Introduction to Translational Science

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 Operations and Genetic Epidemiology • Cross Cultural Adaptation of Research Instruments • Introduction to Translational Sc of Patient-Oriented Clinical Research

Patient-Oriented Clinical Research rogram, Policies, and soft of the Health State of the Sta Oriented Clinical Research Services Research

Instrument Validation and Development

Genetics and Genetic Epidemiology

Cross Cultural Adaptation of Research Instruments

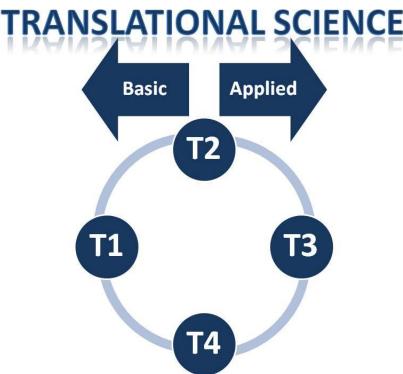
 Introduction to Translational Science
 Responsible Conduct of Patient-Oriented Clinical Research Patient-Oriented Clinical Research Methods • Patient-Oriented Clinical Research Biostatistics • Integrating Molecular Biology with Patient-Oriented Clinical Research • Data Management, Quality Control, and Regulatory Issues • Grantsmanship and Peer Review • Health Services Research

Instrument Validation and Development
Genetics and Genetic Epidemiology
Cross Cultural
Cross Cultural ficate in Translational Science (C Adaptation d Clinical 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 • Introduction to Translational Science • 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 Descench Instruments
Thereduction to Translational Science Responsible Conduct

of Patient-Oriented Biostatistics • Inte Regulatory Issues • Genetics and Genetic E Responsible Conduct or **Research Biostatistics** and Regulatory Issues Genetics and Genetic E Responsible Conduct o[.] **Research Biostatistics** and Regulatory Issues Genetics and Genetic E Responsible Conduct of **Research Biostatistics** and Regulatory Issues Genetics and Genetic E Responsible Conduct o[.] **Research Biostatistics** and Regulatory Issues Genetics and Genetic E



ted Clinical Research , Quality Control, and n and Development • anslational Science tient-Oriented Clinical ement, Quality Control, on and Development • anslational Science tient-Oriented Clinical ement, Quality Control, on and Development • anslational Science tient-Oriented Clinical ement, Quality Control, on and Development • anslational Science tient-Oriented Clinical ement, Quality Control, on and Development • anslational Science

Introduction to Translational Science • 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 Biostatistics Integrating Molecular Biology with Patient-Oriented Clinical Research Instruments Introduction to Translational Science inplementation of Patient-Oriented Clinical Research Methods Patient-Oriented Clinical Research Patient-Oriented Clinical Research Patient-Oriented Clinical Research Patient-Oriented Clinical Research Patient Patient-Oriented Clinical Research Patient Patient-Oriented Clinical Research Patient Patient Patient-Oriented Clinical Research Patient Patient Patient Patient-Oriented Clinical Research Patient Patient Patient-Oriented Clinical Research Patient Pati

CTS Program policies and guidelines are in compliance with those established by the UT System (<u>http://www.utsystem.edu/</u>) Board of Regents (<u>https://www.utsystem.edu/offices/board-regents/regents-rules-and-regulations</u>), The UT Health San Antonio (<u>http://www.uthscsa.edu/hop2000/</u>), and the Graduate School of Biomedical Sciences (<u>http://gsbs.uthscsa.edu/</u>). The *Catalog* (<u>http://catalog.uthscsa.edu/</u>) of UT Health San Antonio provides general information and regulations that relate to students. In the event of discrepancies between MSCI-TS Program policies/guidelines and those established by UT governing components, those described by the governing components will prevail.

Please note that the policies of the CTS Program are regularly reviewed and updated; therefore, this printed copy may not be the most current. Current policies are provided in the CTS Handbook that is electronically available at the CTS website: <u>http://iims.uthscsa.edu/ed_certificate_in_ts.html</u>



CTS Program IIMS/OREM – MC 7757 UT Health San Antonio 7703 Floyd Curl Drive San Antonio, Texas 78229-3900 210-567-4304 (voice) E-mail: <u>machuca@uthscsa.edu</u>

UT Health San Antonio is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (<u>http://www.sacscoc.org/</u>) (1866 Southern Lane, Decatur, Georgia 30033-4097; telephone number 404-679-4501) to award certificates, and baccalaureate, master's, doctoral, and professional degrees.

Certificate in Translational Science Program, Policies, and Guidelines — Graduate School of Biomedical Sciences Copyright © 2020 UT Health San Antonio

Certificate in Translational Science (CTS)

Program, Policies, and Guidelines

Table of Contents

Aims/Objectives
Admission Requirements
Applicant Document Requirements
Application Process
Tuition and Fees
Student Pathways in the CTS Program
Regular Students
Full-time Students
Part-time Students
Faculty and Staff as Students in the CTS Program
Non-degree Seeking Students in the Graduate School of Biomedical Sciences (GSB
Certificate Requirements
Coursework
Required Courses
Elective Courses
Timeline for Coursework
Grade Requirement
Transfer of Coursework for Credit
Class Attendance and Makeup Policy
Other CTS Program Requirements
Laptop Computer
Ethics and Professionalism Policy
Completion of the CTS Program
Recommendation for Granting the CTS
Time-to-Certificate
Helpful Online Connections
Appendices
Contact Information

UT HEALTH SCIENCE SAN ANTONIO GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Certificate in Translational Science (CTS)

AIMS/OBJECTIVES

The goal of this program is to provide graduate students, postdoctoral fellows, faculty, and other health care professionals with formal education in the essential components of translational science. That is, the advancement of scientific discoveries made in basic biomedical research towards clinical applications and improvements in human health. This training program will prepare professionals to integrate within interdisciplinary investigative teams for the conduct of clinical and translational research in culturally diverse settings.

The specific aims of the CTS Program are to:

- Support the intellectual environment at UT Health San Antonio for clinical and translational science.
- Provide fundamental curricular activities in translational science to UT Health San Antonio students, postdoctoral trainees, clinical residents and fellows, and faculty from the Schools of Medicine, Nursing, Dentistry, Allied Health, and Graduate School of Biomedical Sciences (GSBS) as well as from local organizations that are partnered with UT Health San Antonio.

The aims of the CTS Program will be achieved *via* participation and successful completion of required didactic coursework.

Certificate Program Governance

Oversight for the routine operations and implementation of the Certificate in Translational Science (CTS) Program will be provided by the Master of Science in Clinical Investigation and Translational Science (MSCI-TS) Program and the corresponding MSCI-TS Committee on Graduate Studies (COGS).

Admission Requirements

All students should have a sufficient educational background in the biological or biomedical sciences prior to admission to the program. It is expected that most students will have a health professional degree (*e.g.*, MD, DDS/DMD, DVM, or BS in nursing and/or allied health) or a BS/BA, MS, or PhD degree with emphasis in a health-related discipline. The following general requirements will be applied:

- A medical, dental, masters and/or baccalaureate **degree** from an accredited institution in the United States or an U.S. equivalent degree and training at an international institution. All transcripts from international institutions (including GPA) must be evaluated and submitted by an approved <u>NACES member</u> foreign credentialing evaluation agency. The CTS preferred agencies are: The Educational Credential Evaluators, Inc. (ECE) or the World Education Services, Inc. (WES).
- A Grade Point Average (GPA) no lower than a B (3.00 in a 4.00 system) in the last 60 hours of coursework for a BS/BA degree or a GPA of at least 3.0 for applicants with a MS degree.
- A minimum score of 84 on the internet version of the Test of English as a Foreign Language (**TOEFL**) or band score of 7 on the academic version of the International English Language Testing System (**IELTS**) for our international applicants. Scores on the TOEFL and IELTS (academic version) tests taken more than two years prior to the date of application will not be accepted.

Applicant Documentation Requirements

Applicants should utilize the <u>checklist</u> of required documentation for admission that is provided in the Appendix of this Handbook.

All the **required** information previously discussed **must** be submitted in order for an applicant to be considered by the MSCI-TS Student Admissions Committee. Requests for an exemption to any of these general admission requirements should be addressed to the CTS Program Director and sent directly to the CTS Academic Coordinator at the address below.

Required Documentation:

1. **Completed and submitted GSBS online application.** The GSBS online application can be found on the GSBS homepage at <u>http://www.uthscsa.edu/academics/biomedical-sciences/what-know-you-apply</u>.

- 2. Official transcripts from ALL colleges and universities attended.
- 3. **Course by Course Translation of International** transcripts to include GPA and U.S. degree equivalency by <u>NACES member</u> foreign credentialing evaluation agency (Preferred agencies: ECE or WES).
- 4. **Official TOEFL or IELTS (academic version) scores** taken within the past two (2) years for foreign national applicants.
- 5. **Three (3) Letters of Recommendation** attesting to the applicant's readiness for graduate level studies in translational science. These letters should be uploaded to the Recommendation Form by the individual recommenders who will receive an email from the online application system (EMBARK) with a link to the Recommendation Form.
 - 1. Students from a GSBS graduate program who have a Supervising Professor are required to submit one (1) of the three (3) letters from their Supervising Professor with a statement indicating the availability and approval of release time for the completion of the CTS educational activities.
 - 2. Residents or fellows in an approved UT Health San Antonio residency or fellowship program are required to submit one (1) of the three (3) letters from the departmental chair with a statement indicating the availability and approval of release time for the completion of the CTS educational activities.
 - **3.** UT Health San Antonio faculty and staff are required to submit one of the three (3) letters from their authorized supervisor with a statement indicating the availability and approval of release time for the completion of the CTS educational activities.
- 6. A **Statement of Purpose (a.k.a. Personal Statement)** (1-2 pages) that includes a brief description of the applicant's educational background. The applicant should express their long-term research and career goals, and clearly state how the CTS educational curriculum will fit in with and enhance their career objectives. The Statement of Purpose should be submitted with the online application to the GSBS.
- 7. A current curriculum vitae. This should be submitted with the on-line application to the GSBS.
- 8. Copy of U.S. Medical License/Certificate for licensed health care professionals.

Official test scores, transcripts, and foreign transcript translations, mentioned above, <u>MUST</u> also be sent to:

Registrar's Office-Graduate Admissions MSC 7702 UT Health San Antonio 7703 Floyd Curl Drive San Antonio, Texas 78229-3900

gsprospect@uthscsa.edu Phone: 210-567-2667

Academic Coordinator CTS Program

Application Process

Application. An <u>online application</u> for admission into the CTS Program must be processed through UT Health San Antonio Graduate School of Biomedical Sciences (GSBS). This application is available at: <u>uthscsa.edu/academics/biomedical-sciences/what-know-you-apply</u>.

As described in the online application for admission into the GSBS, official transcripts from **ALL** colleges and universities attended by the applicant are required; these must be submitted in sealed institutional envelopes. In addition, all transcripts from foreign institutions must be translated and submitted by one of the above mentioned approved foreign credentialing evaluation agencies. Official TOEFL or IELTS (academic version) test scores must also be submitted.

Deadlines. The CTS Program has an open application policy and will accept applications for admission at any time. However, *GSBS deadlines* (submission of application and required documentation) for matriculation in a specific academic semester are listed below.

Application Deadlines	
Fall Semester	April 1
Spring Semester	October 1

Applicants will have the responsibility for the timely submission of application materials in order to meet the deadlines established by the GSBS for registration and course enrollment.

Application Review. Operational processes used by the CTS Program are provided by the Master of Science in Clinical Investigation and Translational Science (MSCI-TS) Committee on Graduate Studies (COGS). Thus, after receipt of the online application together with all of the required admission materials outlined above, the MSCI-TS Admissions Committee will review and provide a recommendation to the MSCI-TS COGS.

Each application will be individually reviewed to consider: the applicant's undergraduate and graduate course work and degree(s), scores on the TOEFL or IELTS (academic version), if applicable, tests, research experience, and all other required documentation submitted with the online application. The admission decision is based on the personal statement as well as record of academic achievement, research experience, coursework, and letters of recommendation.

After sequential review by the MSCI-TS COGS and the GSBS, applicants will be formally notified of the outcome by the Graduate Dean of the Graduate School of Biomedical Sciences (GSBS). The MSCI-TS COGS recommends admission to the most highly qualified applicants regardless of ethnicity, gender, age, sexual orientation, nation of origin, or disability.

After acceptance, students may complete the requirements for certificate completion while enrolled as either a full-time or part-time student.

Graduate students who are enrolled in the Master of Science in Clinical Investigation and Translational Science (MSCI-TS) Program or the Certificate in Cancer Prevention (CCP) Program are ineligible to concurrently enroll in the CTS Program. However, coursework accomplished towards the Certificate in Translational Science may be applied to the MSCI-TS degree or the CCP.

Tuition and Fees

Tuition and Fees. Rates for in-state and out-of-state graduate student tuition and fees are established by the institution and subject to adjustment. A summary of current rates is provided in the Appendix (page 17).

Student Pathways in the CTS Program

Regular Students. After acceptance as a candidate working towards the certificate, students may undertake course requirements for graduation while enrolled as either a full-time or part-time student.

Full-Time students. Full-time students are enrolled in **at least eight (8)** semester credit hours (SCH) per semester during the Fall and Spring semesters.

Part-time Students. Part-time students are enrolled for **minimum of four** (4) credit hours per semester during the Fall and Spring semesters.

UTHSA Faculty and Staff as Students in the CTS Program.

UT Health San Antonio faculty and staff may apply for admission in the CTS Program. The amount of course work that can be taken by faculty or staff in a given semester is subject to the 'quantity of work' rules outlined in the current UT Health San Antonio <u>Catalog</u> and <u>Handbook of Operating Procedures</u> (HOP).

UTHSA/GSBS Students in the CTS Program.

UT Health San Antonio students already enrolled in an Academic Program within the GSBS or other school(s) at UTHSA may apply for admission in the CTS Program. The course work completed for the CTS will be independent of the students' main educational program and cannot be used to fulfil SCH requirements within other GSBS programs. The student will be required to submit three letters of recommendation from their current supervising professor/mentor, from the home program director and, the dean of the school outlining their approval of enrollment into the CTS program.

Non-Degree Seeking Students in the GSBS. Non-degree seeking students may enroll in courses and receive GSBS course credit *without* matriculation (admission) into a graduate program. For those not already matriculated into other GSBS graduate programs, an <u>on-line application</u> must be submitted to the GSBS for approval by the Dean [this would also include UT Health San Antonio faculty, staff, or others]. The appropriate Course Director must approve the enrollment of any non-degree seeking student in their course and sign course cards (provided by the GSBS Dean's office).

Course credit earned as a non-degree seeking student can be applied towards a Certificate in Translational Science following formal application and acceptance into the CTS Program. Note that enrollment as a non-degree seeking student in the GSBS is limited to four (4) semesters. Additional details about non-degree seeking students are available at:

http://gsbs.uthscsa.edu/graduate_programs/non-degree-student-status

Certificate Requirements

Coursework. Completion of the CTS Program requires the satisfactory completion of required and elective coursework. Twelve (12) semester credit hours (SCH) of didactic coursework are required to obtain the CTS. All course-related rules established by the MSCI-TS Program and listed in the <u>MSCI-TS Handbook</u> will be endorsed and followed by the CTS Program.

Required Courses. Students in the CTS Program must successfully complete the following didactic courses.

TSCI 5070 (2 SCH)	Responsible Conduct of Research
TSCI 5071 (2 SCH)	Patient-Oriented Clinical Research Methods -I
TSCI 5072 (2 SCH)	Patient-Oriented Clinical Research Biostatistics - I
TSCI 6001 (1 SCH)	Introduction to Translational Science
TSCI 6101 (1 SCH)	Topics in Translational Science

Elective Courses. Diverse elective courses are available to CTS graduate students. These courses may be taken in any semester when offered and include:

TSCI 5050 (1 SCH)	Introduction to Data Science
TSCI 5073 (1 SCH)	Integrating Molecular Biology with Patient-Oriented Clinical Research
TSCI 5074 (2 SCH)	Data Management, Quality Control, and Regulatory Issues
TSCI 5075 (2 SCH)	Scientific Communication
TSCI 5077 (1-3 SCH)	Practicum in Translation Science
TSCI 5080 (1 SCH)	Practicum in Integrating Molecular Biology with Patient-Oriented Clinical Research

TSCI 6060 (2 SCH)	Patient-Oriented Clinical Research Methods -2
TSCI 6061 (2 SCH)	Patient-Oriented Clinical Research Biostatistics - 2
TSCI 6065 (2 SCH)	Health Services Research
TSCI 6067 (1 SCH)	Genomic Healthcare
TSCI 6100 (1 SCH)	Practicum in IACUC Procedures
TSCI 6102 (1 SCH)	Practicum in IRB Procedures
TSCI 6105 (1 SCH)	Topics in Cancer Prevention
TSCI 6106 (.5 – 1 SCH)	Practicum in Cancer Prevention Science

Timeline for Coursework. A typical schedule for a full-time CTS student is provided in the Appendix of this Handbook.

Coursework towards a Certificate in Translational Science must be accomplished within three (3) or less years prior to request for certification. Exceptions to this requirement will be considered by the MSCI-TS COGS on a case-by-case basis. A written request for exemption must be submitted to the CTS Program Director through the CTS Academic Coordinator and should include a brief description of the reason(s) for the request.

Grade Requirement. As detailed by the MSCI-TS Program, student performance in CTS courses is assessed on a satisfactory (S) / unsatisfactory (U) basis. Any student who receives less than a Satisfactory (S) assessment in any CTS required course will be required to re-take the course and receive a passing grade during the next academic year. In the event of a second failure in the same course, the MSCI-TS COGS will provide a recommendation to the GSBS Dean as to whether or not the student should be dismissed from the CTS Program.

Exemption of a Required Course. Exemptions to 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 must be submitted to the CTS Program Director through the CTS Academic Coordinator and should include a brief description of the reason(s) for the request. In the event that prior coursework conducted at another institution is the basis for the request, details regarding the content of the substitute course(s) must be provided. In the event that prior coursework conducted at another institution is the basis for the request are required in addition to the written request.

- Official copy of the transcript from the institution where the course was taken, the transcript should include the number of credit hours earned and indicate successful completion of the course.
- Copy of the course description from the catalogue in effect when the course was taken.
- Copy of the course syllabus during the semester taken, if available.

MSCI-TS COGS approval of a request for exemption to a required course does not automatically result in approval of course credit hours towards the CTS degree. Transfer of coursework for credit is described below.

Transfer of Coursework for Credit. If a student has successfully completed graduate level coursework that is duplicative of *required* CTS courses, it is possible that transfer of course credit may be allowed. A written request for consideration of transfer of course credit in substitution for a given CTS course must be submitted to the CTS Program Director through the CTS Academic Coordinator. This request should include a comprehensive description of the prior course detailing when and where completed, course contact hours, and details of course content and objectives. The request should include an official transcript that indicates successful course completion and the grade issued. If the transfer of course credit (on the GSBS form) and submit to the GSBS for consideration/approval by the Dean. In no case will the allowable semester credit hour(s) of transfer for a given course exceed that of the corresponding MSCI-TS course. No more than 3 semester credit hours may be transferred towards the completion of a Certificate in Translational Science.

Class Attendance and Makeup Policy

Attendance. Attendance at scheduled classes and examinations is crucial to meeting course and program objectives. Therefore, regular attendance in class is expected of each student. Attendance is defined as being present within 15 minutes after the scheduled beginning of the class and until 15 minutes before the scheduled ending of the class.

Excused absences may be granted by the Course Director in cases such as formal presentations at scientific meetings, illness, or personal emergency. Excused absences are considered on an individual basis and require electronic communication with the Course Director to request an excused absence. The email request to the Course Director for consideration of an excused absence must provide details regarding the circumstances and specific dates. It is expected that students will provide *advanced notice* of absence for scheduled events.

Repeated unexcused absences make it impossible to achieve course objectives. Thus, if a student has excessive unexcused absences in a given course, they will automatically receive a grade of *unsatisfactory* unless *makeup* has been approved by the Course Director (see below). Allowable unexcused absences will be determined by the credit hours of the course as follows:

Course (Semester Credit Hours	Allowable Unexcused Absences
3	3
2	2
1	1

Absence Makeup. Makeup of absences (both excused and unexcused) is allowed at the discretion of the Course Director.

Other CTS Program Requirements



Laptop Computers. A required class (TSCI 5072) requires a laptop computer that is operational in a wireless mode. Software required for this course includes:

- Microsoft Office Suite (can be purchased at the UT HEALTH SAN ANTONIO bookstore with a student ID)
- R & R Studio (Open source, free, latest version) <u>https://www.rstudio.com/products/RStudio/</u> <u>https://www.r-project.org/</u>

Laptops with an Apple Mac-based operating system must be able to also perform as a PC-based operating system.

All laptops will connect to UT Health San Antonio network via the HSCwave broadcast wireless connection. Authentication for wireless use is based on the UT Health San Antonio domain username and password. Verification of proper operation **prior** to the start of class is highly recommended.

Assistance is available thru the IMS Service Desk (210-567-7777 or <u>ims-servicedesk@uthscsa.edu</u>). Assistance is also available at the IMS Student Support Center (ALTC 106).

Ethics/Professionalism Policy

The CTS Program expects all students to exhibit the highest standards of conduct, honesty, and professionalism. Academic misconduct includes activities that undermine the academic integrity of the institution. The University may discipline a student for academic misconduct as outlined in the UT Health San Antonio <u>Catalog</u> and <u>Handbook of Operating Procedures</u>. Academic misconduct may involve human, hard-copy, or electronic resources. Policies of academic misconduct apply to all course-, department-, school-, and university-related activities including conferences and off-campus performances. All cases

of academic misconduct must be reported to the Dean of the Graduate School of Biomedical Sciences (GSBS) and the seriousness of the violation may be taken into account in assessing a penalty. Academic misconduct includes, but is not limited to, the following:

- *Cheating*. Any attempt to use or provide unauthorized assistance, materials, information, or access in any form and in any academic exercise or environment is considered cheating and is expressly forbidden.
- *Fabrication*. A student must not falsify or invent any information or data including, but not limited to, records or reports, data analyses, and citation to the sources of information.
- *Plagiarism*. Plagiarism is defined as presenting someone else's work as one's own. Ideas or materials taken from another source for either written or oral use must be fully acknowledged. The adoption or reproduction of ideas, opinions, theories, formulas, graphics, or research results of another person without acknowledgment is expressly forbidden. Credit must be given to the originality of others whenever:
 - Quoting the works of another
 - o Using another person's ideas, opinions, or theories
 - Paraphrasing the words, ideas, opinions, results, or theories of others
 - o Borrowing facts, statistics, or illustrative material
 - Offering materials assembled or collected by others

Facilitating Academic Dishonesty. A student must not intentionally or knowingly help another student commit an act of academic misconduct, nor allow another student to use his/her work or resources to commit an act of misconduct.

Completion of the CTS Program

Recommendation for Granting the Certificate in Translational Science. A graduate student must be accepted into in the CTS Program to be eligible to receive a certificate. Upon satisfactory completion of all required didactic and elective coursework, the CTS student will complete and submit the <u>CTS Request</u> for <u>Certification</u> form to the MSCI-TS Academic Coordinator for review and approval by the MSCI-TS COGS. Once approved by the MSCI-TS COGS, the Chair of the MSCI-TS COGS will then submit a recommendation form to the *Graduate Faculty Council* (GFC) of the Graduate School of Biomedical Sciences (GSBS) through the Dean of the GSBS for further consideration and approval.

Time-to-Certificate. The CTS Program can be completed within 1 year of study. Some students may require 2 to 3 years to complete certificate requirements. If a CTS student has not completed the necessary coursework within 3 years, the MSCI-TS COGS Chair will form a special committee to review progress with the student. The special committee's responsibility will be to either recommend a course of action to expedite completion or recommend termination of the enrollment of the student in the program.

Helpful Online Connections

CTS Programhttp://iims.uthscsa.edu/ed_certificate_in_ts.htmlCTS Formshttp://iims.uthscsa.edu/ed_certificate_in_ts_forms

<u>Graduate School of Biomedical</u> <u>Sciences (GSBS)</u>	http://gsbs.uthscsa.edu/
<u>GSBS Application for Admission</u>	https://www.uthscsa.edu/academics/biomedical- sciences/what-know-you-apply
<u>GSBS Academic Calendar</u>	http://33hu841nxtz3q9wwt3fihfao- wpengine.netdna-ssl.com/registrar/wp- content/uploads/sites/2/2019/12/GSBS-2020- 2021-Calendar.pdf
GSBS Syllabus Depot	http://gsbssyllabus.uthscsa.edu/

<u>CANVAS</u> <u>http://www.uthscsa.edu/university/canvas</u>

UT Health San Antonio Catalog http://catalog.uthscsa.edu/

UT Health San Antonio Handbook of Operating Procedures (HOP)

http://www.uthscsa.edu/hop2000/

 Institute for the Integration of Medicine and Science
 http://iims.uthscsa.edu/

Appendices

	Page
MSCI-TS Committee on Graduate Studies (MSCI-TS COGS)	14
Typical Schedule for a One-Year CTS Program	15
Typical Tuition and Fees for CTS Program	16
CTS <u>Checklist of Required Documentation for Application</u>	17
CTS Student Status Checklist	18
CTS <u>Request for Certification</u> form	19
CTS Contact Information	20

2020-2021 Committee on Graduate Studies (MSCI-TS COGS)

Helen P. Hazuda, PhD MSCI-TS COGS Chair

Alex Bokov, PhD Population Health Sciences

Carrie Jo Braden, RN, PhD Nursing

Andrew Cap, MD, PhD, FACP Clinical Investigation Fellowship San Antonio Military Medical Center

Bandana Chatterjee, PhD Molecular Medicine

Byeongyeob Choi, PhD Population Health Sciences

Yong-Hee P. Chun, DDS, MS, PhD Periodontics

Robert A. Clark, MD Office of the VP for Research

Bertha E. Flores, PhD, APRN School of Nursing

Christopher Frei, PharmD, MSc Pharmacology Ed& Research Cntr

Jonathan Gelfond, MD, PhD Population Health Sciences

Goutam Ghosh-Choudhury, PhD Medicine/Renal Diseases Helen P. Hazuda, PhD Medicine/Renal Diseases

Teresa Johnson-Pais, PhD Urology

Addanki Pratap Kumar, PhD Molecular Medicine

Donna M. Lehman, PhD Medicine/Cardiology

Kelly C. Lemke, DDS, MSCI-TS Developmental Dentistry

Timothy D. Raabe, PhD Graduate School for Biomedical Sciences

Pamela Sabrsula, MS, CIP IRB

Susanne Schmidt, PhD Population Health Sciences

Joseph O. Schmelz, PhD Office of the VP for Research

Rudy J. Trevino, MS, CPIA Research Regulatory Program

Chen-Pin Wang, PhD Population Health Sciences

Typical schedule for a One Year CTS 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 6001 (1 SCH) – Introduction to Translational Science

Year 1 – Spring Semester

TSCI 6101 (1 SCH) - Topics in Translational Science TSCI electives (4 SCH) - Elective coursework

CTS Elective Courses (may be taken in any semester when offered)

TSCI 5050 (1 SCH) – Introduction to Data Science TSCI 5073 (1 SCH) – Integrating Molecular Biology with Patient Oriented Clinical Research TSCI 5074 (2 SCH) – Data Management, Quality Control, and Regulatory Issues TSCI 5075 (2 SCH) – Scientific Communications TSCI 5076 (2 SCH) - Introduction to Informatics TSCI 5077 (1 SCH) – Practicum in Translational Science TSCI5080 (1 SCH) – Practicum in Integrating Molec Biology with Pt-Orient. Clin. Research TSCI 6060 (2 SCH) - Patient Oriented Clinical Research Methods -2 TSCI 6061 (2 SCH) - Patient Oriented Clinical Research Biostatistics -2 TSCI 6065 (2 SCH) – Health Services Research TSCI 6067 (1 SCH) – Genomic Healthcare TSCI 6069 (2 SCH) - Statistical Issues, Planning, & Analysis of Contemporary Clin. Trials TSCI 6070 (2.5 SCH) – Biostatistics Methods for Longitudinal Studies TSCI 6100 (1 SCH) – Practicum in IACUC Procedures TSCI 6102 (1 SCH) - Practicum in IRB Procedures TSCI 6105 (1 SCH) - Topics in Cancer Prevention TSCI 6106 (.5 - 1 SCH) – Practicum in Cancer Prevention

Twelve (12) semester credit hours (SCH) are required to obtain the Certificate in Translational Science (CTS). Students **must** be admitted to the CTS program to be eligible for certification.

Certificate in Translational Science Program 2021-2022 Tuition and Fees - Certificate Cost Estimate

TX Resident – Full Time Student Estimated Cost of Certificate				
Semester	SCH	Tuition per SCH	Fees per Semester	Estimated Cost per Semester
Fall 2021	6	\$179.94	\$1,836.50	\$2,916.14
Spring 2022	6	\$179.94	\$1,936.50*	\$3,016.14
Estima	ted Total (Cost of Certifi	cate	\$5,932.28

CTS Requires the Completion of 12 SCH Coursework: 8 Required/4 Elective.

- *= Includes **\$100 Graduation Fee**
- **Texas Resident Tuition per Semester Credit Hour (SCH) = \$179.94** (Tuition estimate is a combination of Statutory, Differential, Designated, and Designated (Deregulated) Tuition Fees).
- Estimated Fees Per Semester = \$1,775.50 (Fees includes Fitness Center, Student Service, Medical Service, Library, Health Ins. Fees).

Non-TX Resident – Full Time Student Estimated Cost of Certificate				
SemesterSCHTuition per SCHFees per Semester				Estimated Cost per Semester
Fall 2021	6	\$679.07	\$1,836.50	\$5,910.92
Spring 2022	6	\$679.07	\$1,936.50*	\$6,010.92
Estimated Total Cost of Certificate \$11,9			\$11,921.84	

- *= Includes \$100 Graduation Fee
- Non-Texas Resident Tuition per Semester Credit Hour (SCH) = \$680.07 (Tuition estimate is a combination of Statutory, Differential, Designated, and Designated (Deregulated) Tuition Fees).
- Estimated Fees Per Semester = \$1,775.50 (Fees includes Fitness Center, Student Service, Medical Service, Library, Health Ins. Fees).

Tuition and Fees subject to change without notice. <u>Press CNTRL + Click Here for a detailed breakdown of Tuition and Fees.</u>

For questions regarding UTHSA Tuition and Fees Policy, <u>Press CNTRL + Click Here for explanation of tuition types and fees</u>. Press CNTRL + Click here for all CTS Forms

Certificate in Translational Science (CTS) Program

CHECKLIST OF REQUIRED DOCUMENTATION FOR APPLICATION

See CTS Handbook at http://iims.uthscsa.edu/ed_certificate_in_ts_handbook for full program requirements

Submit an on-line application to the UT Health San Antonio Graduate School: <u>http://gsbs.uthscsa.edu/</u>

- Official transcripts of ALL international colleges/universities from an approved <u>NACES member</u> foreign credentialing evaluation agency should be sent from the credentialing agency (in a sealed envelope) to The UTHSCSA Registrar's Office as directed in the online application instructions. The translation must be from an approved NACES member which has been approved by the UTHSCSA Registrar's Office.
- Official translation of international transcripts including GPA of ALL international colleges/universities from credentialing agencies should be sent from the credentialing agency (in a sealed envelope) to The UTHSCSA Registrar's Office as directed in the on-line application. The translation must be from a credentialing agency approved by the UTHSCSA Registrar's Office.
- Three Letters of Recommendation (LOR) should attest to the applicant's readiness for graduate level studies in translational science and be addressed to Dr. Linda McManus, CTS Program Director. If a matriculated graduate student has a Supervising Professor or Program/Track Director, one letter must be provided by this individual.

(Note: LOR's should be uploaded to your on-line application by the references you named in your on-line application.)

- LOR1 Reference:
- LOR2 Reference:
- LOR3 Reference:

Test of English as a Foreign Language (TOEFL) or the academic version of the Test of English as a Foreign Language (IELTS) scores (test taken within the past two years) sent directly to The UTHSCSA from the ETS. UTHSCSA code: 6908 (Note: The TOEFL or IELTS (academic version) is required for all non-US citizens whose first language is not English.)

In addition to the above, the documents listed below are required and should be uploaded to your online application.

Curriculum vitae (CV) of applicant.

Statement of Purpose (Includes a brief description of the applicant's background, long term career goals, and an indication of the basis for application into the CTS Program.)

Revised: 07/24/2020

Certificate in Translational Science (CTS) Program Student Program Status Checklist

	The information contained below is subject to shance at the Breasan's and	or Instructor's discrotion with	hout notice
	The information contained below is subject to change at the Program's and/	Semester	iour notice.
	Course Catalog Number & Title	Course Schedule	Pre-Rea
YEAF	1 (FALL SEMESTER):		
	TSCI 5070 (2.0 sch): Responsible Conduct of Research	Monday, 3-5 p.m.	
	TSCI 5071 (2.0 sch): Pt Oriented Clinical Research Methods - 1	Tuesday, 3-5 p.m.	
	TSCI 5072 (2.0 sch): Pt Oriented Clinical Research Biostats – 1	Thursday, 3-5 p.m.	
	TSCI 6001 (1.0 sch): Introduction to Translational Science	Wednesday, 3-5 p.m.	
YEAF	R 1 (SPRING SEMESTER) :		
	TSCI 6101 (1.0 sch): Topics in Translational Science	TBA	
	4.0 sch of Electives (below)	All Semesters	
	Submitted Certification Request Form to Program (12 sch are	required for CTS Program Gra	duation)
	CTS Program Electives	Semester	-
	Course Catalog Number & Title	Course Schedule	Pre-Rea
	TSCI 5050 (1.0 sch): Introduction to Data Science	All Semesters (TBA)	
	TSCI 5073 (1.0 sch): Integrat Molec Bio w/Pt Orient Clin Res	Spring Semester (TBA)	
	TSCI 5074 (2.0 sch): Data Mgmt, Quality Control & Reg Issues	Spring Semester	
		Tuesday, 3-5 p.m.	
	TSCI 5075 (2.0 sch): Scientific Communication	Fall Semester	
	TSCI 5077 (1.0 sch): Practicum in Translational Science	Wednesday, 3-5 p.m. All Semesters (TBA)	
_			
	TSCI 5080 (1.0 sch): Practicum in Integrat Molec Bio w/Pt- Orient Clin Res	Fall Semester (TBA)	TSCI 5073
	TSCI 6060 (2.0 sch): Pt Oriented Clinical Research Methods – 2	Spring Semester	TSCI 5071
_	TOT COST (2.0 million Distant different Distants - 2	Monday, 3-5 p.m.	TCCT 5073
	TSCI 6061 (2.0 sch): Pt Oriented Clinical Research Biostats – 2	Spring Semester Thursday, 3-5 p.m.	TSCI 5072
	TSCI 6065 (2.0 sch): Health Services Research	Fall Semester	TSCI 5071
_		Thursday, 3-5 p.m.	TSCI 6060
	TSCI 6067 (1.0 sch): Genomic Health Care	Spring Semester Wednesday, 3-5 p.m.	
	TSCI 6069 (2.0 sch): Statistical Issues, Planning & Analysis of Contemporary Clinical Trials	Spring Semester (TBA)	TSCI 5072 TSCI 6061
	TSCI 6070 (2.5 sch): Biostatistics Methods for Longitudinal Studies	All Semesters	TSCI 5072
	ter en e (in sen), prostatistes rections for congituarian staties	Wednesday, 1-4 p.m.	TSCI 6061
	TSCI 6100 (1.0 sch): Practicum in IACUC Procedures	All Semesters Wednesday (TBA)	
	TSCI 6102 (1.0 sch): Practicum in IRB Procedures	All Semesters	
	TSCI 6105 (1.0 sch): Topics in Cancer Prevention	Tuesday (TBA) Fall Semester (TBA)	
_			
	TSCI 6106 (.5 - 1.0 sch): Practicum in Cancer Prevention Science	All Semesters (TBA)	

Revised: 05/2021

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

Certification Request Form

Student Name:		
Graduation Semester: Fall Spring (Double Click on Box & Mark "Checked")	Year:	
Regular UTHSCSA Graduate Student: 🗌 Yes 🗌	No	
If yes, graduate program/track		
Department/Division:		
Date admitted to CTS Program:		

Courses completed towards a Certificate in Translational Science

Course ID Number	Course Title	Course Semester Credit Hours (SCH)	Yr/semester completed
9 c			
			-
			2
		0	j

Signature confirms course information above:

Approved for Submission to MSCI-TS COGS for Graduation Recommendation:

Academic Programs Coordinator

(Date)

CTS Program Director

(Date)

Revised: 07/14/2020

CTS Contact Information

Bertha E. Flores, PhD, APRN, WHNP-BC **Program Director** 210 567 7101 (voice) Floresb2@uthscsa.edu

> Alex Machuca Academic Coordinator 210-567-4304 (voice) Machuca@uthscsa.edu

CTS Program IIMS/OREM – MC 7757 UT Health 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 Translational Science • Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures • Selected Topics in Advanced Research Ethics • 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 Translational Science Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures

 Selected Topics in Advanced Research Ethics
 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 Translational Science • Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures • Selected Topics in Advanced Research Ethics • Responsible Conduct of Patient-Oriented Clinical Research • 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 Translational Science Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures

 Selected Topics in Advanced Research Ethics
 Responsible Conduct of Patient-Oriented Clinical Research 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 Translational Science • Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures • Selected Topics in Advanced Research Ethics • Responsible Conduct of Patient-Oriented Clinical Research • 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 Translational Science • Introduction to Translational Science • Practicum in IACUC Procedures • Topics in Translational Science • Practicum in IRB Procedures • Selected Topics in Advanced Research Ethics Responsible Conduct of Patient-Oriented Clinical Research
 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 • 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 in IACUC Procedures • Topics in Research Ethics • Responsible C Clinical Research • Patient-Orie Integrating Molecular Biology with Issues • Grantsmanship and Peer F and Genetic Epidemiology • Cros Introduction to Translational Scienc



to Translational Science • Practicum
 res • Selected Topics in Advanced
 sponsible Conduct of Patient-Oriented
 ed Clinical Research Biostatistics •
 ment, Quality Control, and Regulatory
 'alidation and Development • Genetics
 Practicum in Translational Science •
 nslational Science • Practicum in IRB

Procedures • Selected Topics in Advanced Research Ethics • Responsible Conduct of Patient-Oriented Clinical Research • Patient-Oriented Clinical Research • Patient-Oriented Clinical Research Methods • Patient-Oriented