prior to your exam

1. Application for admission to candidacy
2. Request for scheduling exam
3. Transfer of credit (if applicable)

3. *Submit a written research proposal*

You must submit the written research proposal to the TAC **at least two weeks prior to the scheduled examination date**. The proposal should outline an original investigation leading to innovation in structural biology and/or biochemistry.

The proposal will generally follow an NIH R01 grant format:

1. Total of 7 pages including the SA page, all text, figures, and tables, excluding bibliography and title page.
2. 11-point Arial font (single spaced)
3. 10 point font is allowed for figure legends (single spaced)
4. Margins should be ½" all around
5. Sections should include:
    - Specific Aims (1 page maximum)
    - Background and Significance (suggested 1.5 pages)
    - Innovation (suggested 0.25 page)
    - Preliminary Results (suggested 1.25 pages)
    - Research Design (suggested 3 pages)
    - Bibliography (no page limit)

Though the students can consult with anyone on the general nature and design of the research proposal and get general comments on the document, the written document produced must be solely the writing of the student.

4. *Oral Exam*

The student is generally given 10-15 minutes to give an overview of their proposal to the committee before the defense begins. During the oral defense portion of the exam, faculty members will test the student's knowledge not only regarding the proposal topic, but with respect to structural biology and biochemistry as a whole. The proposal provides a platform for the exam, but questions are not limited to what is in the written proposal. Rather, the committee will test the student's ability to plan and carry out hypothesis and/or discovery driven research, probe the depth of their knowledge, and test the student's ability to "think on their feet.". The student must demonstrate sufficient basic knowledge of the system in question, the ability to form of a relevant research question, the ability to design aims to test this question, sufficient knowledge of the proposed approaches (including their strengths and limitations), and the ability to interpret results with respect to the proposed question. The student should be prepared for broad-ranging questions covering any related topic. Good performance on this section of the exam is critical to a successful outcome.

At the conclusion of oral defense, the candidate will be excused, and the committee will deliberate to determine the result of the examination.

Examination Results

Pass
The student must receive the affirmative votes of a majority of the members of the committee in order to pass.

Pass with Conditions
The committee may feel that, although the student has passed the examination, they should complete additional work to be fully prepared to carry out their doctoral studies. This may be in the form of a written document, additional coursework, etc. These conditions must be satisfied within six months. The student will be considered to have "passed" when these conditions are satisfactorily met as determined by the committee chair. Failure to meet the conditions will result in failure of the examination.

Fail
In the event that the student fails the examination, they are subject to immediate dismissal from the PhD Program. . However, at the discretion of the Comprehensive Exam Committee and program director, they may be allowed to retake the examination once. The remedial exam will be in a form designated by the committee and must be completed within six months.

***Note:** The student must pay attention to the rules regarding registration for the correct number of thesis hours in the semester during which they will take the comprehensive exam in order to be eligible for it. If the student passes with conditions, they should register for thesis hours as if they had passed without conditions. If they fail, they will be required to meet registration requirements for the new examination.

Fellowship Proposals

All students must write a fellowship proposal during their tenure. The student should discuss with the program director, student advisory committee, and thesis mentor to decide which fellowship to apply for.

Yearly Update Seminars Post-Comps

Research in progress seminars should be given annually. These seminars provide a good opportunity for the student's TAC to review the student's progress and to invite input from the faculty as a whole, as well as afford the student opportunities to polish presentation skills. A TAC meeting should follow immediately or shortly after the seminar.

Publication Requirement

Prior to scheduling a final defense, each graduate student must publish (or have submitted for publication) one primary, or first-author, major publication. This requirement does not include a technique paper (major methods papers allowed) or a review. Any exceptions must be approved by the GTC and Program Director.

The Thesis Defense

Generally, the TAC serves as the Thesis Examination Committee, but can be different if appropriate and approved by the Program Director. As per School of Medicine rules, the Thesis Examination Committee shall consist in a minimum of five Graduate Faculty members. The majority of the members, including the committee chair, must be from the STBB core training faculty. At least one of the members must be outside the program's core training faculty. Once approved to write their thesis the student should work with the

committee to schedule their thesis defense. Pay close attention to the deadlines for the semester chosen for graduation (https://graduateschool.cuanschutz.edu/forms-resources/resources)

The student is strongly advised to work closely with the thesis mentor as they are writing their thesis to receive consistent feedback. However, you must present a complete draft to you mentor no later than 4 weeks prior to the defense date, and to the full committee no later than 2 weeks prior to the defense date.

Per Graduate School rules, the Program Director must approve the student's final Thesis Examination Committee membership and the examination schedule. The Request for the Exam and Biosketch must be submitted to the Program Administrator and Graduate School at least 4 weeks before the exam. These forms can be found on the graduate school website (https://graduateschool.ucdenver.edu/forms-resources). The Graduate School will send the final examination forms to the appropriate faculty members. The Program Administrator will post the notice of the examination, send out examination notices, and ensure examination rooms are reserved for the students.

For the defense, the student presents a 45-minute public seminar highlighting the contributions made to the understanding of a particular scientific problem by their dissertation work. Thereafter, the Committee will then examine the student about the thesis work. To pass the examination, the student must receive affirmative votes from the majority of the members of the Thesis Examination Committee. Thesis Examination Committee members may impose conditions before conferring a passing evaluation, or may require more extensive remedies before considering passing the student.

All members of the committee must be present for the examination. One member, but not the chairman nor the student, may participate by interactive video if absolutely necessary. The examination form is signed by each member of the Thesis Examination Committee and returned to the Program Administrator and Program Director. The student must receive votes from the majority of the Examination Committee for one of the following outcomes:

1. Pass
2. Pass with stated conditions
3. Fail

If a student passes the examination with conditions, those conditions must be satisfied within sixty days of the defense. The special conditions must be stated on the examination form and subsequently monitored by the committee chair in order to ensure that the conditions can be completed within the sixty days allotted. If a student fails the examination outright, they may be, at the discretion of the examination committee, dismissed from the program effective immediately.

Once the student is notified of a pass, they must circulate the thesis approval form to their committee for signatures, and then send it to the Program Administrator. The student must also submit their final thesis through ProQuest, work with the graduate school to make edits, and submit their final edits by the semester deadline. Failure to submit these documents will result in delayed graduation from the program.

Thesis Defense Checklist
☐ First author paper submitted
☐ Credits completed before or during the defense term
☐ Exam Committee assembled and defense date scheduled
☐ Thesis submitted to mentor for approval 4 weeks prior to defense date
☐ Request for Exam and Biosketch to the Program Administrator and Graduate school 3 weeks prior to the defense date
☐ Thesis submitted to Exam Committee 2 weeks prior to defense date
☐ All conditions/revisions met within 60 days of the defense date

Exit Masters Degree

A student who needs to leave the Program before completing their PhD should discuss this with the Program Director. Under extenuating circumstances and with due consideration a Masters Degree may be granted. To obtain a Masters Degree in STBB the student must write an abbreviated thesis, and successfully defend this thesis to their TAC. However, in contrast to the PhD, there is no publication requirement.

STUDENT SUPPORT

Student Financial Support

Ph.D. students in the Structural Biology & Biochemistry Program are provided a compensation package totaling $54,970. This includes health and dental insurance, tuition, and academic fees along with a $34,000/year stipend for living expenses. Students who receive full-support stipends from the University of Colorado Denver | Anschutz Medical Campus Ph.D. programs are required to pursue their training on a full-time basis, devoting each day of the normal work week, plus any additional time required by their research projects and academic courses. All future funding is dependent on satisfactory academic progress in the program and the selection of thesis mentor at the end of the first year. Once accepted into a thesis laboratory, the mentor will fund tuition, stipend, and benefits. It is very important that students successfully complete

the required research rotations during the first year in order to join a lab and maintain funding. Students are encouraged to rotate only with faculty who are able to provide future funding to the student.

Each student is responsible for books, housing, and any other expenses outside of tuition, health and dental insurance. The Program Administrator will obtain a copy of the students' University bill following registration for the current semester. The Program Administrator will ensure that all appropriate charges on the student bill is paid. It is only necessary to deliver a copy of the bill to the Program Administrator if there is a problem or question. Please note that students registering after the semester registration deadline set by the Office of Admissions & Records are assessed a late registration fee, which is the student's responsibility to pay pursuant to Graduate School policy.

Student expenses, including the stipend, will be paid until graduation as long as the following conditions are met:

1. Student maintains satisfactory academic progress
2. Student becomes eligible for in-state tuition after the first year.
    a. Students who fail to qualify for in-state residency will be responsible for the difference between in-state and out-of-state/international tuition.
3. Student passes the Preliminary Examination at the end of the first year.
4. Student passes the University Comprehensive Examination by the end of the second academic year.
5. Student's chosen thesis mentor is able to provide support during the research phase of the program.
    - If the advisor can no longer fund the student, it is the student's responsibility to make other arrangements. The program staff will assist in this effort to the best of their ability.
6. Student schedules the Dissertation Defense within approximately five years of entering the program.

Travel

A. Werner and Kitty HIRS Research Awards for Ph.D. Student Travel to National Meetings

A major gift to the Graduate School at the Anschutz Medical Campus has allowed the establishment of an endowed award for graduate students in the basic biomedical sciences at the Anschutz Medical Campus. The C. Werner and Kitty Hirs Graduate Student Enrichment Fund Awards may be used for any one of the following three specific purposes:

1. Travel awards to supplement support for Ph.D. students to attend national meetings,
2. Travel awards to facilitate Ph.D. students learning new techniques either through a visit to an out-of-state laboratory or by signing up for a hands-on technique course, such as the MBL course, and
3. Merit scholarships to aid in recruiting the "best and the brightest" Ph.D. students into the basic sciences at the HSC.

The travel awards can be made for up to $500 each. In accordance with Dr. Kitty Hirs' expressed wishes, the travel award for meeting attendance will be divided into two parts: $400 to be applied to travel expenses (e.g., registration, lodging, travel) and $100 directly to the student for personal expenses at the meeting (e.g., making it possible for the student to attend extra-meeting social events in which science is part of the conversation). Up to 20 "meeting" awards will be made each academic year. The travel awards for visiting another laboratory or attending a techniques course are to be applied only to travel expenses (e.g., travel and lodging). Up to 10 "techniques" awards will be made each academic year.

Eligibility:

1. The student must have successfully passed his/her comprehensive exam.
2. The student must be enrolled in a basic biomedical sciences Ph.D. program.
3. The student must have an abstract (first author) submitted and accepted for presentation at the meeting.

4. The student must submit an estimated budget to attend the conference.
5. The student's laboratory mentor must commit to providing any additional support necessary for the student to attend the meeting.
6. For attendance and presentation at a conference the award will be up to a maximum dollar amount of $500

Application Materials:
1. Application form
2. Student's CV
3. Abstract of the work to be presented at the meeting
4. A letter of acceptance from the organization holding the meeting.

Submittal Deadlines:
Applications must be submitted **one month** before the meeting. Applications should be submitted to the Dean of the Graduate School (in care of Elizabeth Downes, Finance and Accounting Coordinator, Elizabeth.Downes@cuanschutz.edu).

B. Structural Biology and Biochemistry Travel Awards
A limited number of travel awards are available through the STBB program:

1. Travel awards to supplement support for Ph.D. students to attend national meetings,
2. Travel awards to facilitate Ph.D. students learning new techniques either through a visit to an out-of-state laboratory or by signing up for a hands-on technique course, such as the MBL course, and
3. Travel to an Internship

The travel awards can be made for up to $500 each and potentially more for international travel or internship travel. The travel awards for visiting another laboratory or attending a techniques course or an internship are to be applied only to travel expenses (e.g., travel and lodging).

Eligibility:
1. The student must have an abstract (first author) submitted and accepted for presentation at the meeting.
2. The student must submit an estimated budget to attend the conference.
3. The student's laboratory mentor must commit to providing any additional support necessary for the student to attend the meeting.

Application Materials:
1. Application form
2. Student's CV
3. Abstract of the work to be presented at the meeting
4. A letter of acceptance from the organization holding the meeting.

Please visit the PSC website to make sure you are familiar with any travel restrictions that are in place due to COVID-19. These restrictions are fluid.

https://www.cu.edu/psc
https://www.cu.edu/psc/travel/psc-updates-related-coronavirus-travel

Tutoring
Tutoring is available on an individual basis. Students should contact the chair of the Student Advisory Committee immediately if they feel they need assistance with any course work, English, or writing.

Depending upon needs, some tutoring may be paid by the Graduate School or program to help ensure success.

Advising

Members of the advising committee and the Program Director are available for general advising. Students should meet with members of the advising committee regularly to ensure they are adhering to the graduate school rules and making sufficient progress towards their degree. Students are strongly encouraged to seek advising on any issues that they feel are inhibiting their academic progress or professional development.

Community Resources

- Reporting Acts of Discrimination: Office of Equity
- Professionalism Issues: Office of Professional Development
- General Student Concerns: Dean of Students
- External Resources: Stop AAPI Hate
- Mental Health Resources: Student and Community Counseling Center
- Mental Health Resources: Faculty & Staff Counseling

POLICIES AND PROCEDURES

Below are policies direct from the Graduate School regarding academic leave and the honor code. For a full list of graduate school recourses, academic policies, and procedures please see: https://graduateschool.ucdenver.edu/forms-resources/resources

Academic Leave Policy

Graduate school is a privilege; working in the biomedical research/academic field, whether as a graduate student, a postdoctoral fellow, or an independent investigator, is a time-honored and challenging profession that requires a high level of commitment and responsibility. Students who receive full-support stipends from the University of Colorado Denver | Anschutz Medical Campus Ph.D. programs are required to pursue their training on a full-time basis, devoting each day of the normal work week, plus any additional time required by their research projects and academic courses. Additionally, for a student to maintain full-time student status, the following guidelines for vacation and leave time have been established by the Graduate School. These represent the leave to which a graduate student is entitled; however, research demands and commitment to graduate studies often result in students using less than the allotted leave. Individual graduate programs might not have a formalized system for accounting for vacation and sick leave; if so, vacation and leave monitoring falls under the honor system and is the responsibility of the student.

- **Vacation and Holidays.** Graduate students shall receive all University holidays and no more than 14 calendar days (counting all days Monday through Sunday) of vacation per annum, with no year-to-year accrual. Students shall continue to receive stipends during vacations and holidays. In the Graduate School at the University of Colorado Denver | Anschutz Medical Campus, the times between academic terms and the summers are considered active parts of the training period and are not necessarily free times. However, students taking courses are expected to attend all classes and take all exams as scheduled. They should not take vacations when classes or exams are scheduled. For advanced students, vacation time should be arranged with the dissertation advisor.
- ***Sick Leave and Other Leave***. Graduate students may continue to receive stipends for up to 15 calendar days (counting all days Monday through Sunday) of sick leave per annum, with no year-to-

year accrual. Under exceptional circumstances, additional sick days may be granted following a written request and approval by the student's program director. Sick leave may be used for the *medical* conditions related to pregnancy and childbirth.

- ***Parental Leave*** – Graduate students may also receive stipends for up to 60 calendar days (counting all days Monday through Sunday) of parental leave per annum for the adoption or the birth of a child. Either parent is eligible for parental leave. Parental leave must be approved by the student's program director. Sick leave may not be used to supplement parental leave, except as noted above.
- ***Unpaid Leave*** – Individuals requiring more than 15 calendar days of sick leave or more than 60 calendar days of parental leave, must seek approval from their program for an unpaid leave of absence. Approval for a leave of absence must be requested in advance by the student and approved by the program. The leave period and conditions must be documented, both at the time of leave and at the time of re-entry into the program. A copy of this agreement must be submitted to the Graduate School.
- ***Termination*** – Upon graduation or termination a graduate student forfeits all unused annual and sick leave; payment may not be made from grant funds (training grants or research grants) for leave not taken.

Maintaining Good Standing

The University of Colorado Anschutz Medical Campus has a Student Code of Conduct. The Structural Biology & Biochemistry Program endorses and enforces this Code of Conduct. We strive to make our community a place of study and work where people are treated, and treat one another, with respect and civility. The Structural Biology & Biochemistry Program views the student conduct process as a learning and growth experience that aims to repair harm and can result in personal understanding of one's responsibilities and privileges. As members of the Structural Biology & Biochemistry community, students are expected to uphold standards that assist in promoting a safe and welcoming community. The full Code of Conduct can be found at https://www.ucdenver.edu/docs/librariesprovider122/health-and-wellness/cu-denver-student-code-of-conduct---final-with-suspension-update-9-16-20.pdf?sfvrsn=4d0ea7b9_2. A student who violates the Code of Conduct will be called before the Program Director and Student Advisor who may assign disciplinary action, up to and including dismissal from the program.

Each student is expected to maintain satisfactory academic progress. A student whose grade point average drops below a 3.0 is placed on academic probation. To be removed from academic probation, a student must achieve a GPA of 3.0 or above for the academic semester following the semester for which the student was placed on probation, and must achieve a cumulative GPA of 3.0 or above within two semesters of being placed on probation. A student who fails to be removed from academic probation within two semesters will be dismissed from the program.

Doctoral students are expected to complete all degree requirements within seven years of matriculation. Students who fail to complete the degree in this seven-year period are subject to termination from the Graduate School upon the recommendation of the Program Director and concurrence of the Dean. For a student to continue beyond the time limit, the Program Director must petition the Graduate School and include 1) reasons why the program faculty believe the student should be allowed to continue in the program and 2) an anticipated timeline for completion of the degree. Students who cannot complete requirements in the 7-year period will be required to retake a second comprehensive examination. The Graduate School may approve extensions for up to one year.

The student requirements described in this handbook must be met by the deadlines stated. The Program Administrator & Director monitor the progress of each student. If they conclude that a student is not meeting the program's requirements in a timely manner, they may request a meeting with that student. After review, the Program Administrator & Director may take any actions deemed appropriate, including placing

conditions on the student's continuance in the program or dismissing the student from the program. If a student is in jeopardy of missing a deadline or believes they are not achieving acceptable progress, the student should contact the Program Director immediately. Failure to notify the Program Director of problems in completing requirements can result in dismissal from the program.

CAMPUS RESOURCES

AMC Bookstore
https://cuanschutz.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?storeId=87741&catalogId=10001&langId=-1

The Anschutz Medical Center Bookstore provides the most complete inventory of Medical and Scientific books in the Rocky Mountain area. Over 3,000 titles are available for immediate shipment including an extensive selection of Medical titles in CD-ROM and PDA formats. Software is available at discounted education prices for faculty and students. Special orders for books and software are available for titles not in stock. The bookstore carries all books and products necessary for course work at the University Of Colorado Denver Anschutz Medical Center.

Location:
Anschutz Medical Campus
13121 East 17th Avenue
Education 2 South Bldg.,
Aurora, CO. 80045
303-724-2665 (4-BOOK)
The AMC Bookstore is located on the 1st floor of the Education 2 South. When you enter Ed 2, the bookstore is on the right from the lobby entrance.

Hours:

Monday-Thursday	08:30am-3:30pm
Friday	9am-3pm
Saturday	CLOSED
Sunday	CLOSED

Health Sciences Library
http://hslibrary.ucdenver.edu/
The UC Denver Health Sciences Library links people, reliable health sciences knowledge, and technology in support of effective learning, quality health care, vital research, and community service. The staff of the library strives for the highest quality services as they enhance access to the knowledge base of the health sciences, instruct users in information retrieval and management techniques, and acquire and organize a specialized collection of electronic, print and other resources in a cost-effective manner.

Location:
Health Sciences Library | University of Colorado Denver
Mail Stop A003
12950 E. Montview Blvd.
Aurora, CO 80045 | USA
Phone: 303-724-2152

Hours:

Monday - Thursday	7:00 am – 12:00 Midnight
Friday	7:00 am – 6:00 pm
Saturday	10:00 am – 6:00 pm
Sunday	10:00 am – 12:00 Midnight

Exceptions are posted on their website.

Recreation
Lounge 500, in the Fitzsimons Building is a lounge for all Anschutz Medical Campus students – it is accessible 24/7 with your student ID (which you will receive during your school/program orientation). The lounge includes billiards, ping pong, foosball, seating, and privacy rooms which can be used for breastfeeding,

prayer, naps (!), etc. Check out the space – it is right next to the Bookstore/ Food Court area on the first floor of Building 500. There are a few quadrangle areas which are good gathering places for volleyball, frisbee, football and other outdoor activities. You may checkout volleyball net sets, frisbees, etc., from the Student Assistance Office. 303-724-7686.

Intramural Sports

Flag Football - Fall – Commissioned by AMC Campus
Volleyball - Fall and Winter – AHEC
Basketball - Fall and Winter - AHEC
Flag Football is commissioned by AMC students.
Basketball and volleyball utilize the services of the Auraria Campus.

Fees for team sports at Auraria are typically $30/student player on a team. $50/guest (spouse, friend, roommate, etc.). Watch the www.ucdenver.edu/studentassistance website, as well as your @CUAnschutz.edu email for upcoming sports announcements.

Anschutz Medical Campus students are able to use the Recreation Facilities at the Downtown Campus of UC Denver. The Recreation Center is actually the property of Metropolitan State College of Denver, but all of Auraria and Anschutz Medical Campus students are able to use the facilities. You need to have your Anschutz Medical Campus ID (that means you can participate AFTER orientation). Go to http://www.msudenver.edu/campusrec/# for more information.

Other facilities and parks close to the Anschutz Medical campus include:

Moorhead Recreation Center
2390 Havana Street, Aurora, CO 80010 (303) 366 1718

Parklane Pool
3200 Tucson Street, Aurora, CO 80011 (303) 341-2650

Aurora Parks and Recreation:
General's Park (at the corner of Colfax and Peoria) Cottonwood Park, Sand Creek Park, Moorhead Park, Spencer Garrett Park, and Havana Park.

AMC Student Health Insurance Office

https://www.cuanschutz.edu/student/health-wellness/student-health-insurance

The Anschutz Medical Campus at the University of Colorado provides varied student needs in the area of health. The Student Health Insurance (SHI) Plan is designed to provide students with health care coverage offering a PPO accident and sickness health plan.

All degree and specific approved, certificate-seeking students enrolled in five or more credit hours must take the School of Medicine's Student Health Insurance Plan unless they can prove enrollment in other comparable insurance.

The Student Insurance Office is available to all students at the School of Medicine to assist with selecting or waiving the Student Insurance Plan. The Student Health Insurance Coordinator can help you evaluate your insurance needs so you choose the best plan available. If you are having problems understanding a bill, or you think an error has been made, don't hesitate to contact the Student Insurance Office. One of the functions of the Student Insurance Office is to help you resolve billing issues.

Contact:

Student Health Insurance Office
303-837-2127
studentinsurance@cuanschutz.edu

Parking and Transportation
The parking office is in Fitzsimons Building on the 1st Floor (west side of the Food Court seating area). Parking permit are available for the student rate. They also have maps and information on where to park, bike rack/bike locker locations, maps to get there, and other commuting options https://www.cuanschutz.edu/offices/facilities-management/parking-transportation-maps/parking

Public Transportation
The RTD College Pass is available to all active (enrolled) Anschutz Medical Campus degree seeking students (including the Dental ISP Program). A mandatory, student use fee per semester supports the pass. This fee is covered by the program along with tuition and other fees.

The AMC RTD College Pass INCLUDES all regular fixed route service, including bus (local, express, regional), light rail, call-n-Ride, and skyRide service (free to AMC students with RTD College Pass). Services NOT included in the RTD College Pass program are: access-a-Ride, BroncosRide, RockiesRide and other special event services.

For any term in which the degree-seeking student enrolls for academic credit at Anschutz Campus, the fee will be assessed. Waivers out of the College Pass Program will be allowed only for individual students who meet specific criteria, which are outlined in the Fee Waiver Application form. Detailed information about the Waiver process may be found on the Student Assistance website. For degree seeking students new to campus, the College Pass will not be available until the student their AMC ID Badge. For new students, the College Pass will be distributed by the Badging / Security Office during matriculation.

UC Denver Shuttle Service
The University offers a bus service to the Faculty, Staff and Students that runs between the Anschutz Medical Campus (AMC) and the Lawrence Street Center Building downtown (LSC). There are two designated BUS STOPS for pick up and drop off:

- In front of the Fitzsimons Building on the Anschutz Medical Campus (south side)
- In front of the main entrance to the Lawrence Street Center Building downtown

This service is free to UC Denver faculty, staff and students with University ID.

Student Assistance Office
http://www.ucdenver.edu/life/services/student-assistance

The Student Assistance Office's mission is to enhance student life at the Anschutz Medical Campus of the University of Colorado Denver by providing excellence in specific non-academic and academic student services.

Students who have been admitted into their respective school/program or who are currently enrolled can utilize the Student Assistance Office's many services during their tenure at the Anschutz Medical Campus. All students may utilize the services of this office.

Location:
Anschutz Medical Campus
Education II North
3rd Floor #3123
Aurora, CO 80045
303-724-7686

The Student Service Suite includes several offices -

- Bursar/Cashier
- Diversity and Inclusion
- Financial Aid
- Registrar
- Student Assistance
- Student Health Services/Student Health Insurance

These offices are centrally located on the 3rd floor of Education 2 North. The Student Assistance Office is responsible for maintaining smooth access to the variety of services utilized by students. In addition, the Student Assistance Office offers a variety of programming and services to all students at the Anschutz Medical Campus.

DIRECTORY

Core Training Faculty	Email	Office	Phone
Catherine Musselman, Ph.D. Program Director Assoc. Prof, Dept. of Biochemistry and Molecular Genetics	Catherine.Musselman@CUAnschutz.edu	RC1-S 9102	(303) 724-3208
Francisco Asturias, Ph.D. Assoc. Prof, Dept. of Biochemistry & Molecular Genetics	Francisco.Asturias@CUAnschutz.edu	RC1-S, 10104	303-724-3202
David Bain, Ph.D. Professor, Dept. of Pharmaceutical Sciences	David.Bain@CUAnschutz.edu	SOP 4117	303-724-6118
John Bankston, Ph.D. Asst. Prof, Physiology and Biophysics	John.Bankston@CUAnschutz.edu	RC1 N 7133	303-724-4909
Brad Bendiak, Ph.D. Assoc. Prof, Dept. of Cell & Developmental Biology	Brad.Bendiak@CUAnschutz.edu	RC1-S, 12113	303-724-3453
Carlos Catalano, Ph.D., PharmD. Professor, Dept. of Pharmaceutical Sciences	Carlos.Catalano@CUAnschutz.edu	SOP 4118	303-724-0011
Uwe Christians, MD Ph.D. Professor, Dept. of Anesthesiology	Uwe.Christians@CUAnschutz.edu	Bioscience C116	303-724-5665
Angelo D'Alessandro, Ph.D. Asst. Prof, Dept. of Biochemistry & Molecular Genetics	Angelo.Dalessandro@CUAnschutz.edu	RC1-S 9118	303-724-0096
Shaodong Dai, Ph.D. Assoc. Prof, Dept of Immunology and Microbiology	dais@njhealth.org	NJH	303-398-1504
Elan Eisenmesser, Ph.D. Assoc. Prof, Dept. of Biochemistry & Molecular Genetics	Elan.Eisenmesser@CUAnschutz.edu	RC1-S, 9117	303-724-3246
Kirk Hansen, Ph.D. Assoc. Prof, Dept. of Biochemistry & Molecular Genetics	Kirk.Hansen@CUAnschutz.edu	RC1-S, 9120	303-724-3324
Michael Holers, MD Professor and Division Head, Dept. of Rheumatology	Michael.Holers@CUAnschutz.edu	BDC, 3102E	303-724-7605
Larry Hunter, Ph.D. Professor, Dept. of Pharmacology	Larry.Hunter@CUAnschutz.edu	RC1-S, 6101	303-724-3574
Aaron Johnson, Ph.D. Asst. Prof, Dept. of Biochemistry and Molecular Genetics	Aaron.M.Johnson@CUAnschutz.edu	RC1-S 10th Floor	303-724-3224
David Jones, Ph.D.	David.Jones@CUAnschutz.edu	RC1-S,	303-724-

Assoc. Prof, Dept. of Pharmacology		6116	3600
John Kappler, Ph.D. Professor, Dept. of Integrated Immunology	kapplerj@njhealth.org	NJH Room K404A	303-398-1307
Jeffrey Kieft, Ph.D. Professor, Dept. Biochemistry & Molecular Genetics	Jeffrey.Kieft@CUAnschutz.edu	RC1-S, 9110	303-724-3257
Tatiana Kutateladze, Ph.D. Professor, Dept. of Pharmacology	Tatiana.Kutateladze@CUAnschutz.edu	RC1-S, 6112	303-724-3593
Daniel LaBarbera, Ph.D. Asst. Prof, Dept. of Pharmaceutical Sciences	Daniel.LaBarbera@CUAnschutz.edu	SOP 2101	303-724-4116
Maggie Lam, Ph.D. Assoc. Prof, Dept. of Medicine	Maggie.Lam@CUAnschutz.edu	RC2 8400	303-724-3520
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