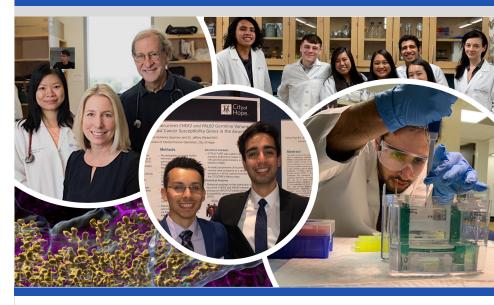


# **Application Details**

# Cityof Hope®

IRELL & MANELLA GRADUATE SCHOOL OF BIOLOGICAL SCIENCES

# Translational Medicine



The Master of Science in Translational Medicine (MSTM) is a two-year master's degree program at the Irell & Manella Graduate School of Biological Sciences at City of Hope. This program is aimed at providing students with an applied research experience and an in-depth understanding of how to translate basic research into medical products from the perspectives of both academic research (discovery) and downstream commercial development. Graduates will be uniquely positioned to begin research laboratory careers in the biotech/pharmaceutical industry, clinical or academic laboratories, or pursue further education at the doctoral level, medical education or both.

#### **RESEARCH SPOTLIGHT**

AIDS & Pathogens Bioinformatics & Population Sciences Cancer Etiology & Cancer Biomarkers Diabetes & Metabolism Drug Discovery, Development & Delivery Genomics & Epigenetics Hematopoiesis & Hematological Malignancy Immunology & Immunotherapy Molecular & Cellular Aging Stem Cell Biology & Stem Cell Therapy

For more information about the MSTM program, visit us at CityofHope.org/MSTM

Priority Deadline December 15 Regular Deadline Rolling admission

#### **Application Requirements:**

#### 1. The online application includes:

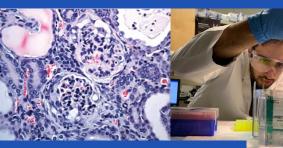
- Personal statement (describe how the MSTM program will enhance your future career options and increase your skill set for a career in the biomedical research or life sciences industry)
- Curriculum Vitae
- Educational Background
- Recommenders' contact information
- 2. Transcripts from every institution of higher education you have attended
- Unofficial copies can be used for admissions purposes; official transcripts will be required before matriculation.
- 3. Two Letters of recommendation

#### 4. Standardized tests

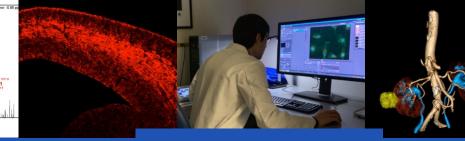
- (optional) ONE of the following tests: Graduate Record Examination (GRE), Medical College Admission Test (MCAT), Graduate Management Admission Test (GMAT) or United States Medical Licensing Examination (USMLE)
- Test of English as a Foreign Language (TOEFL) scores are required for all foreign students and must be sent by the Educational Testing Service. Only foreign students who have completed a four-year bachelor's degree in the United States are eligible to petition to waive this requirement.

#### 5. Application submission is fee. Apply Now

**City of Hope** 1500 E. Duarte Road Duarte, CA 91010-3000 (877) 715-GRAD (4723) gradschool@coh.org



# Program Learning Outcomes



# Program Curriculum

- Generate hypothesis and perform hypothesis-driven research Design research and methodology, and analyze and report data results
- Assess the literature, identify knowledge gaps and convey findings to the scientific
- Plan the translation of basic science and engineering discoveries into products and processes that benefit society
- Communicate effectively in a research environment composed of scientists, engineers and business professionals
- Adhere to ethical principles in research, development and business issues inherent in the bioscience industries
- Tackle complex problems and contribute productively on an interdisciplinary team

## **Technical Training**

- Integrative Genomics and Bioinformatics
- Analytical Cytometry
- Metabolic Phenotyping
- Mass Spectrometry
- Light/Confocal Microscopy & Digital Imaging
- Integrated Islet Distribution
- CRISPR Technology
- Bio-methodology & Handling
- Anesthesia & Aseptic Techniques

m/z

3D Oncologic Imaging

Course Name	credit
Introduction to Biomedical Research Technologies	2.0
Preclinical Models for Diseases	1.5
Introduction to Biomedical Data Science	1.5
The Science of Health Disparities	1.5
Pharmaceutical Discovery and Development	3.0
Statistical Thinking	1.0
Oncology Clinical Trials Design	1.0
Introduction to Clinical Research Development	2.0
Introduction to Fundamentals of Scientific Research	1.5
Fundamental Papers in Applied Medicine	2.0
Current Topics in Disease Mechanisms	2.0
Clinical Genomics & Precision Medicine	1.0
Science Communications	0.5
Professional Development	1.0
Scientific Research Rigors and Ethics	1.0
Independent Research	7.5
Master's Thesis Research	30.0
TOTAL	60.0

"This program provides students with the opportunity to perform cuttingedge research that discovers fundamental mechanisms of diseases and develops novel therapeutic strategies at City of Hope – a world-renowned biomedical research institute with expertise in therapeutics, population science and stem cell research ."

#### **David Ann, Ph.D.** *Dean* **Yilun Liu, Ph.D.** *Vice Dean and Program Director Irell & Manella Graduate School of Biological Sciences, City of Hope*