Overview
This Master of Science in Clinical and Translational Investigation (MSCTI) at the University of Miami has been established to create a structured educational program that offers trainees of diverse cultural and educational backgrounds formal graduate training in the principles and practice of translational science and clinical research. Our highly integrated, cross-disciplinary program has been designed to further the new discipline of translational science by providing a foundation for the development of future practitioners and leaders of translational science who are prepared to deal with the perceived bottlenecks that inhibit translational research: institutional culture and practice, scientific complexity of translational research design and methodology, and regulatory and ethical processes. The overall goal of this curriculum development award is to engage promising new and Early Stage Investigators in the discipline of translational science so that they make the pursuit of academic translational science their own professional goal.

Course of Study
The Masters in Clinical and Translational Investigation program can be completed in 1-3 years depending on goals and professional responsibilities the student. This thirty credit hour program that includes completion of structured content courses, participation in small group interactive seminars and completion of a K-award, R21, or R01-type interdisciplinary clinical / translational research proposal. The proposal serves as a thesis or a formal master thesis, to be evaluated by a thesis committee consisting of one member of the Steering Committee, two faculty members, each representing one component of the translational focus (T1, T2, T3, T4) of the student, and another investigator not affiliated with the K30 program.

Successful completion of the MSCTI requires students to maintain a GPA of 3.0 or greater with no grade below C in any courses and successful completion of the thesis project.

Current students must discuss their plan with their program manager to make adjustments as needed. Students on a F-1 visa must enroll in a minimum of nine credits per semester.

Contact Information
Tatjana Rundek (trundek@med.miami.edu), MD. PhD., Program Director.
Barry Hudson (bhudson@med.miami.edu), Ph.D., Program Director
Carlos Sandoval (c.sandoval1@med.miami.edu), Program Manager
MS Clinical and Translational Investigation
305 243 6398

Admissions Requirements
All individuals with strong research backgrounds are eligible to submit an application. Applications will be reviewed in batches, and admittance will be based on those most qualified for the program. We strongly encourage the following to apply:

- Individuals who have completed terminal healthcare degrees (e.g., MD, PhD, DO, RN) who are interested in pursuing additional formal didactic training to become independent investigators in clinical and/or translational science;
- Individuals who have completed terminal scientific degrees (e.g., PhD, DSci) who are interested in pursuing additional formal didactic training to improve knowledge and skills related to translation of basic to clinical applications; and
- Individuals who are currently enrolled in a terminal degree program (e.g., MD, PhD) who are interested in adding a year to their program to obtain a MCTSI concurrent with their terminal degree.

Completed application package consist of the following:

- Completed online application form
- Application fee (US dollars, non-refundable)
- Official transcripts from each college or university attended
- Resume or Curriculum Vitae
- Three letters of recommendation
- Personal statement of career goals and interest in degree program.

A GRE is not required

Full application instructions can be found online.
Course Descriptions

CTI 601. Introduction To Clinical And Translational Research. 2 Credit Hours.
This introductory core course will be taught by the PI and Co-PI, as well as various guest lecturers. It will include special topics in translational science including: ethics in translational science, communication of science, introduction to bioinformatics, research with underserved/under-represented populations, regulatory considerations, grant writing, and other pertinent subjects. Students will be required to attend each weekly seminar and read the corresponding journal excerpts. Students are required to attend the weekly discussion sessions led by the PI and Co-PI in order to solidify concepts and translational themes.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CTI 602. Writing for Translational and Clinical Science. 2 Credit Hours.
This introductory core course will be taught by the Masters of Science in Clinical and Translational Investigation (MSCTI) Program Directors, as well as various guest lecturers. The focus of the course will be on developing grant and manuscript writing skills in the area of clinical and translational science across the translational science spectrum.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CTI 603. Research Ethics. 3 Credit Hours.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CTI 604. CTI 604-01: Advance Independent Study. 1-3 Credit Hours.
Components: IND.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

CTI 805. Capstone Project / Master's Thesis. 1-6 Credit Hours.
The Capstone Project is an opportunity for MSCTI students to apply the principles and practices of clinical and translational research, and is a vital component in the training of impactful clinical and translational investigators. Students will engage in research, produce publishable content, and advance their research careers.
Components: THI.
Grading: SUS.
Typically Offered: Fall, Spring, & Summer.

CTI 820. Research in Residence. 1 Credit Hour.
Components: THI.
Grading: SUS.
Typically Offered: Fall & Spring.