





# *Master of Science in Clinical Investigation and Translational Science*

Program, Policies, and Guidelines

## **Table of Contents**

Page

# Table of Contents

	Page
<b>Manuscript Requirement</b> _____	<b>14</b>
<b>Coursework and Grading</b> _____	<b>15</b>
Required Courses _____	15
Research Course _____	16
Thesis Course _____	16
Elective Courses _____	16
Grade Requirement _____	17
Transfer of Coursework for Credit _____	18
<b>Class Attendance and Makeup Policy</b> _____	<b>19</b>
<b>Other MSCI-TS Program Requirements</b> _____	<b>19</b>
Laptop Computer Requirement	19
<b>Semi-Annual Student Evaluation</b>	

# Table of Contents

Page

*Appendices (Continued)*

**FORMS**

[Supervising Committee Approval of Research Project](#) (Checklist & Form) \_\_\_\_\_ 33

[Compact Between MSCI-TS Student and Supervising Professor](#) (Form) 35

[Semi-Annual MSCI-TS Student Evaluation](#)

UT Health San Antonio  
GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

*Master of Science in Clinical Investigation and  
Translational Science (MSCI-TS) Program*

***AIMS/OBJECTIVES***

The goal of this program is to prepare investigators skilled in the conduct of outstanding clinical and translational research in culturally diverse settings.

**The specific aims of the MSCI-TS Program are to:**

Support the intellectual environment at UT Health San Antonio (UTHSCSA) for the optimal training of future clinical and translational investigators.









## Tuition and Fees

***Tuition and Fees:*** Rates for in-state and out-of-state student tuition and fees are established by the institution and subject to adjustment. A summary of current rates is provided in the Appendix.

The UT Health San Antonio “[Excess Credit Hours Policy](http://catalog.uthscsa.edu/generalinformation/excesscredithourspolicy/)” can be found in the UT Health San Antonio Catalog at: <http://catalog.uthscsa.edu/generalinformation/excesscredithourspolicy/>. Under this policy a student who is enrolled in hours beyond the applicable credit hour limit will be charged out-of-state tuition.

***Foreign Nationals Applicants/Students in the MSCI-TS Program:*** Consistent with the aims of the MSCI-TS Program, the MSCI-TS COGS firmly believes that enrollment in courses related to the conduct of clinical investigation is directly relevant to the research education of fellows and trainees at UT Health San Antonio. As a consequence, denying access to the MSCI-TS courses to foreign national applicants/students potentially puts them at a disadvantage in their research education and experiences. Additionally, the MSCI-TS Program will directly benefit from the J-1 and H-1B visa programs because the skills taught in the MSCI-TS

their course by signing the GSBS non-degree seeking student's course card (provided by the GSBS Dean's office).

Course credit earned as a GSBS non-degree seeking student can be applied towards an MSCI-TS degree following formal application and acceptance into the MSCI-TS Program. A Master Degree in Clinical Investigation and Translational Science cannot be obtained as a GSBS non-degree seeking student. If an applicant has completed all required MSCI-TS courses as a non-degree seeking student in the GSBS, they must be eligible to enroll in the MSCI-TS course, Mentored Research in Clinical Investigation (TSCI 6097), at the time of application to the MSCI-TS program. Therefore, they must have identified a Supervising Professor, Research Supervising Committee, and submitted their Research Project Proposal documentation packet as part of their application.

## Degree Requirements

Successful completion of the MSCI-TS Program requires the satisfactory completion of all required coursework, completion of a MSCI-TS COGS approved Research Project Proposal, submission of a manuscript to a peer-reviewed publication, and the MSCI-TS COGS' approval of the student's manuscript.

Students who are accepted into the MSCI-TS Program are required to establish a Supervising Professor at either the time of application (encouraged) or within one year of admission to the program. Additionally, the student must establish their Research Supervising Committee after the establishment of their Supervising professor. It is the responsibility of the student to seek out a MSCI-TS Graduate Faculty member and establish their commitment to serving as their Supervising Professor.

**Coursework:** Thirty (30) semester credit hours (SCH) are required to obtain the MSCI-TS degree. Students must satisfactorily complete all *required courses*. Students must complete:

18 (SCH) of required courses

12 (SCH) of elective courses.

**Research Project Proposal:** One of the main requirements of the MSCI-TS degree is to have students produce a Research Project Proposal (RPP) under the direction of their Supervising Professor (SP) and their Research Supervising Committee (RSC).

**Manuscript:** Upon satisfactory completion of all required courses, students must submit a manuscript to a peer-reviewed journal and have the MSCI-TS COGS review and approve the manuscript for eligibility of candidacy for the MSCI-TS degree

In the event that a student identifies a Supervising Professor who is not a member of the MSCI-TS Graduate Faculty, the MSCI-TS COGS will separately assess the qualifications of that individual for recommendation to the GSBS for appointment to the MSCI-TS Graduate Faculty. Requests for consideration of appointment to the MSCI-TS Graduate Faculty may be considered concurrently with the evaluation of an individual to serve as a student's Supervising Professor.

Details and requirements for MSCI-TS Graduate Faculty appointment are provided in the MSCI-TS (Programmatic) Graduate Faculty section of the MSCI-TS Handbook. No Supervising Professor may have more than five (5) MSCI-TS students at a given point in time; exception to this limit requires special consideration by the MSCI-TS COGS.

The proposed Supervising Professor must submit a letter of commitment to be included in the student's Research Project Proposal documentation packet forwarded to the MSCI-TS COGS through the MSCI-TS Academic Programs Coordinator. The letter of commitment must include the following:

- Brief overview of the planned research project that has been reviewed and approved by the student's Research Supervising Committee.

- Explicit descriptio

# Research Project Proposal

***Research Project Proposal:*** The first duty of the Research Supervising Committee will be to assist the student in (1) planning his/her research project, and (2) approving the research proposal for review by the MSCI-

2. A letter of commitment f





TSCI 5075 (2 SCH)	Scientific Communication
TSCI 5080 (1 SCH)	Integrating Molecular Biology with Patient-Oriented Clinical Research Practicum (Prerequisite: TSCI 5073)
TSCI 6060 (2 SCH)	Patient-Oriented Clinical Research Methods -2 (Prerequisite: TSCI 5071)
TSCI 6061 (2 SCH)	Patient-Oriented Clinical Research Biostatistics – 2 (Prerequisite: TSCI 5072)
TSCI 6065 (2 SCH)	Health Services Research (Prerequisite: TSCI 5071 & TSCI 6060)

**Research Course:** In a given semester, MSCI-TS students **with an approved Research Project**



*Exemption of Required Course:* Exemption of the requirement for completion of a required course will be considered by the MSCI-TS COGS on a case-by-case basis. A written request for exemption of a required course must be submitted to the MSCI-TS Program Director through the MSCI-TS Academic Coordin

# **Class Attendance and Makeup Policy**







## Completion of the MSCI-TS Program

***Recommendation for Granting the MSCI-TS Degree:*** Upon satisfactory completion of all degree requirements, the MSCI-TS COGS must review and approve the recommendation for graduation; the MSCI-TS COGS Chair will then submit a recommendation form to the GSBS Graduate Faculty Council (GFC) through the Dean of the GSBS for further consideration and approval.

***Time-to-Master's Degree:*** It is expected that that the MSCI-TS Program can be completed in 2 years of full-time work. Part-time students may require 3 to 4 years to complete the degree requirements. If an MSCI-TS student who enrolled full-time has not graduated in 3 years (or a part-time student has not graduated in 4 years), the MSCI-TS COGS Chair will form a special committee independent of the Student's Research Supervisory Committee to review progress with the student and his/her advisor. The special committee's responsibility will be to either recommend a course of action to expedite graduation or recommend termination of the enrollment of the student in the program.



# Helpful Online Connections



**2019-2020**



**Polly H. Noel, PhD**  
Family & Community Medicine

**Michael Odom, MD**  
Pediatrics/Neonatology

**Alexis Ortiz, PT, PhD**

**Martin G. Schwacha, PhD**  
Surgery

**Wayne H. Schwesinger, MD**  
Surgery

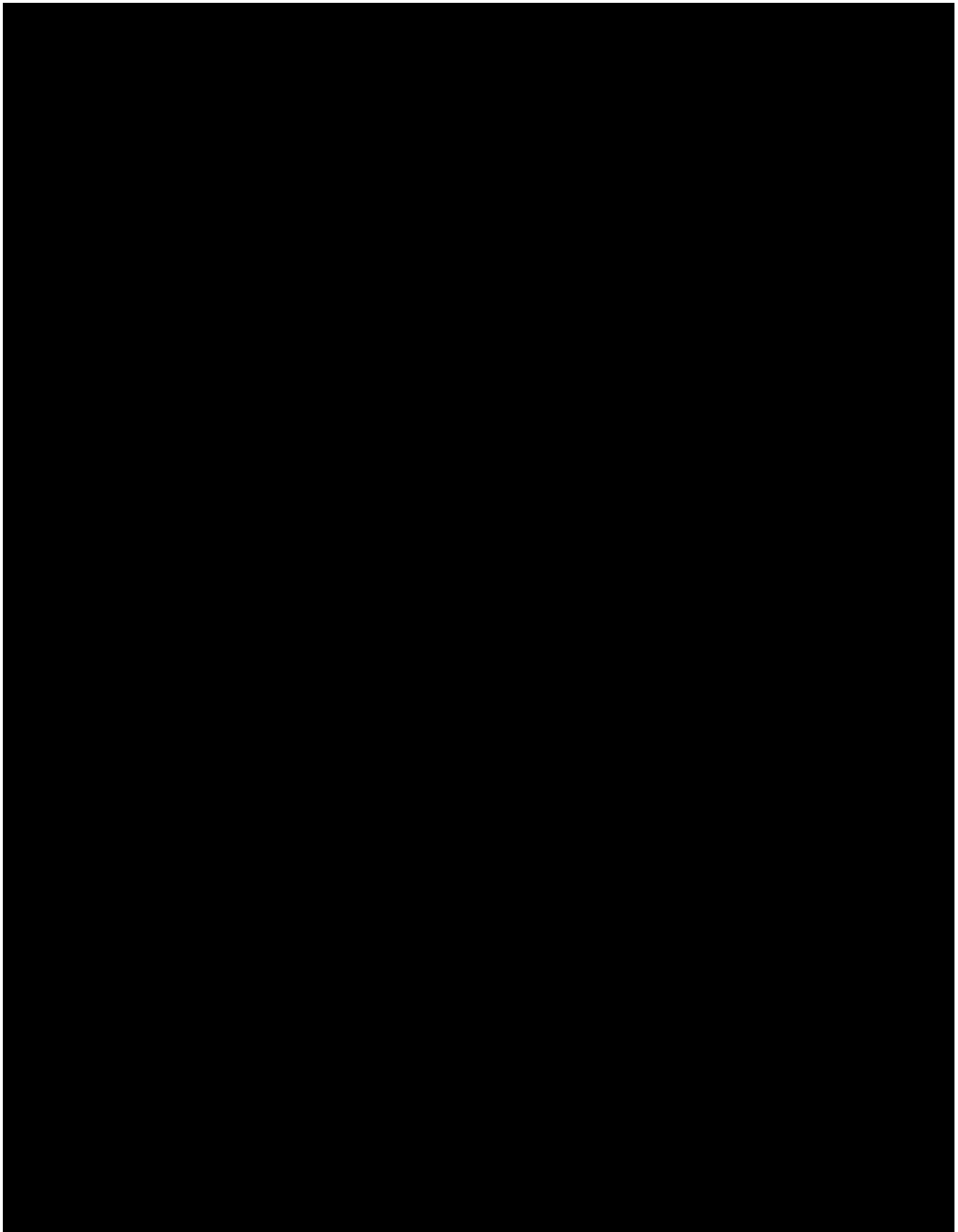
## Typical schedule for a full-time MSCIT-S Student

### Year 1 – Fall Semester

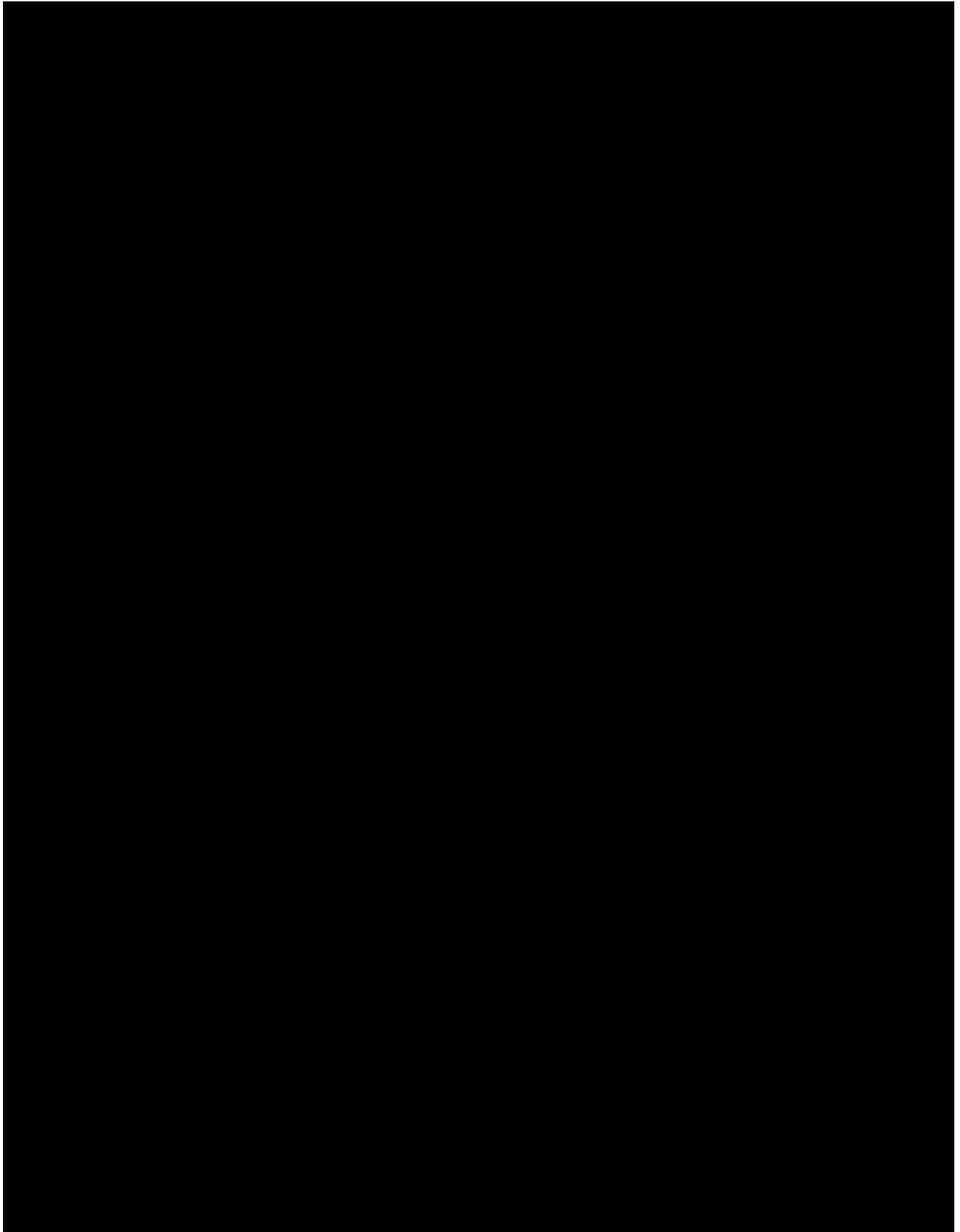
- TSCI 5070 (2 SCH) – Responsible Conduct of Research
- TSCI 5071 (2 SCH) – Patient Oriented Clinical Research Methods -1
- TSCI 5072 (2 SCH) – Patient Oriented Clinical Research Biostatistics -1
- TSCI 5075 (2 SCH) – Scientific Communications

### Year 1 – Spring Semester

- TSCI 5073 (1 SCH) – Integrating Molecular Biology with Patient Oriented Clinical Research
- TSCI 5074 (2 SCH) – Data Management, Quality Control, and Regulatory Issues
- TSCI 6061 (2 SCH) – Patient Oriented Clinical Research Biostatistics -

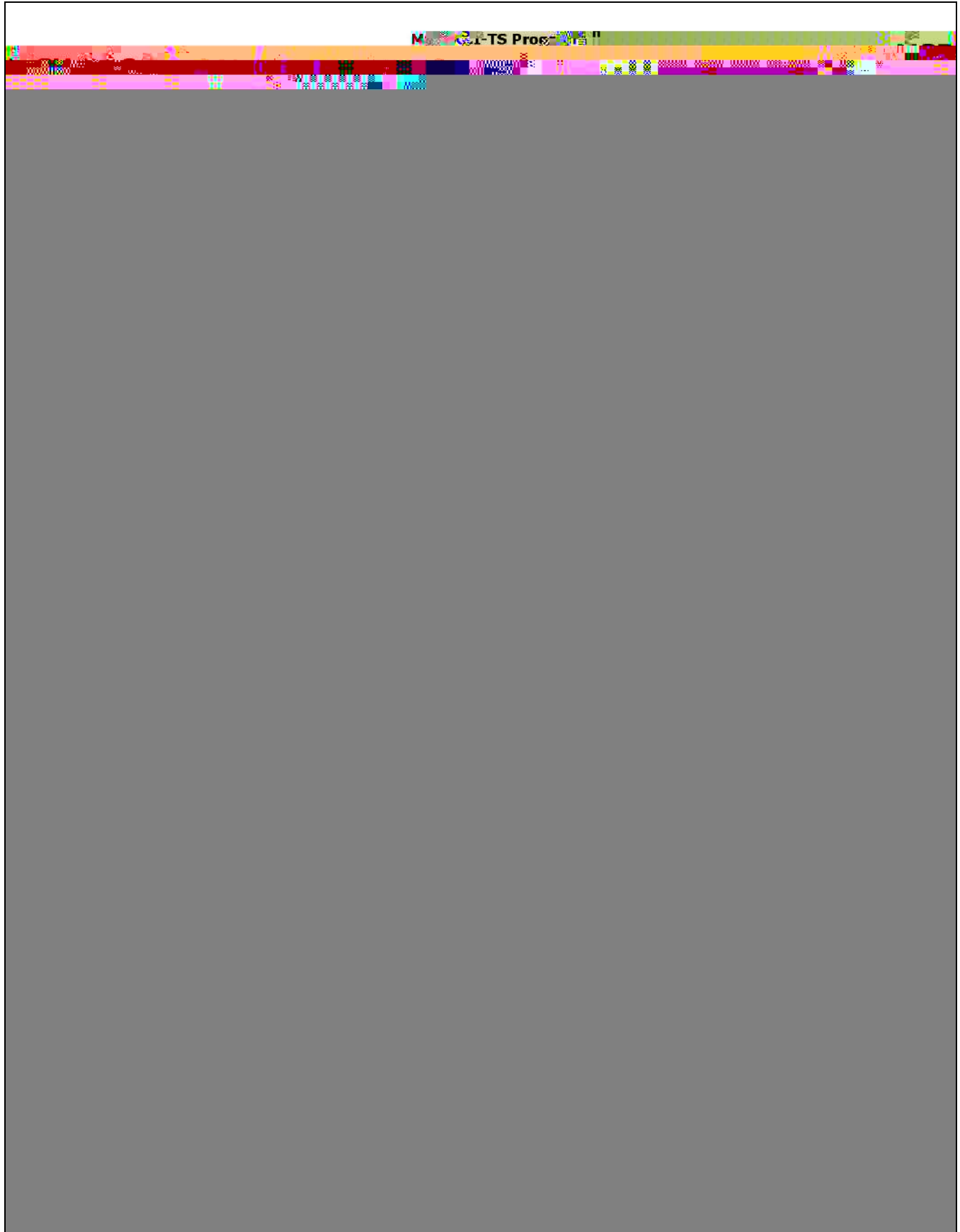


[“Click here for all MSCI-TS Forms”](#)





Master of Science in Clinical Investigation and Translational Science 2019-2020











6



MSCI-TS Program

SEM 7







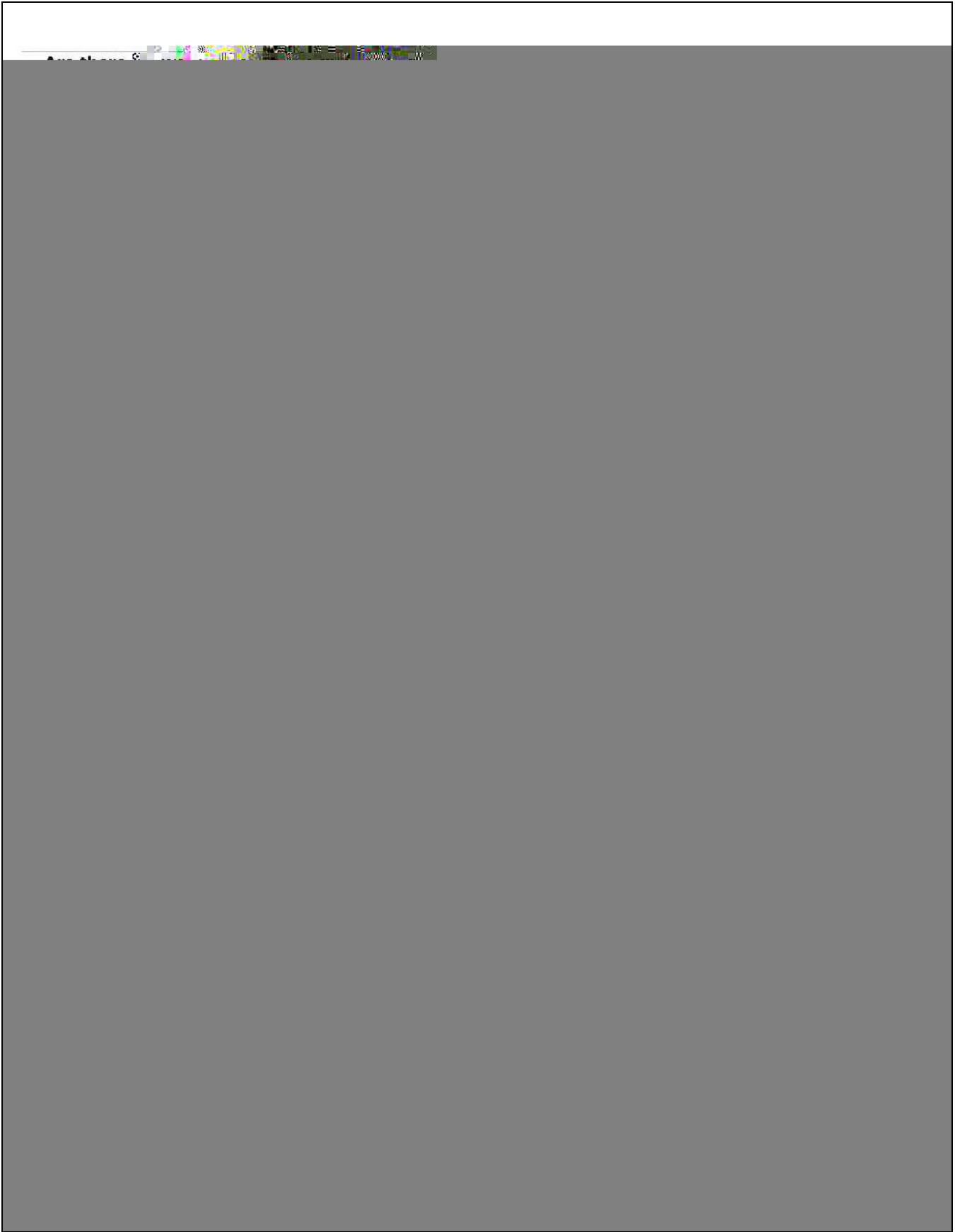


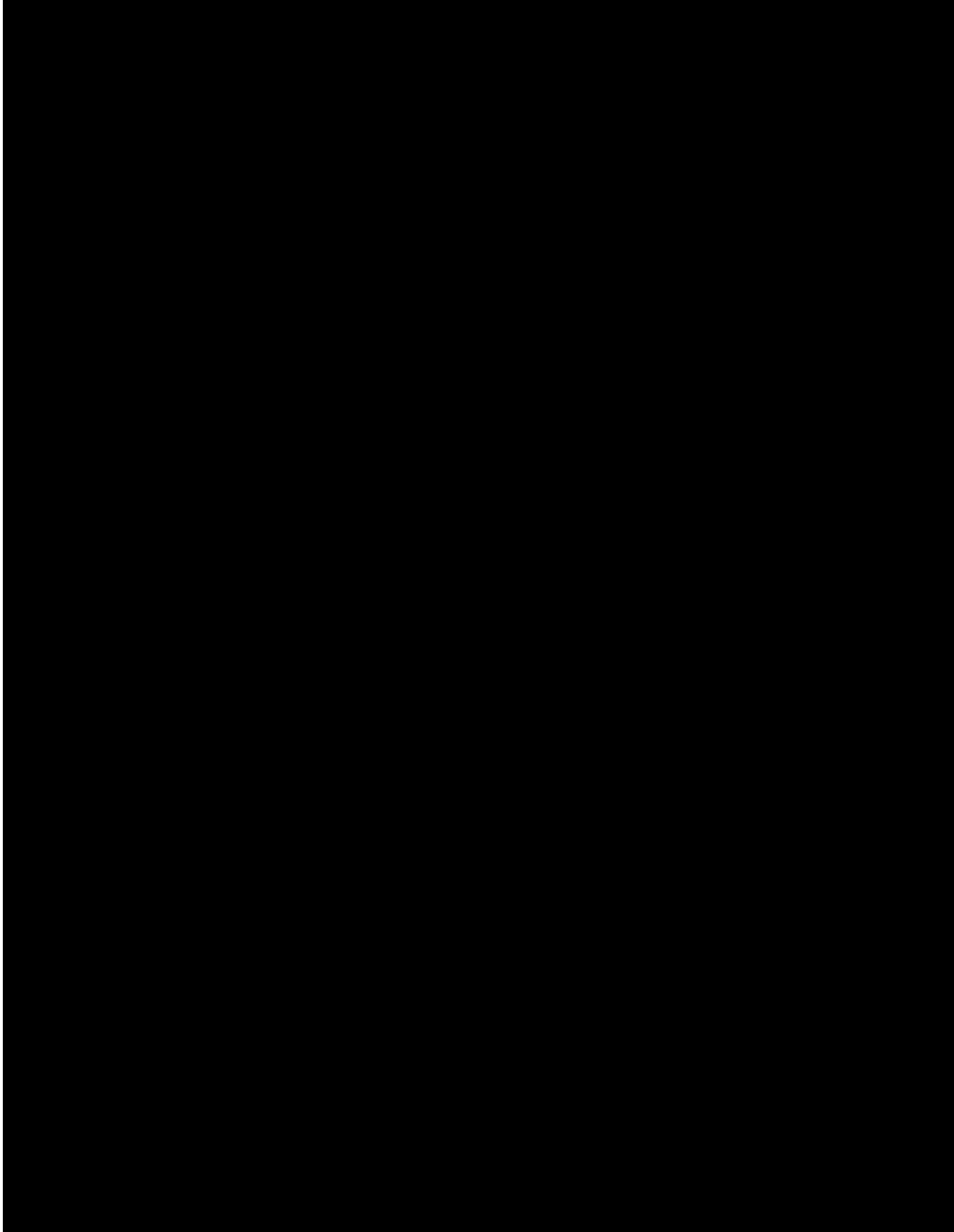


• Extramural 

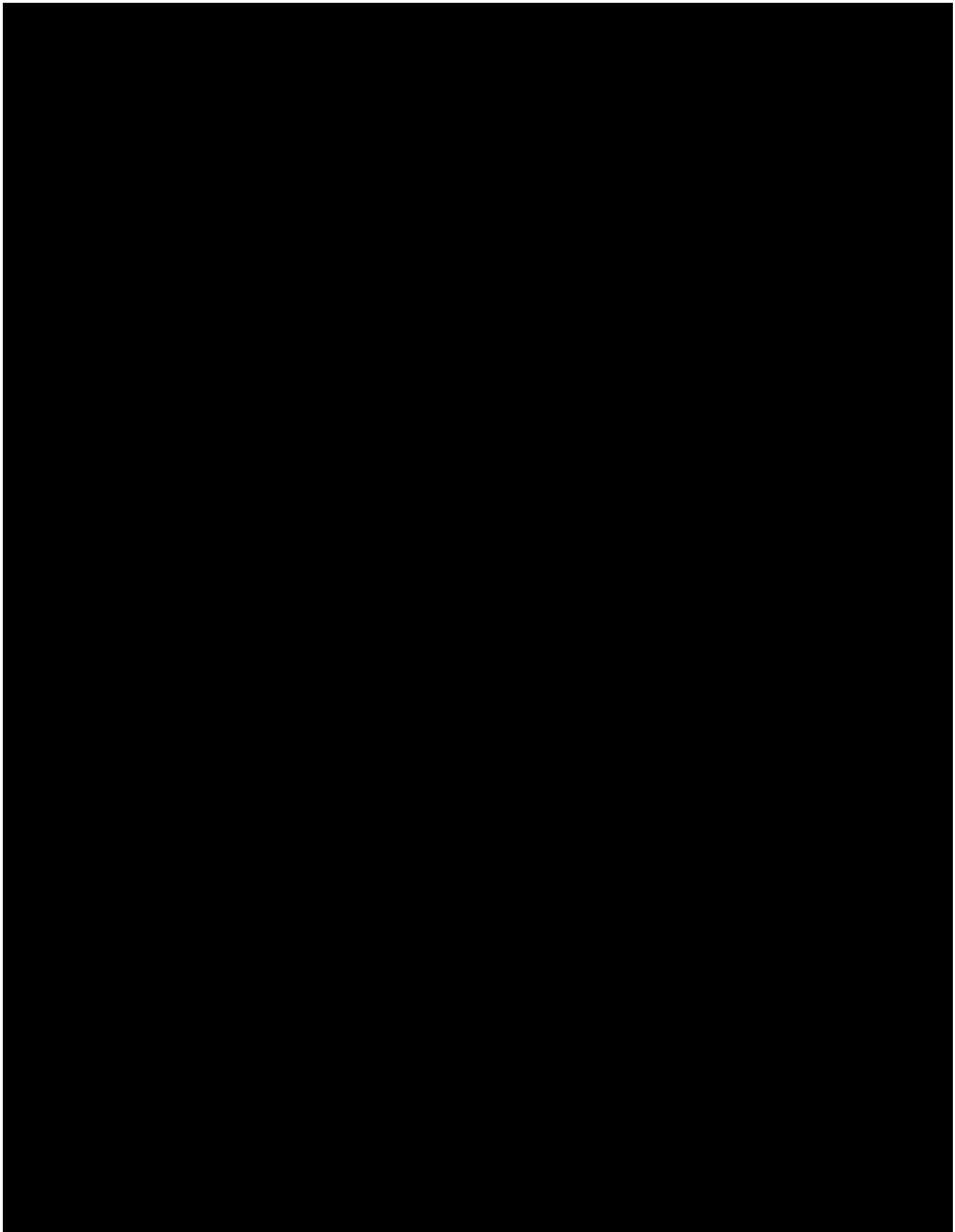








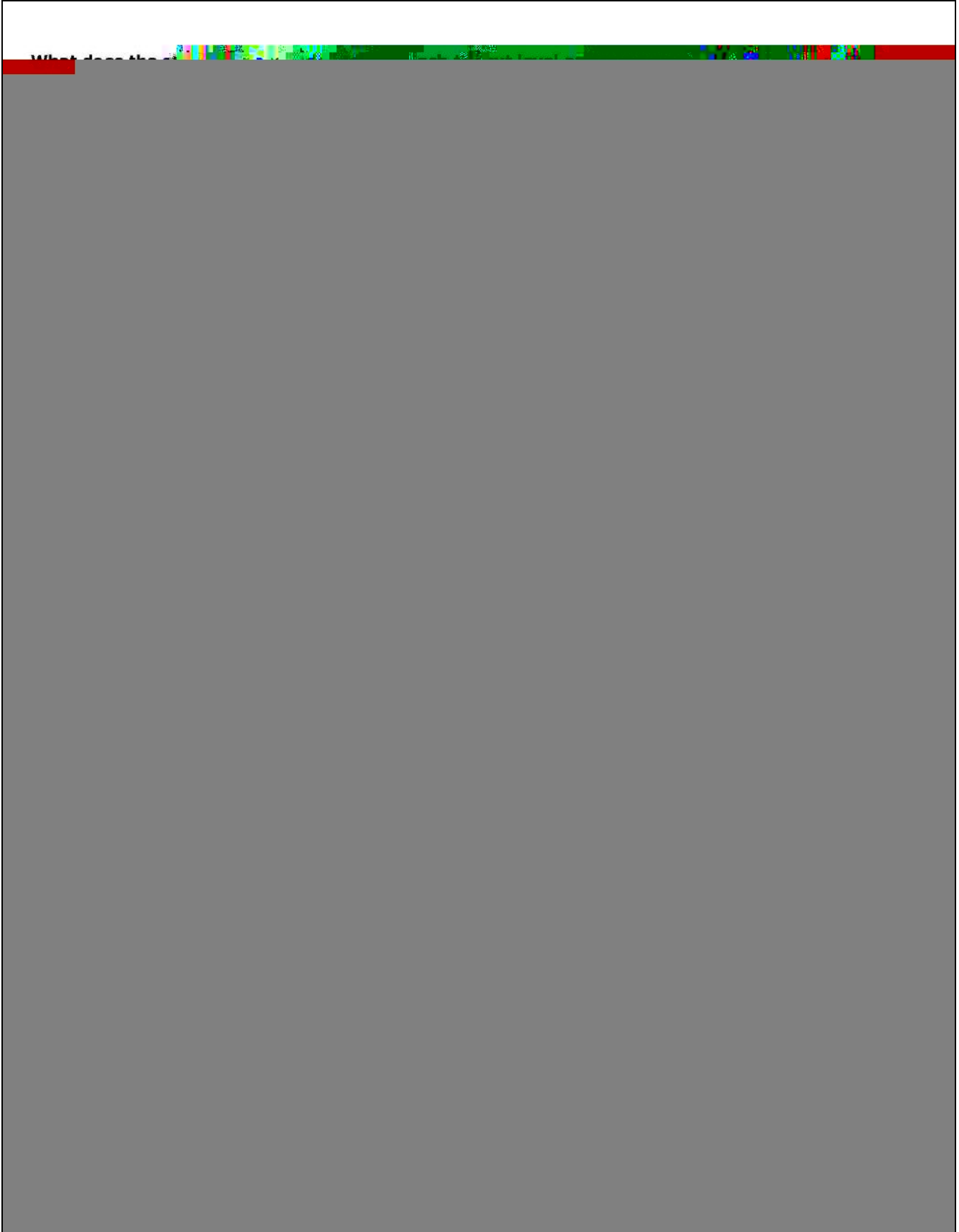


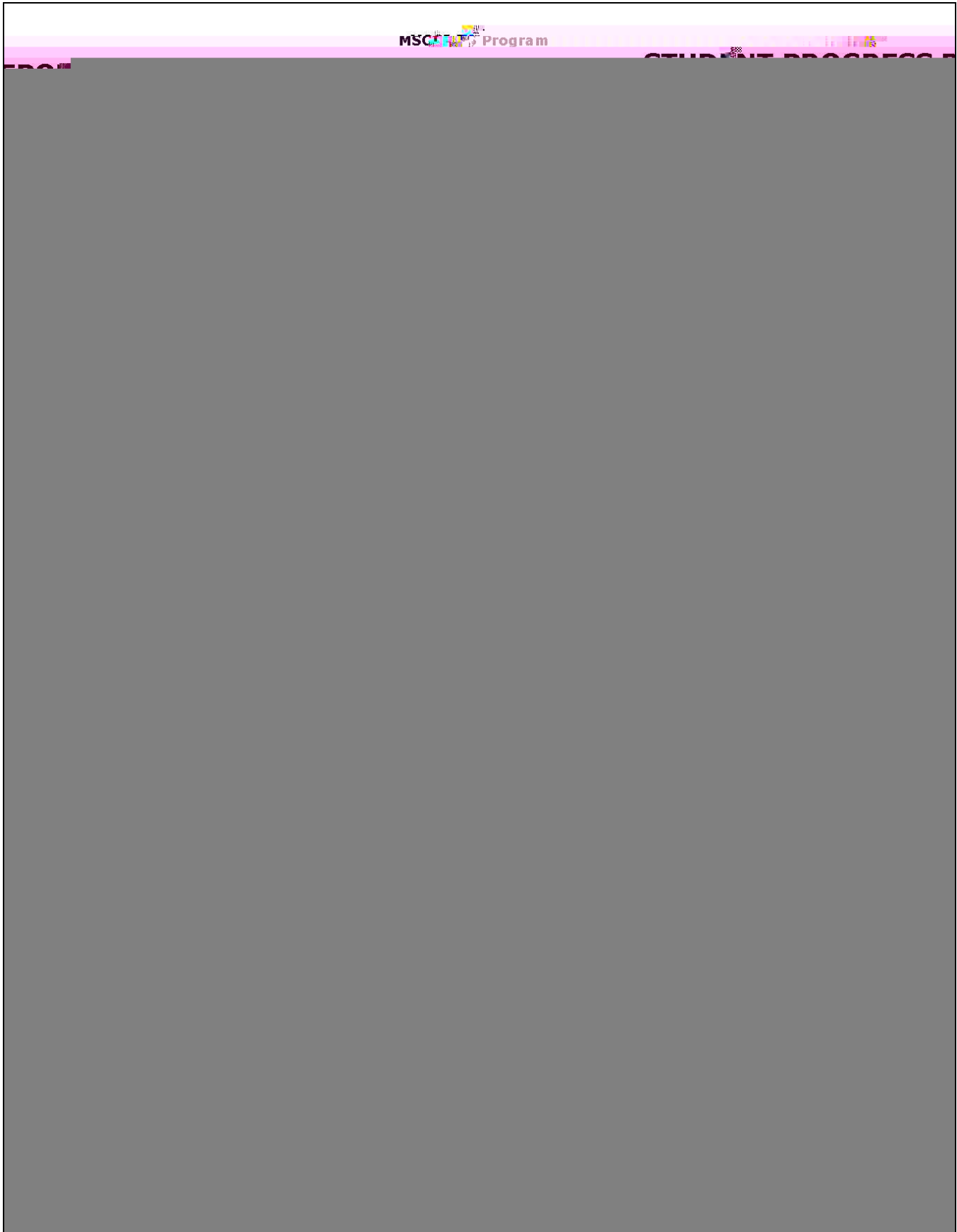


Describe what further research activities you will be conducting during your postdoctoral fellowship.







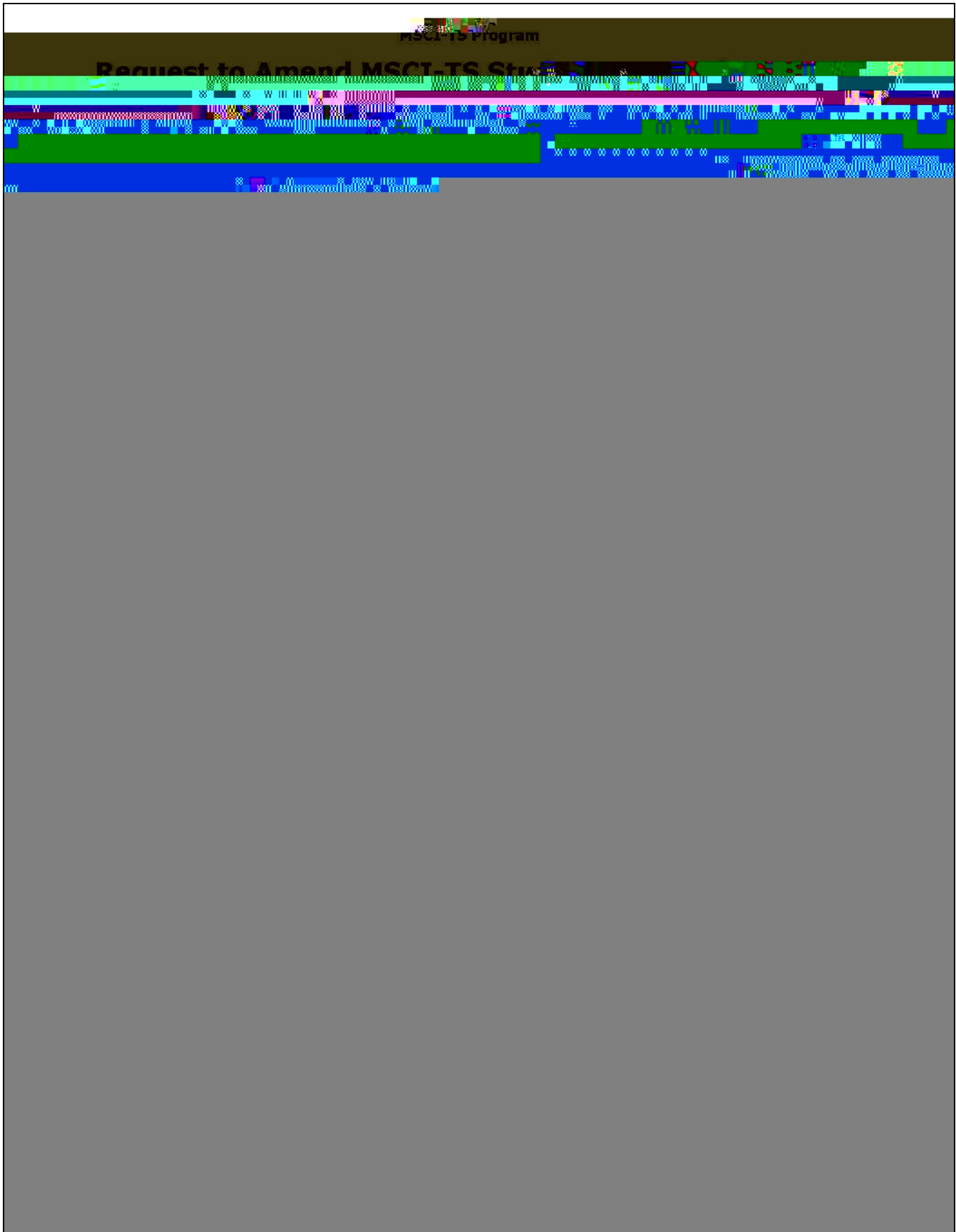


















### **TSCI 5079 Practicum in Intellectual Property, Technology Transfer and Commercialization**

1.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Consent of the Course Director*

Course Director: Leonid Bunegin, BSc

This *elective* course provides an opportunity for participation in unique clinical and translational research activities that focus on the processes involved in the protection of intellectual property and the transfer and commercialization of technology. Activities are highly individualized for each student on the basis of prior experience and research interests.

### **TSCI 5080 Integrating Molecular Biology with Patient Oriented Clinical Research Practicum**

1.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Consent of the Course Director*

Course Director: Goutam Ghosh-Choudhury, PhD

This is the required practicum to TSCI

**TSCI 6061 Patient-Oriented Clinical Research Biostatistics 2**

2.0 Semester Credit Hours (SCH)

*Prerequisite: Patient-Oriented Clinical Research Biostatistics -*

societal challenges ahead. Genomics in cancers is an active area in personalized medicine, and this topic will be discussed by a local cancer genomics expert. The course will also provide an introduction and overview of current applications of gene therapeutics to a variety of disorders. By the end of the course, students will have a working knowledge of the human genome and the tools for integrating this information into clinical research as well as conveying it to patients.

### **TSCI 6069 Statistical Issues, Planning, and Analysis of Contemporary Clinical Trials**

2.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Patient-Oriented Clinical Research Biostatistics – 1 and Patient-Oriented Clinical Research Biostatistics – 2*

Course Director: Jonathan Gelfond, MD, PhD

This *elective*

### **TSCI 6098 Thesis**

1.0 Semester Credit Hours (SCH)

*Prerequisite: An approved Supervising Professor, Supervising Committee, and research project in the MSCI-TS program.*

Course Director: Donald M. Dougherty, PhD

Registration for one semester is required of MSCI-TS degree candidates.

### **TSCI 6100 Practicum in IACUC Procedures**

1.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Consent of the Course Director*

Course Director: Rodolfo Trevino, MS, CPIA

This *elective* course presents an in-depth introduction to the institutional program that provides oversight and regular review of projects that involve the care and use of animals. This includes consideration of the operational procedures of the Institutional Animal Care and Use Committee (IACUC) of The UTHSCSA. Course objectives are achieved through a combination of readings, monthly attendance at selected IACUC meetings, and discussions with faculty.

### **TSCI 6101 Topics in Translational Science**

1.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Consent of the Course Director*

Course Director: Christopher Frei, PharmD, MSc

This *elective* course addresses selected topics in translational science through a series of lectures, assigned readings, literature reviews, class presentations, and discussions with faculty.

### **TSCI 6102 Practicum in IRB Procedures**

1.0 Semester Credit Hour (SCH) (elective course)

*Prerequisite: Consent of the Course Director*

Course Director: Meyad Baghezza, BA, CIP

This *elective* course presents an in-depth introduction to the institutional program that provides oversight and regular review of research projects that involve human subjects.



## **MSCI-TS Contact Information**

Donald M. Dougherty, PhD

**Program Director**

210-567-4304 (voice)

[Doughertyd@uthscsa.edu](mailto:Doughertyd@uthscsa.edu)

Alex Machuca

**Academic Programs Coordinator**

IIMS/Office of Research Education and Mentoring

Main Campus, 7.742F, MED

210-567-4304 (voice)

[Machuca@uthscsa.edu](mailto:Machuca@uthscsa.edu)

**MSCI-TS Program**

UT Health at San Antonio

7703 Floyd Curl Drive

San Antonio, Texas 78229-3900

This educational program is supported in part by a grant provided by the National Center for  
Advancing Translational Science of the National Institutes of Health  
(UL1 TR002645)

Responsible Conduct of Patient-Oriented Clinical Research    Patient-Oriented Clinical Research Methods    Patient-Oriented  
Clinical Research Biostatistics    Integrating Molecular Biology with Patient-Oriented Clinical Research    Data Management,  
Quality Control, and Regulatory Issues    Grantsmanship and Peer Review    Health Services Research    Instrument Validation  
and Development    Genetics and Genetic Epidemiology    Cross Cultural Adaptation of Research Instruments    Practicum in