

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO  
GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

GRADUATE PROGRAM IN CELL SYSTEMS & ANATOMY

## I. DESCRIPTION

The M.S. Degree Program in the Department of Cell Systems & Anatomy (hereinafter referred to as the Program) offers training in the areas of anatomical sciences and biotechnology. The curriculum prepares students seeking a Master of Science degree for a fulfilling biomedical career, in academic, industrial or clinical settings. The overall mission of the Program is to prepare the next generation of life-long learners and critical thinkers, prepared to design and execute innovative basic and translational research, and to address the most important and challenging knowledge gaps in basic biology, human health, and disease. There are two parallel tracks in the Program: Anatomical Sciences and Biotechnology with some overlapping requirements but distinct curricula. The program of graduate study (i.e. the track elected) leading to the Master's Degree will depend upon the student and the career for which the student is preparing. A Committee on Graduate Studies (COGS) oversees all aspects of Program (see Section III below).

## II. GRADUATE FACULTY

All tenured and tenure-track faculty with primary appointments in CSA are eligible to participate and mentor students as Supervising Professors in the Program. Non-3(l)-189(th)aTBT108.02 534.

for the Program. On a case-by-case basis and at the discretion of the M.S. Admissions Committee



presentation of the thesis proposal to COGS constitutes the oral qualifying exam. Copies of the proposal must be forwarded to the Academic Coordinator for distribution to all members of COGS at least one week before the presentation. It is the responsibility of the student and primary mentor to have the proposal delivered on time. Failure to do so will result in rescheduling the presentation to COGS. After the presentation, members of COGS will vote to accept the proposal as is or stipulate conditions for acceptance, or vote it unacceptable. Members of COGS will vote to accept the Supervising Committee as is or recommend additional members and/or changes to the composition. Once COGS approves the thesis proposal and the Supervising Committee, the student will be apply for admission to M.S. candidacy on IMPACT(see section V.d)

After admission to candidacy, all students must register for at least one semester of thesis hours prior to graduation. A student in the Biotechnology track must enroll in CSAT 6098 (Thesis) and an Anatomical Sciences track student must enroll in CSAT 6060 (Anatomical Sciences Thesis) for the final semester. The Supervising Committee shall continue to guide the student in selection of any additional courses and in the student's research.

After the proposal has been approved and the student admitted to candidacy, the student, in consultation with the mentor, shall organize regular meetings with the supervising committee at least twice a year (or more often if necessary) to inform about his/her progress on the thesis project. No later than one week prior to each meeting, the student shall submit to the committee a report of progress on the research, including statements of objectives of the research, methods, major results obtained, conclusions drawn, and proposed direction of future (remaining) work. The Supervising Committee shall evaluate the progress made by the student since the last meeting as well as overall progress to date and agree on the direction of future work to be undertaken. Each member shall complete an evaluation form for M.S. students (Attachment E1 for the first committee meeting and Attachment E2 for the second committee meeting and beyond). It is the student's responsibility to schedule the meeting and to give the completed and signed forms to the Academic Coordinator in a timely manner. If any member of the committee cannot attend a meeting, the student must apprise him/her of the student's progress at the earliest possible opportunity.

The committee shall also decide when the progress is sufficient to permit the student to commence with writing of the thesis. When the Supervising Committee is satisfied that research being conducted towards the thesis is near completion, it shall permit the scheduling of a defense in which the scholarly activity is presented first in a seminar, open to the public, which is then followed by a defense in a closed oral examination in front of the Supervising Committee (and any member of COGS that chooses to participate). Members of the committee will signify their permission by completion of GSBS Form 40 (Attachment H). The student and mentor are responsible for scheduling a mutually agreeable time for the committee. The Academic Coordinator manages scheduling of rooms for seminars and oral examinations through the Graduate School Office (see Attachment I) and sends out announcements to all Graduate Faculty and students about upcoming public defenses. It is the responsibility of the student and mentor to submit Form 40, thesis abstract and student vita to the Academic Coordinator at least two weeks prior to the defense (see section VI.b).

#### b. The Supervising Committee

The student and his/her Supervising Professor will provide COGS the names of the proposed members of the student's Supervising Committee (GSBS Form 42; Attachment G). The Supervising Committee must consist of:

- i.) the MS student advisor (Biotechnology Student Advisor/Anatomical Sciences Student Advisor) who will chair the committee. The role of the Chair is to maintain consistency of standards for student performance.
- ii.) Supervising Professor and at least two other faculty members from the Graduate Faculty.

- iii) One faculty member from another graduate program within the University of Texas Health Science Center, San Antonio but with a primary appointment in a different department (outside of CSA) at the institution.

Any exceptions to this prescribed committee structure must be justified in a memo to the COGS Chair from the student and his/her supervising professor. These requests will be reviewed by COGS and must be approved by a unanimous vote. The first duty of the Supervising Committee will be to assist the student in the planning of his/her project and in the preparation of a thesis proposal to be presented to COGS. It is the responsibility of the Supervising professor and the student to discuss the composition of the committee members with the Supervising Committee Chair.

c. Presentation of Thesis Proposal

The proposal for students in

- E. Use Arial, Helvetica, Palatino Linotype, or Georgia typeface, black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)
- F. Type density, including characters and spaces, must be no more than 15 characters per inch.
- G. Type may be no more than six lines per inch
- H. Paper Size: Use standard paper size (8 ½" x 11).
- I. Page Margins: Use at least one-half inch margins (top, bottom, left, and right) for all pages. No information should appear in the margins, including the student's name and page numbers.
- J. Page Formatting: Use only a standard, single-column format for the text. No two-column format since it can cause difficulties when reviewing the document electronically.
- K. Do not include any information in a header or footer of the attachments. A header will be system-generated that references the name of the student. Page numbers for the footer will be system-generated in the complete application, with all pages sequentially numbered.
- L. Figures, Graphs, Diagrams, Charts, Tables, Figure Legends, and Footnotes: You may use a

## VI. AWARDING OF THE M.S. DEGREE

### a. Time to Completion of Degree Requirements

M.S. students are expected to complete all degree requirements, including the defense, in approximately two years of full-time studies from date of matriculation. During the design of the thesis proposal, it is important for the student and Supervising Professor to plan for a two-year time frame from entry into the Program until successful defense. Supervising Professors mentoring students requiring more than two years to complete the thesis will be expected to seek approval from COGS for a time extension at least two months before the end of the student's fourth semester in the Program.

### b. Final Thesis Defense

To schedule the final defense, the student must submit Form 40 and 3 copies of abstract and vita to the Academic coordinator at least 3 weeks before defense; these documents will then be submitted to the Graduate Dean's office. A final draft PDF version of the thesis must be uploaded into ProQuest for formatting review by the Graduate Dean's office prior to defense. The publisher, Proquest/UMI,



COGS approved:



CELL SYSTEMS & ANATOMY  
COMMITTEE ON GRADUATE STUDIES (COGS) 2018-2019

Name	Position	Term Expires	Room	Phone	Email
Dr. Ramaswamy Sharma	Chair, COGS	2021	2.024V1	7-3845	sharmaR3@uthscsa.edu

Dr. Omid Rahim

## **Attachment B**

### **GUIDELINES FOR PROGRAM ADMINISTRATION BY THE FACULTY OF CELL SYSTEMS & ANATOMY**

Several faculty members will oversee the administration of the Cell Systems & Anatomy (CSA) Graduate Program as members of COGS. The members of COGS and the term of each position are:

**Chair of COGS** -3 yrs. Appointment by the Chair of Department and Program Director. A full time faculty member in

Attachment C

MS Degree Program in Cell Systems & Anatomy

Plan of Study Anatomical Sciences Track

First Year

Fall Semester		Semester Credit Hours
CSAT 5030	Basic Histology	1
CSAT 5060	Advanced Histology	2
CSAT 6060	Special Studies in Anatomy/Cell Biology	1.5
INTD 5047	Neuroanatomy	

Attachment D

## MS Degree Program in Cell Systems & Anatomy

### Plan of Study Biotechnology Track

#### First Year

Fall Semester		Semester Credit Hours
CSAT 6077	Eucaryotic Cell Biology	2
CSAT 6076	Eucaryotic Molecular Biology	2
CSAT 6096	Research Rotations	2
CSAT 5007	Methods in Cell Biology	1
TSCI 5070	Responsible Conduct Of Patient-Oriented Clinical Research	2
CSAT 5074	Introduction to Research	0.5
Total Semester Credit Hours		9.5

#### Spring Semester

CSAT 6097	Research	5
CSAT 5095	Experimental Design & Data Analysis	3
Total Semester Credit Hours		8

#### Second Year

#### Fall Semester

CSAT 6097	Research
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**Department of Cell Systems & Anatomy Graduate Program**  
**Evaluation by Committee Members**  
**Meeting 1**

Student Name:

Mentor Name:

Month/Year Matriculated:

Date of Meeting:

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

**Committee member: *Please comment on issues that particularly need improvement.***

1. Is the student attentive and hard-working?
2. Has a thesis project with a testable hypothesis been identified?
3. Does the project have a strong rationale / scientific premise?
4. Have potential committee

**Department of Cell Systems & Anatomy Graduate Program  
Evaluation by Committee Members  
Meeting 2 / 3 (circle as appropriate)**







**COMPOSITION OF SUPERVISING COMMITTEE  
MASTER OF SCIENCE DEGREE**

*Please TYPE all information. Submit this form with a computer file containing your proposal to the Office of the*



## **REQUEST FOR FINAL DEFENSE AND ORAL EXAMINATION**



## APPROVAL FORM FOR THESIS PROPOSAL

**This form must be signed by all local members of your Thesis Committee.**

The member of the committee who is located outside of the Health Science Center need not sign below, but he/she should be sent a copy of the proposal once it is approved by COGS.

We, the members of the Thesis Committee of \_\_\_\_\_, have seen, read, and approved her/his Thesis Proposal. We agree that it is ready for presentation to the Committee on Graduate Studies of the Cell Systems & Anatomy Program.

(Mentor)

(Member, CSA)

(Member, CSA)

(Member, CSA)



**PETITION FOR ADMISSION TO CANDIDACY  
for the degree of  
MASTER OF SCIENCE**

BU Yc Zgh Xbh ; fU UY d[c fUa

**GSBS Academic Record**

9b fY X d[c fUa 'Bj U T Ma L:

HU bc" gYa Yg f\ ci fg Wa d YX' 7i ai Uj Y; D5'

5" fci jY X Wi fg g Wa d YX'  Mg'  Bc'

**Qualifying Examinations**

- '9l Ua jU jcbg kUj YX
- '9l Ua jU jcbg dgg X'

Kf jbb' ..... SUY CfU ..... SUY

'Gj bU i fY g c Z E i U Z h j '9l Ua jU jcbg' 7ca a jBY  
.....  
.....

**Research Experience**

'Dch jU Z f d c X V j Y U b X b X b X b j Y g j U jcbg j V g U j U X V m i

'Gj bU i fY g c Z g i X b i g f g X U W U j l c f f L  
.....  
.....

**Admission to candidacy recommended by Committee on Graduate Studies:**

7C; G7 U f G j b U i f Y' ..... SUY

**APPROVED**

8Y U b G j b U i f Y' ..... SUY



**REPORT ON FINAL ORAL EXAMINATION**

We the undersigned, as the Supervising Committee of \_\_\_\_\_  
report that we have on \_\_\_\_\_ examined the candidate on the thesis and other  
Date  
subjects of the graduate program

**Granting of the degree of Master of Science**

**Recommended**

**Not Recommended**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Approval of recommendation for granting of degree:**

By Committee on Graduate Studies in \_\_\_\_\_  
Graduate Program

\_\_\_\_\_  
**Chair, Committee on Graduate Studies**

\_\_\_\_\_  
**Date**

**By Graduate Faculty Council**

\_\_\_\_\_  
**Dean, Graduate School of Biomedical Sciences**

\_\_\_\_\_  
**Date**

**Note: Please type all information**

Date: \_\_\_\_\_

**Memorandum**

Thesis       Dissertation

*To:*            Bindery/Library

*From:*        \_\_\_\_\_ (Department)

*Subject:*     Binding Materials for \_\_\_\_\_ (Name)

Title (All Caps): \_\_\_\_\_

Name as it should appear on spine (Last name, Initials): \_\_\_\_\_

Name as it should appear on the cover (First name Middle name/initials Last name): \_\_\_\_\_

Year: ---                      Contact info for student: \_\_\_\_\_

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Dear \_\_\_\_\_:  
(Student's name)

I am writing on behalf of the University of Texas Health Science Center at San Antonio (UTHSCSA) to ask your written permission to distribute the following digital work(s) online:

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We specifically request permission for the use of your copyrighted work(s) to:

1. Make extra copies of your works for preservation and backup purposes.
2. Display your work on the Web. (We will make your work available to the general public or restrict it to UTHSCSA faculty, staff and students only as you indicated to us.)
3. Distribute single copies of the work for educational and research purposes. If someone cannot use the online version of your work for some reason, we want to be able to print it out for them or provide it to them in a way that they can use. (Example: A person with mobility issues may not be able to use the online copy and want our staff to print it.)

4. Index or encode the work(s) so that they can be retrieved by a search engine. When we put your work into the repository, we will provide a description of the work so that the software we use and web search engines such as Google can index it and people can easily find it. (Note: If you have asked us to restrict your work to UTHSCSA only, it will not be available to web search engines.)

## Graduate Student Program and Administrative Support

Program:

Human Resources – Benefits Consultation

Stephanie Radassao, Ext. 7-3808

Room 227D, Medical School

Employment – Sanction Check (once)

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## UTHSCSA CSA MS Program Compact Between Graduate Students and Their Supervising Professors

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CSA MS training entails both formal education in advanced scientific knowledge and theory as well as research training under the supervision of one or more investigators who are qualified to fulfill the responsibilities of a mentor. A positive mentoring relationship between the student and the supervising professor is a vital component of the student's preparation for a successful biomedical career.

Individuals who pursue a biomedical graduate degree are expected





**Time off for Illness or University Holidays– Vacation Policy (HOP 4.3.5, 4.7.14)** (What is the laboratory policy for vacations, holidays, and personal days?)

**Conflict Resolution and Student Complaint Policies** (refer to [Student Catalogues](#), [GSBS website](#))

### **Additional Topics**

We have discussed all the above topics and made the mutually agreed upon additions, specifications and changes. We acknowledge our joint intention to re-evaluate the compact, the agreed upon milestones and the degree completion date at least once a year throughout the student's period of academic standing.

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Student's Name

---

Signature of Student

---

Date

---

Supervising Professor's Name

---

Signature of Supervising Professor

---

Date

This compact has been adapted from the [UT System Health Institutions Compact Between Graduatea](#)





- In collaboration with supervising committee, the supervising professor/mentor and the track advisor will provide the student with assistance in understanding the requirements for successful completion of thesis research.
- Experiences and information that will optimize the student's career opportunities and success to be provided by the supervising professor/mentor.

**U** **o** **8** **h**

<u>U</u>	<u>u</u>
Review of program requirements by COGS Chair	Incoming Student Orientation and the first class of "Introduction to Research", Fall Semester of Year 1
Mentor Selection and completion of mentor selection form	December 15 of Year 1
Review of degree (and track specific) requirements and academic plan of study by track advisor and mentor	During or before the third week of Jan of Year 1
Inclusion of student on mentor's research protocols (e.g. IACUC) and/or IRB approvals (if applicable)	Before Jan 15 of Year 1, before any research activities begin;
Selection of members of a thesis supervising Committee & start writing thesis proposal.	Before August 1 of Year 2
Have the thesis committee meeting, and get the proposal approved by the committee.	Before October 1 of Year 2
Thesis proposal prepared and presented to COGS for approval, and approval of the thesis committee by COGS	Before November 1 of Year 2
Application for approval of admission to MS candidacy	No later than end of Fall semester Year 2
Thesis completed, successfully defended, and approved by supervising committee and Graduate Faculty Council (GFC)	No later than May 15 of Year 2
Completion and filing of all paperwork required for graduation	No later than end of Spring semester Year 2
Submission of exit survey to the CSA program and Dean responsible for student affair in the Graduate Dean's Office	No later than end of Spring semester Year 2

Degree Completion Checklist for Students

- Review requirements for MS degree in CSA (including all required coursework) and Milestones and complete \_\_\_\_\_ with your mentor and assigned advisor. This should occur as soon as mentor/track selection occurs but \_\_\_\_\_ **K** \_\_\_\_\_
- Maintain active student status by registering for courses every fall and spring semesters except when on an approved leave of absence granted by the GSBS upon a recommendation by COGS
- Complete all required organized coursework, including Supervised Teaching
- Schedule and successfully complete required thesis proposal
- Together with your supervising professor/mentor, form your thesis supervising committee (membership must comply with the CSA MS Degree Program Guidelines)
- Have your thesis supervising committee approved by CSA COGS, and complete GSBS form 42
- Prepare and successfully present your dissertation proposal to CSA Graduate faculty
- Apply for Advancement to Candidacy, and complete GSBS Form 31.
- Enroll in required thesis hours and complete your thesis research
- Successfully complete defense of your written thesis
- Submit required documentation to the Graduate School for completion and graduation, and complete Form 41.

I, \_\_\_\_\_, have read this form and have had the opportunity to discuss the information contained in it with my mentor and student advisor. I understand the \_\_\_\_\_ t \_\_\_\_\_ und

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**INSTITUTIONAL REQUIREMENTS  
FOR THE  
HANDLING OF ANIMALS**

