

**Irell & Manella Graduate School of Biological Sciences
at City of Hope**

**MASTER OF SCIENCE
IN TRANSLATIONAL MEDICINE
(MSTM)**

**Student Handbook
2024-2025**



BECKMAN RESEARCH INSTITUTE

**IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES**

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INTRODUCTION

City of Hope was founded in 1913, in Duarte, California, by working-class men and women who believed in helping those less fortunate than themselves. Although initially a tuberculosis sanatorium, research programs were initiated at City of Hope in 1951 and expanded rapidly until by the late 1970s approximately 130 PhD-level investigators were conducting a broad range of research programs throughout the institute.

In 1983, Beckman Research Institute of the City of Hope was established with generous support from the Arnold and Mabel Beckman Foundation. The Institute is comprised of basic science research groups within the departments of Cancer Biology and Molecular Medicine; Cancer Genetics and Epigenetics; Developmental and Stem Cell Biology; Diabetes and Metabolic Diseases Research; Experimental Therapeutics; Immuno-Oncology; Information Sciences; Lymphoma SPORE; Molecular Immunology; Molecular and Cellular Biology; and Population Sciences.

City of Hope has a long and impressive history of groundbreaking discoveries in the field of diabetes. In 2016 the Diabetes & Metabolism Research Institute was founded. The institute is comprised of the following departments and programs: Clinical Diabetes, Endocrinology & Metabolism; Diabetes Complications & Metabolism; Diabetes Immunology; Molecular & Cellular Endocrinology; Translational Research & Cellular Therapeutics, and The Wanek Family Project for Type 1 Diabetes.

Hematologic cancers are those cancers that occur in cells of the immune system or in blood forming tissues, including bone marrow. As a pioneer in advancing care for all hematologic cancers and related blood disorders, City of Hope's Hematologic Malignancies and Stem Cell Transplantation Institute leads the field as one of the largest and most successful transplant centers in the world. The institute also houses the Gehr Family Center for Leukemia Research, the Toni Stephenson Lymphoma Center, the Judy and Bernard Briskin Center for Multiple Myeloma Research, the Center for Gene Therapy, the Center for Stem Cell Transplantation, the Survivorship Center, and the Center for T Cell Transplantation.

City of Hope's innovative research programs continue to evolve and grow in many promising areas, including production of functional human hormones, radioimmunotherapy, neurosciences, stem cell research, and gene therapy.

City of Hope is a pioneer in the field of hematopoietic cell transplantation, and research into this therapy has been supported by a National Cancer Institute/National Institutes of Health program project grant since 1981. The Hematopoietic Cell Transplantation program provides opportunities for basic science investigations, as well as developing mechanisms for delivery of genetic material and novel therapeutic agents.

Chemically synthesized genes produced in the Biology Division were used to develop the first recombinant human peptide hormone which led to the commercial production of human insulin (Humulin, now used by millions of people with diabetes worldwide).

The study of monoclonal antibodies against the cancer antigen CEA (carcinoembryonic antigen) led to establishment of the Radioimmunotherapy Program. Genetically engineered antibodies carrying radioactive isotopes are being used in cancer therapy trials and in studies designed to localize tumors in patients. The humanized monoclonal antibodies developed at City of Hope made possible the “smart” cancer drugs such as Herceptin, Rituxan, and Avastin, which are saving and extending lives.

Recent advances in neurosciences programs include the gene therapeutic “rescue” of neurotransmitter-deficient fruit flies; the discovery of necessary interaction between extracellular matrix molecules and neurotransmitter receptor gene expression; the identification of a motor neuronal-specific antigen that may be involved in the maintenance and regeneration of neuromuscular junctions; and the development of an organotypic spinal cord culture, valuable in studying nervous system development.

MISSION STATEMENT

Our mission at the Irell & Manella Graduate School of Biological Sciences is to train future leaders in biomedical sciences by combining immersive research experiences with educational programs that foster intellectual curiosity, instill rigor in scientific rationale, provide proficiency in experimental design and research planning, emphasize ethical responsibility, and facilitate professional skill development. The Graduate School strives to promote diversity, equity, and inclusion in all aspects of our institution, believing that a rich tapestry of backgrounds and experiences strengthens scientific discovery and our collective impact on society.

MESSAGE FROM THE DEAN

City of Hope and Beckman Research Institute (which hosts the Irell & Manella Graduate School of Biological Sciences) have a remarkable history of innovation in science and medical care. Our faculty members have made major contributions in biological sciences and biomedicine and are widely recognized as leaders in their fields. The biotech industry was launched by investigators at City of Hope when they created the technology that led to the first human recombinant gene products, insulin, and human growth hormone, which are now in use by millions of people worldwide. The most recent class of blockbuster drugs, humanized monoclonal antibodies, is based upon a core technology developed by Beckman Research Institute researchers. Both basic science and translational biomedical research flourish here, in a collegial atmosphere where cross-communication thrives, and basic science findings are often applied to the cure of life-threatening diseases.

The Graduate School enrolled its first class of Ph.D. students in Biological Sciences in 1994. Our graduates have gone on to academic appointments and postdoctoral fellowships at some of the nation's best universities, as well as to positions in major biotech and pharmaceutical companies. City of Hope's interdisciplinary research programs provide students with many opportunities to enrich their graduate education by interacting with other graduate students, postdoctoral fellows, and faculty members outside of their own areas of specialization. In 2021, the Graduate School expanded the scope of our doctoral training with a second PhD program in Translational Medicine. City of Hope has a strong track record in training both predoctoral students and postdoctoral fellows. In 2018 and 2022, the Graduate School initiated new joint master's programs in translational medicine and regulatory affairs with the Henry E. Riggs School of Applied Life Sciences at Keck Graduate Institute. In 2024, the Graduate School initiated its own masters' program. In addition, we host undergraduate and high school researchers in our extensive summer internship program.

Welcome to the Irell & Manella Graduate School of Biological Sciences.

PROGRAM LEARNING OUTCOMES

- Generate hypothesis and perform hypothesis-driven research.
- Design research and methodology, analyze and report data results.
- Assess the literature, identify knowledge gaps, and convey findings to the scientific community.
- 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.

PROGRAM OVERVIEW

The MSTM program is a two-year master's program. 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 careers in biotechnology/pharmaceutical industry, clinical or academic laboratories, or pursue further education at the doctoral level, medical education, or both.

MSTM students will enroll as full-time students in the Irell & Manella Graduate School of Biological Sciences at City of Hope throughout the entire two-year program. The MSTM curriculum is designed to foster a deep understanding of the latest techniques in preclinical drug discovery and development, principles of disease etiology and progression, data science technologies in biomedical research and precision medicine, the process of clinical trial development and the effect of health disparities in disease prevention, detection, and intervention. This is achieved through a unique blend of well-established classroom instruction and intense, hands-on experience in the laboratory setting taught by distinguished COH research and clinical faculty. Upon completion of the program, graduates will be poised to pursue careers in a variety of academic and industry settings, as well as in government agencies and healthcare institutions. The MSTM program also prepares students to pursue doctoral degrees in fields such as medicine, public health, and biomedical research by equipping them with the critical thinking skills and practical experience needed to excel in these fields.

GRADUATE SCHOOL ADMINISTRATION

Dean, David Ann, Ph.D.

Vice Dean & MSTM Director, Yilun Liu, Ph.D.

Director of Assessment and Development, Susan Neuhausen, Ph.D.

Director of Ph.D. Administration and Admissions, Markus Kalkum, Ph.D.

Director of Ph.D. Curriculum, Jeremy Stark, Ph.D.

Director of the Postdoctoral Training Office, Mark LaBarge, Ph.D.

Director of Professional Development and Education, Christopher Sistrunk, Ph.D.

Associate Director of MSTM/MSRA Program, Ke Ma, Ph.D.

Associate Director of Ph.D. Admissions, Tijana Jovanovic-Talisman, Ph.D.

Faculty Liaison for Students, Patrick Fueger, Ph.D.

Faculty Liaison for Professional Development Seminars, John Kaddis, Ph.D.

Assistant Director of Admissions and Recruitment, Glenn Manthey, Ph.D.

Senior Administrative Director, Saundra Hilton, M.A.

Registrar, Kendra Carter, M.B.A, M.H.A, P.M.P

Supervisor, Business Operations, Sarah Bannister

Postdoctoral Program Manager, Linda McDaniel

Academic Program Coordinator, Jennifer To

Program Outreach and Data Management Coordinator, Natalie Figueroa

MSTM PROGRAM LEADERSHIP AND COMMITTEE

The MSTM Director oversee the needs and development of this joint program. The MSTM Admissions Committee is chaired by the Director and the Associate Director of the MSTM Program. The MSTM program is assessed by the Assessment Sub-Committee under the guidance of Director of Assessment and Development.

Yilun Liu, Ph.D.

Vice Dean, Irell & Manella School of Biological Sciences
Professor & Associate Chair, Department of Cancer Genetics and Epigenetics
MSTM Director
Beckman Research Institute
City of Hope

MSTM ADMISSIONS and ADMINISTRATIVE COMMITTEE

Yilun Liu, Ph.D. (co-chair)
Ke Ma, Ph.D. (co-chair)
Sangeeta Dhawan, Ph.D.
Patrick Fueger, Ph.D.
Mustafa Raoof, M.D.
Hung-Ping (Ben) Shih, Ph.D.
Sarah Shuck, Ph.D.
Srividya Swaminathan, Ph.D.
Yanzhong (Frankie) Yang, M.D., Ph.D.
Glenn Manthey, Ph.D.

ASSESSMENT COMMITTEE

Susan Neuhausen, Ph.D. (chair)
Ke Ma, Ph.D.
Jeremy Stark, Ph.D.
Mark Boldin, Ph.D.
Dustin Schones, Ph.D.

MSTM FACULTY MENTORS

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
1.	Karen Aboody, M.D.	2003	Mount Sinai School of Medicine	Professor	Developmental and Stem Cell Biology
2.	David Ann, Ph.D.	2006	Purdue University	Professor	Diabetes Complications and Metabolism
3.	Saro Armenian, DO	2008	Western University	Professor	Pediatrics and Population Sciences
4.	Kimlin Ashing, Ph.D.	2006	University of Colorado	Professor	Population Sciences
5.	Benham Badie, M.D.	2015	UC Los Angeles	Professor	Surgery
6.	Michael Barish, Ph.D.	1989	Stanford University	Professor	Developmental & Stem Cell Biology
7.	Mark Boldin, M.D., Ph.D.	2011	Weizmann Institute of Science (Israel)	Associate Professor	Molecular & Cellular Biology
8.	Sergio Branciamore, Ph.D.	2018	University of Florence, Italy	Assistant Professor	Computational & Quantitative Medicine
9.	Charles Brenner, Ph.D.	2020	Stanford University	Professor	Diabetes & Cancer Metabolism
10.	Christine Brown, Ph.D.	1998	UC Berkeley	Professor	Hematology and Hematopoietic Cell Transplantation
11.	Elizabeth Lihua Budde, M.D., Ph.D.	2013	Duke University	Associate Professor	Hematology and Hematopoietic Cell Transplantation
12.	Michael Caligiuri, M.D.	2018	Stanford University School of Medicine	Professor	Hematopoietic Cell Transplantation
13.	Edouard Cantin, Ph.D.	1983	University of Cambridge	Professor Emeritus	Molecular Imaging & Therapy
14.	Angelo Cardoso, M.D., Ph.D.	2016	University Paris-Sud, France	Research Professor	Center for Gene Therapy
15.	Nadia Carlesso, M.D., Ph.D.	2016	University of Turin, University of Genova	Professor	Hematologic Malignancies Translational Science
16.	John Carpten, Ph.D.	2023	The Ohio State University, Columbus	Professor	Integrative Translational Sciences
17.	Wing-Chun (John) Chan, M.D.	2013	University of Hong Kong	Professor	Pathology
18.	Saswati Chatterjee, Ph.D.	1991	Georgetown University	Professor	Surgery

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
19.	Chun-Wei (David) Chen, Ph.D.	2017	University of Rochester	Associate Professor	Systems Biology
20.	Jianjun Chen, Ph.D.	2018	Shanghai Institute of Biochemistry, Chinese Academia of Sciences	Professor	Systems Biology
21.	Mike Y. Chen, M.D., Ph.D.	2015	Thomas Jefferson University/ Medical College of Virginia	Associate Professor	Surgery
22.	Shiuan Chen, Ph.D.	1985	University of Hawaii	Professor	Cancer Biology and Molecular Medicine
23.	Wenyong Chen, Ph.D.	2005	University of Alabama	Associate Professor	Cancer Biology and Molecular Medicine
24.	Zhen Chen, B.Med, Ph.D.	2016	UC Riverside	Associate Professor	Diabetes Complications and Metabolism
25.	David Craig, Ph.D.	2023	University of Washington, Seattle	Professor	Integrative Translational Sciences
26.	Alexey Danilov, M.D., Ph.D.	2020	Yaroslavl Medical Academy	Professor	Hematology and Transplantation
27.	Thanh Dellinger, M.D.	2015	UC Irvine	Assistant Clinical Professor	Surgery
28.	Yingfeng Deng, Ph.D.	2021	Albert Einstein College of Medicine	Associate Professor	Diabetes and Cancer Metabolism
29.	Sangeeta Dhawan, Ph.D.	2017	Indian Institute of Science, Bangalore	Assistant Professor	Translational Research and Cellular Therapeutics
30.	Don Diamond, Ph.D.	1989	Harvard University	Professor	Hematology and Hematopoietic Cell Transplantation
31.	Richard Ermel, Ph.D., D.V.M., M.P.V.M	2002	UC Davis	Professor	Comparative Medicine
32.	Marwan Fakih, M.D.	2012	American University of Beirut, Lebanon	Professor	Medical Oncology & Therapeutics Research
33.	Mingye Feng, Ph.D.	2018	Johns Hopkins University	Associate Professor	Immuno-Oncology
34.	Betty Ferrell, Ph.D.	1989	Texas Women's University	Professor	Nursing Research and Education/ Population Sciences
35.	Yuman Fong, M.D.	2016	Weill Cornell Medical College	Professor	Surgery

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
36.	Stephen Forman, M.D.	1979	University of Southern California	Professor	Hematopoietic Cell Transplantation
37.	Patrick Fueger, Ph.D.	2016	Vanderbilt University	Associate Professor	Molecular and Cellular Endocrinology
38.	Adolfo Garcia-Ocana, Ph.D.	2023	Universidad Autonoma of Madrid, Spain	Professor	Molecular and Cellular Endocrinology
39.	Carlotta Glackin, Ph.D.	1993	University of Southern California	Associate Professor Emeritus	Stem Cell Biology & Regenerative Medicine
40.	Ajay Goel, Ph.D.	2019	Panjab University	Professor	Molecular Diagnostics, Therapeutics and Translational Oncology
41.	Stacy Gray, M.D.	2016	University of Chicago	Professor	Population Sciences, Medical Oncology and Therapeutic Research
42.	Steven Gruber, M.D., Ph.D.	2019	University of Pennsylvania Medical School	Professor	Center for Precision Medicine
43.	Zhaohui Gu, Ph.D.	2020	Shanghai Jiao Tong University	Assistant Professor	Computational & Quantitative Medicine
44.	Nora Heisterkamp, Ph.D.	2017	University of Rotterdam	Research Professor	Systems Biology
45.	Robert J. Hickey Ph.D.	2011	City University New York	Associate Professor	Cancer Biology and Molecular Medicine
46.	David Horne, Ph.D.	2006	Massachusetts Institute of Technology	Professor	Cancer Biology and Molecular Medicine
47.	Wendong Huang, Ph.D.	2006	University of Texas Health Sciences Center	Professor	Diabetes Complications and Metabolism Research
48.	Susanta Hui, Ph.D.	2016	University of Calcutta	Professor	Radiation Oncology
49.	Keiichi Itakura, Ph.D.	1974	Tokyo College of Pharmacy, Japan	Professor Emeritus	Center for RNA Biology & Therapeutics
50.	Rahul Jandial, M.D., Ph.D.	2008	UC San Diego	Associate Professor	Neurosurgery
51.	Marta Jankowska, Ph.D.	2021	San Diego State University	Associate Professor	Population Sciences
52.	Tijana Jovanovic-Talisman, Ph.D.	2013	Columbia University	Associate Professor	Cancer Biology and Molecular Medicine

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
53.	John Kaddis, Ph.D.	2015	University of Southern California	Associate Professor	Diabetes and Cancer Discovery Science
54.	Markus Kalkum, Ph.D.	2003	Free University of Berlin	Professor	Molecular Imaging and Therapy
55.	Fouad Kandeel, M.D., Ph.D.	2008	Cairo University	Professor	Clinical Diabetes, Endocrinology and Metabolism
56.	Marcin Kortylewski, Ph.D.	2005	Univ. School of Medical Sciences	Professor	Immuno-Oncology
57.	Hsun Teresa Ku, Ph.D.	2007	Medical University South Carolina	Associate Professor	Translational Research and Cellular Therapeutics Research
58.	Ya-Huei Kuo, Ph.D.	2008	University of Connecticut	Professor	Hematologic Malignancies Translational Science
59.	Larry W. Kwak, M.D., Ph.D.	2015	Northwestern University	Professor	Hematology and Hematopoietic Cell Transplantation
60.	Mark LaBarge, Ph.D.	2016	Stanford University	Professor	Population Sciences
61.	James Lacey, Ph.D., M.P.H.	2009	University of Michigan	Professor	Computation and Quantitative Medicine
62.	Peter Lee, M.D.	2011	UC San Diego	Professor	Hematology and Hematopoietic Cell Transplantation
63.	Ling Li, Ph.D.	2018	Zhejiang University	Associate Professor	Hematological Malignancies Translational Science
64.	Yun (Rose) Li, M.D., Ph.D.	2022	University of Pennsylvania	Assistant Professor	Radiation Oncology
65.	Ren-Jang Lin, Ph.D.	1993	Pennsylvania State University	Professor Emeritus	Molecular and Cellular Biology
66.	Yilun Liu, Ph.D.	2011	Yale University	Professor	Cancer Genetics and Epigenetics
67.	Qiang Lu, Ph.D.	2002	UC San Diego	Professor	Developmental and Stem Cell Biology
68.	Ke Ma, Ph.D.	2018	Baylor College of Medicine	Associate Professor	Diabetes Complications & Metabolism
69.	Ellie Maghami, M.D.	2004	Washington University School of Medicine at St. Louis	Professor	Surgery
70.	Linda Malkas, Ph.D.	2011	City University of New York	Professor	Molecular & Cellular Biology
71.	Edwin Manuel, Ph.D.	2015	Harvard University	Associate Professor	Immuno-Oncology

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
72.	Guido Marcucci, M.D.	2016	Catholic University of Sacred Heart, Rome	Professor	Hematologic Malignancies Translational Science
73.	Crystal Marconett, Ph.D.	2023	UC Berkeley	Associate Professor	Integrative Translational Sciences
74.	Heather McGee, M.D. Ph.D.	2021	Yale University	Assistant Professor	Radiation Oncology
75.	Marcia Miller, Ph.D.	1975	UC Los Angeles	Professor Emeritus	Molecular & Cellular Biology
76.	Jose Enrique Montero Casimiro, M.D.	2019	Havana University	Research Professor	Diabetes Immunology
77.	Rama Natarajan, Ph.D.	1990	Indian Institute of Science	Professor	Diabetes Complications and Metabolism
78.	Susan Neuhausen, Ph.D.	2009	University of Minnesota	Professor	Population Sciences
79.	Edward Newman, Ph.D.	1981	Yale University	Associate Professor Emeritus	Medical Oncology and Therapeutics Research
80.	Vu Nguyen Ngo, Ph.D.	2010	UC San Francisco	Associate Professor	Systems Biology
81.	Joyce Niland, Ph.D.	1988	University of Southern California	Professor	Diabetes and Cancer Discovery Science
82.	Javier Gordon Ogembo, Ph.D.	2018	Nagoya University	Professor	Immuno-Oncology
83.	Sumanta Kumar Pal, M.D.	2009	UCLA David Geffen School of Medicine	Professor	Medical Oncology & Therapeutic Research
84.	Sunita Patel, Ph.D.	2003	Alliant University	Associate Professor	Population Sciences
85.	Jeff Perry, Ph.D.	2021	University of Cambridge UK	Assistant Professor	Molecular Diagnostics, Therapeutics and Translational Oncology
86.	Flavia Pichiorri, Ph.D.	2016	University of Rome, Italy	Professor	Hematologic Malignancies Translational Science
87.	Alberto Pugliese, M.D.	2023	University of Palermo, Italy	Professor	Diabetes Immunology
88.	Christiane Querfeld, M.D., Ph.D.	2016	University of Cologne, University of Heidelberg	Professor	Surgery

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
89.	Mustafa Raoof, M.D.	2015	Aga Khan University, Pakistan	Assistant Professor	Surgery
90.	Dan J. Raz, M.D.	2012	University of Pennsylvania	Professor	Surgery
91.	Anne Reb, Ph.D., N.P.	2016	Catholic University of America	Assistant Professor	Population Sciences
92.	Helena Reijonen, Ph.D.	2018	University of Turkey	Associate Professor	Diabetes Immunology
93.	Russell C. Rockne, Ph.D.	2013	University of Washington, Seattle	Associate Professor	Computational and Quantitative Medicine
94.	Andrei S. Rodin, Ph.D.	2013	University of Texas, Houston	Professor	Diabetes Complications and Metabolism
95.	Steven Rosen, M.D.	2016	Northwestern University	Professor	Hematopoietic Cell Transplantation
96.	John Rossi, Ph.D.	1996	University of Connecticut	Professor	Molecular and Cellular Biology
97.	Ravi Salgia, M.D., Ph.D.	2018	Loyola University School of Medicine	Professor	Medical Oncology
98.	Dustin E. Schones, Ph.D.	2010	SUNY Stony Brook	Professor	Diabetes Complications and Metabolism
99.	Victoria Seewaldt, M.D.	2015	UC Davis	Professor	Population Sciences
100.	Binghui Shen, Ph.D.	1996	Kansas State University	Professor	Cancer Genetics and Epigenetics
101.	Yanhong Shi, Ph.D.	2004	Northwestern University	Professor	Developmental and Stem Cell Biology
102.	Ben Hung-Ping Shih, Ph.D.	2015	Oregon State University	Associate Professor	Diabetes and Metabolic Diseases Research
103.	John E. Shively, Ph.D.	1975	University of Illinois	Professor	Molecular Immunology
104.	Sarah Shuck, Ph.D.	2021	Indiana University School of Medicine	Assistant Professor	Diabetes and Cancer Metabolism
105.	Christopher Sistrunk, Ph.D.	2016	North Carolina State University	Associate Professor	Population Sciences
106.	Jeremy Stark, Ph.D.	2006	University of Washington	Professor	Cancer Genetics and Epigenetics
107.	Virginia Sun, Ph.D., R.N.	2002	UCLA	Professor	Population Sciences
108.	Zuoming Sun, Ph.D.	2005	Duke University	Professor	Molecular Immunology
109.	Srividya Swaminathan, Ph.D.	2019	University of Southern California	Associate Professor	Systems Biology

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
110.	Timothy Synold, Pharm.D.	1994	UC San Francisco	Professor	Cancer Biology and Molecular Medicine
111.	John Termini, Ph.D.	1998	Columbia University	Professor	Cancer Biology and Molecular Medicine
112.	Debbie C. Thurmond, Ph.D.	2015	University of Iowa	Professor	Molecular and Cellular Endocrinology
113.	Christian Tomasetti, Ph.D.	2022	University of Maryland	Professor	Translational Genomics Research Institute (TGen)
114.	Lindsey Treviño, Ph.D.	2018	Cornell University	Assistant Professor	Population Sciences
115.	Nagarajan Vaidehi, Ph.D.	2005	India Institute of Technology	Professor	Molecular Immunology
116.	Marcel Van den Brink, M.D., Ph.D.	2024	University of Leiden, The Netherlands		
117.	Rupangi Vasavada, Ph.D.	2018	University of Pennsylvania	Associate Professor	Translational Research and Cellular Therapeutics
118.	Edward Wenge Wang, M.D., Ph.D.	2018	Harbin Medical University	Assistant Professor	Medical Oncology and Therapeutics Research
119.	Leo Wang, M.D., Ph.D.	2017	University of Chicago	Associate Professor	Immuno-Oncology
120.	Lili Wang, M.D., Ph.D.	2018	China Medical University/ Tokai University	Professor	Systems Biology
121.	Qiong (Annabel) Wang, Ph.D.	2009	The University of Chinese Academy of Sciences	Associate Professor	Molecular and Cellular Endocrinology
122.	Ping Wang, M.D.	2020	Kaohsiung Medical College, Taiwan	Professor	Diabetes
123.	Sophia Wang, Ph.D.	2013	Johns Hopkins University	Professor	Population Sciences
124.	Xiuli Wang, Ph.D.	2019	Inner Mongolia Medical University /University of Oslo	Professor	Hematology and Hematopoietic Cell Transplantation
125.	Zhao Wang, Ph.D.	2021	Albert Einstein College of Medicine	Associate Professor	Diabetes and Cancer Metabolism
126.	John Williams, Ph.D.	2008	Columbia University	Professor	Cancer Biology and Molecular Medicine

#	Name	Appointment Year	Doctoral Degree Institute	Appointment Title	Department Affiliation
127.	Terence Williams, Ph.D., M.D.	2021	Albert Einstein College of Medicine	Professor	Radiation Oncology
128.	F. Lennie Wong, Ph.D.	2006	University of Los Angeles	Associate Professor	Population Sciences, Computational and Quantitative Medicine
129.	Anna Wu, Ph.D.	2018	Yale University	Professor	Molecular Imaging and Therapy
130.	Xiwei Wu, M.D. Ph.D.	2004	Loma Linda University	Professor	Computational & Quantitative Medicine
131.	Yanzhong (Frankie) Yang, M.D., Ph.D.	2015	Shanxi Medical University/ Fudan University	Associate Professor	Cancer Genetics and Epigenetics
132.	Jiing-Kuan Yee, Ph.D.	1998	University of Texas, Austin	Professor	Translational Research & Cellular Therapeutics
133.	Lisa Yee, M.D.	2017	Yale University	Professor	Surgery
134.	Hua Yu, Ph.D.	2005	Columbia University	Professor	Immuno-Oncology
135.	John Zaia, M.D.	1980	Harvard University	Professor	Center for Gene Therapy
136.	Defu Zeng, M.D.	2002	Fujian Medical University	Professor	Diabetes Complications and Metabolism
137.	Bin (Amber) Zhang, Ph.D.	2020	Sun Yat-Sen University of Medical Sciences	Associate Professor	Hematologic Malignancies Translational Science

CURRICULUM AND DEGREE REQUIREMENTS

Students in the MSTM program are required to complete a total of 60 units over the course of two years of study. A summary of the MSTM curriculum is as follows:

Course ID	Course Name	Credits
Year One		
TM 100	Introduction to Biomedical Research Technologies	1.0
TM 200	Preclinical Models for Diseases	1.5
TM 300	Introduction to Biomedical Data Science	1.5
TM 400	The Science of Health Disparities	1.5
TM 500	Pharmaceutical Discovery and Development	3.0
TM 520	Clinical Biostatistics	3.0
TM 530	Oncology Clinical Trials Design	3.0
TM 550	Applied Clinical Protocol Development	2.0
TM 620	Current Topics in Disease Mechanisms	1.0
TM 650	Clinical Genomics & Precision Medicine	1.0
TM 750	Scientific Research Rigors and Ethics	1.0
TM 800	Independent Research*	7.5
Year Two		
TM 700	Science Communications	0.5
TM 720	Professional Development	0.5
TM 610	Fundamental Papers in Applied Medicine	2.0
TM 900	Master's Thesis Research	30.0

* Independent Research can be fulfilled by Master's Thesis Research for those students with a sponsored thesis mentor.

COURSE INFORMATION

TM 100 Introduction to Biomedical Research Technologies

This course introduces students the state-of-the-art instruments and technologies available at City of Hope, and how to apply them effectively in both laboratory and clinical research settings. Through a combination of lectures, instrumental demonstrations, and hands-on exercises, students will learn to utilize cutting-edge equipment and methodologies, including high-quality flow cytometry instrumentation for analyzing and interpreting cell populations; mass spectrometry analysis of biomolecules; high resolution light microscopy and digital imaging for tissues and live-cell imaging; animal handling techniques for conducting ethical and humane research; sophisticated surgical catheterization models for metabolic phenotyping using live animals; integrated islet distribution program; 3D oncological imaging for cancer diagnosis and treatment planning. Students will complete HIPAA training during this course.

TM 200 Preclinical Models for Diseases

This course introduces the use of animal models in biomedical research. The course covers a wide range of topics, including the natural history and origin of animal models, repositories and sources, breeding systems, nomenclature, normative biology, specific techniques, infectious agents and diseases, laboratory animal pathology, and animal model specific topics. Through weekly lecture presentation, the course explores the applications of the various animal models in biomedical and translational research, as well as the strengths and limitations of different animal models. In addition to lectures, students will engage in critical analysis of selected literature and publications related to the use of animal models in biomedical research.

TM 300 Introduction to Biomedical Data Science

The course provides a unique opportunity for students to work with authentic genomic data and open-source tools under the guidance of experienced bioinformatics and computational biology experts. With hands-on experience, students will develop critical big data analytics skills, enabling them to proficiently analyze diverse genomics data types, including RNA-seq, whole exome sequencing, and single cell RNA-seq data. By the end of the course, students will have the confidence to conduct advanced data analysis in genomics and possess a profound understanding of the underlying concepts and methodologies. Through this course, students will also learn the core concepts and techniques of machine learning, including supervised and unsupervised learning, deep learning, and reinforcement learning. Furthermore, the course aims to equip students with the necessary skills to leverage modern technologies to conduct population-based research, addressing the intersection of environmental and genetic factors affecting health equity.

TM 400 The Science of Health Disparities

This course provides a comprehensive exploration of health disparities, drawing on literature, discussions, and written evaluations to facilitate the development of innovative ideas in this field. Over a century of research has highlighted the significant disparities in health that exist throughout America, with differences in incidence, prevalence, mortality, and burden of diseases and other adverse health conditions being evident when comparing specific population subgroups. These disparities are not random but are systematically distributed according to different levels of social advantage, which can

include social, societal, and genetic/epigenetic factors. Through presentations and discussions, students will examine the fundamental factors that contribute to disparities in health, with a particular focus on cancer disparities. The course will be structured around three key topics: social determinants of health (SDOH), genes and the environment, and precision medicine in health equity.

TM 500 Pharmaceutical Discovery and Development

The course on Drug Discovery and Development is designed to provide students with a comprehensive understanding of the processes involved in discovering and developing new drugs. It explores the multidisciplinary nature of the field, combining principles from chemistry, biology, pharmacology, and pharmaceutical sciences. Throughout the course, students will learn the structure activity relationship and drug design principles, assay design, high throughput screen, medicinal chemistry strategies for optimization, pharmacokinetics, and pharmacodynamics studies.

TM 520 Clinical Biostatistics

This course introduces the basic concepts and methods of biostatistics, the application of statistical techniques to problems in biology, public health, and medicine. The course will cover the fundamentals of statistical inference, study design, and data analysis, as well as statistical tools used in biostatistical research. Students will learn to apply these concepts to real-world data through a series of case studies, including clinical trials, epidemiological studies, and genetic studies. Upon completion of the course, students will be able to describe and implement the PPDAC problem-solving cycle, different types of data, various graphical and statistical methods; and understand how randomness is quantified by probability and how to summarize possible outcomes.

TM 530 Oncology Clinical Trials Design

This course focused on teaching the principles, methods, and practices involved in designing clinical trials. The course will introduce different clinical trial phases and their objectives and methodologies. Students will learn different study design types, protocol development, implementation and conduct, data analysis and interpretation. Upon completion of the course, students will learn the key skills in critical thinking, regulatory knowledge, and practical implementation.

TM 550 Applied Clinical Protocol Development

This course introduces the essential principles and practices involved in the development and conduct of clinical trials. Students will learn about the key components of clinical trial development, including clinical statistics and study design, protocol development, patient recruitment, data collection, analysis, and reporting of results. The course will also cover the regulatory requirements and guidelines governing clinical trials, as well as the importance of good clinical practice. Through interactive lectures and case studies, students will gain a comprehensive understanding of the different phases of clinical trials.

TM 610 Fundamental Papers in Applied Medicine

The course is structured around student presentation and discussion of peer-reviewed research articles, with the goal of developing students' abilities to read and evaluate scientific literature, and to develop their critical thinking and communication skills. They will gain a deeper understanding of the

research methodologies and approaches used in different fields and will develop a broader perspective on current trends and issues in the discipline. Each student will be expected to present once per year.

TM 620 Current Topics on Disease Mechanisms

This course provides an in-depth exploration of current topics in disease mechanisms, drawing on the latest research and cutting-edge techniques to develop a comprehensive understanding of the molecular and cellular processes underlying disease. Through faculty presentations, literature studies and roundtable discussions, students will explore a range of diseases, including cancer, diabetes, infectious diseases, and autoimmune disorders, among others. Students will examine the latest research at City of Hope in disease mechanisms, with a particular focus on the key molecular and cellular pathways that contribute to disease development and progression. Through this course, students will identify areas of research interests for laboratory rotations.

TM 650 Clinical Genomics & Precision Medicine

This course offers a unique opportunity for students to learn directly from City of Hope's clinical faculty, who are world-renowned experts in cancer diagnosis and treatment. With a focus on recent developments in best practices for cancer diagnosis, targeted and personalized molecular and immunological treatments, and other cutting-edge techniques used in cancer research and treatment, the faculty will deliver engaging lectures and presentations to share their wealth of knowledge and expertise with students. Through this course, students will gain valuable insights into the identification of cancer biomarkers and the use of these biomarkers in developing personalized treatment plans. In addition, students may choose to shadow City of Hope's clinical faculty, observing firsthand how they work with patients to develop treatment plans tailored to individual's unique needs.

TM 700 Scientific Communications

This course is designed to provide students with the necessary tools and techniques to write clearly, concisely, and effectively in a scientific context. The course will cover various aspects of scientific writing, including understanding the structure and format of scientific papers, developing a clear and concise writing style, presenting data and results, and writing effective abstracts and summaries. The course provides students with the experience of writing longer scientific documents and having their work critiqued. The class format includes lectures together with in-class assignments and discussions.

TM 720 Professional Development

Professional development is an essential aspect of a successful career in any field, including those related to science and technology. This course is designed to provide master's students with the necessary skills, tools, and knowledge to prepare for and succeed in their future careers. The course will cover career exploration and planning, professional communication, project management, leadership, teamwork, ethics, and professionalism.

TM 750 Scientific Rigors and Ethics

This course aims to provide an overview of the fundamental principles and best practices for conducting research responsibly and ensuring the rigor and reproducibility of scientific research. The course covers a wide range of topics related to research ethics, including responsible authorship, plagiarism, data management, research misconduct, conflicts of interest, and the use of human and

animal subjects in research. Students will learn about the importance of maintaining integrity and accountability in research, and the consequences of failing to do so. The course is delivered through a combination of lectures, discussions, case studies, and interactive exercises. Students will have the opportunity to engage in critical thinking and reflection on the ethical challenges that arise in research, and to develop practical strategies for addressing these challenges.

TM 800 Independent Research

The Independent Research course is designed to offer students the chance to explore different research areas and labs, develop experimental skills, and broaden their knowledge and research perspective. During the course, students are required to complete three lab rotations, each lasting for 4 weeks. The rotation mentor plays a critical role in the course, helping the student to understand how their experiments fit into the laboratory's overall approach to the biomedical problem under investigation. The mentor provides guidance and support in co-developing a research project, which the student conducts under the mentor's supervision. The research facilities and resources required for the project are provided by the mentor. The Laboratory Rotation course takes the form of individual learning in a research laboratory, providing students with hands-on experience and exposure to the research process. Through this course, students develop a deeper understanding of the research process, gain valuable research experience, and build a strong foundation for their future research work. For faculty sponsored students, TM 800 can be fulfilled by conducting MSTM thesis research.

TM 900 Thesis Research

The Master Thesis Research course is designed to provide students with the necessary skills, knowledge, and tools to carry out independent research and produce a high-quality master's thesis. The course aims to train students in developing the ability to design, execute and communicate a research project in their chosen field. The course will begin with defining research questions, identifying relevant literature, and selecting appropriate research methodologies. Throughout the course, students will engage in critical analysis of existing research in their field and learn how to effectively synthesize and integrate research findings to develop new insights and contribute to the knowledge base of their discipline. Students will also learn how to collect and analyze data using appropriate statistical and qualitative research methods. The course will emphasize the importance of ethical considerations in research, including the responsible conduct of research, data protection, and the proper use of research materials. Students will also learn how to effectively present and communicate their research findings through various media, such as written reports, presentations, and posters.

MSTM ACADEMIC CALENDAR

August 2024	
1	Year 2 Students: TM 900 MSTM Thesis Research <ul style="list-style-type: none"> MSTM Thesis Contract (see TM 900 syllabus) due to Registrar
15-19	Year 1 Students: Student Orientation
3 rd and 4 th weeks	Year 1 Students: TM 750 Scientific Research Rigors and Ethics Year 1 Students: Meet with Clinical Faculty Liaison to establish student clinical internship
September 2024	
	Year 1 Students: The follow courses begin: <ul style="list-style-type: none"> TM 200 Preclinical Models for Diseases TM 400 The Science of Health Disparities TM 500 Pharmaceutical Discovery and Development TM 520 Statistical Thinking Year 2 Students: The follow courses begin: <ul style="list-style-type: none"> TM 610 Fundamental Papers in Applied Medicine
2	Labor Day
October 2024	
	Year 1 Students: The follow courses end: <ul style="list-style-type: none"> TM 400 The Science of Health Disparities TM 500 Pharmaceutical Discovery and Development TM 520 Statistical Thinking Year 1 Students: The follow courses begin: <ul style="list-style-type: none"> TM 100 Introduction to Biomedical Research Technologies TM 620 Current Topics on Disease Mechanisms
November 2024	
	Year 1 Students: The follow courses end: <ul style="list-style-type: none"> TM 200 Preclinical Models for Diseases Year 1 Students: The follow courses begin: <ul style="list-style-type: none"> TM 300 Introduction to Biomedical Data Science TM 530 Oncology Clinical Trials Design
28	Thanksgiving Holiday
December 2024	
1	Year 2 Students: TM 900 MSTM Thesis Research <ul style="list-style-type: none"> Preliminary Thesis due to thesis committee
15	Year 2 Students: TM 900 MSTM Thesis Research <ul style="list-style-type: none"> Presentation of Preliminary Thesis to thesis committee due Preliminary Thesis Evaluation Form and Rubric (see TM 900 syllabus) due to the Registrar
25	Christmas Holiday

January 2025	
1	New Year Holiday
	Year 1 Students: The follow courses end: <ul style="list-style-type: none"> • TM 100 Introduction to Biomedical Research Technologies • TM 300 Introduction to Biomedical Data Science • TM 530 Oncology Clinical Trials Design • TM 620 Current Topics on Disease Mechanisms
20	Martin Luther King Jr Day
February 2025	
1	Year 1 Students: The follow courses begin: <ul style="list-style-type: none"> • TM 550 Introduction to Clinical Research Development • TM 800 Independent Research Year 2 Students: PhDTM application due to PhDTM Admissions Committee <ul style="list-style-type: none"> • Cover Letter • MSTM transcript including grades from Fall semester of Year 2 • Supporting letter from the PhDTM mentor • PETITION for SELECTION of PhDTM MENTOR for DISSERTATION RESEARCH form (APPENDIX A)
5	Year 2 Students: Announcement of the PhDTM Admissions decisions
March 2025	
31	Year 2 Students (PhDTM track): TM 900 MSTM Thesis Research <ul style="list-style-type: none"> • MSTM Thesis Seminar due
April 2025	
	Year 1 Students: The follow courses end: <ul style="list-style-type: none"> • TM 550 Introduction to Clinical Research Development Year 1 Students: The follow courses begin: <ul style="list-style-type: none"> • TM 650 Clinical Genomics & Precision Medicine
	Year 2 Students (PhDTM track): BIOSC 550 FSR begins
30	Year 2 Students (non-PhDTM track): TM 900 MSTM Thesis Research <ul style="list-style-type: none"> • MSTM Thesis Seminar due
May 2025	
	Year 1 Students: The follow courses end: <ul style="list-style-type: none"> • TM 650 Clinical Genomics & Precision Medicine • TM 800 Independent Research
	Year 2 Students (all): <ul style="list-style-type: none"> • TM 600 Fundamental Papers in Applied Medicine ends Year 2 Students (all): TM 900 MSTM Thesis Research due to the Registrar <ul style="list-style-type: none"> • MSTM Thesis Cover Sheet

	<ul style="list-style-type: none"> • MSTM Final Thesis • MSTM Oral Defense Committee Report • Final Thesis Rubric (see TM 900 syllabus) Year 2 Students (all): <ul style="list-style-type: none"> • confirm MSTM Degree as MSTM Graduates
26	Memorial Day
June 2025	
1	Year 1 Students advance as Year 2 Students <ul style="list-style-type: none"> •
	Year 2 Students: The follow courses begin: <ul style="list-style-type: none"> • TM 720 Professional Development • TM 900 MSTM Thesis Research Year 2 Students: The follow courses end <ul style="list-style-type: none"> • TM 720 Professional Development
1 st week	MSTM Graduates (PhDTM track): BIOSC 550 FSR ends. MSTM Graduates (PhDTM track): BIOSC 565 FSR Practicum begins
2 nd Friday	GRADUATION in the Rose Garden at 4:00 pm
4 th week	MSTM Graduates (PhDTM track): BIOSC 565 FSR Practicum ends
July 2025	
1	MSTM Graduates (PhDTM track): PhDTM Trimester begins
	Year 2 Students: The follow courses begin and end: <ul style="list-style-type: none"> • TM 700 Science Communications
4	Independence Day

MSTM RESEARCH THESIS

Please refer to TM 900 MSTM Thesis Research Syllabus for additional details on milestones, deadlines, and forms.

THESIS COMMITTEE

Toward the end of the first year, students are required to select the laboratory for their thesis research. The student and their research mentor (e.g., advisor) jointly choose the research topic and two faculty members, one of which must be a COH faculty, as the voting members for their thesis committee. The committee members should be familiar with the research area that encompasses the student's thesis project. The thesis committee is chaired by a member other than the student's research mentor. The student's research mentor will participate as a non-voting member. They will serve primarily as an advisor to the thesis committee and to facilitate discussion. The MSTM Director may review the committee membership, as necessary. The thesis committee membership may be reconstituted whenever the student's thesis topic is significantly modified. It is highly encouraged that the student meets with their committee members on a regular basis. Committee vacancies will be filled promptly.

The written thesis must be presented by the student for examination by the thesis committee. The thesis must be orally defended, and completion of the requirement will be finalized by approval of the document by thesis committee. Each member of the committee is expected to review the thesis and attend a public seminar in which the degree candidate presents the thesis research findings. Immediately thereafter, the thesis committee will meet privately with the student to review any aspect of the thesis including the research methodology, findings, and conclusions.

THESIS DOCUMENT FORMAT

The dissertation must be written in English, at a professional level of expression and presentation. In addition, thesis document should follow the following format:

- Double-spaced, Arial Font type 11, 0.6 in margins
- Each Figure should be placed on an individual page at the point that it is referenced in the thesis (*i.e.*, figures cannot be all at the end).
- Figure legends can be on this page and/or a separate page.

THESIS FINAL DRAFT

A final thesis draft must be submitted to the MSTM thesis committee for a critical review **two weeks prior to** the Thesis Oral Defense. The thesis must include the following elements:

1. Cover pages

- Cover page with name, date, thesis mentor, thesis title
- Table of Contents that list the sections and page numbers
- List of Figures with title and page numbers

2. Hypothesis/Goal and Aims (2 pages)

- Describe the Hypothesis/Goal tested by the research project
- Provide the rationale for the Hypothesis/Goal (foundation from the current literature)
- Describe how the Hypothesis/Goal will be tested in one or two aims

3. Background and Significance (6-8 pages)

- Comprehensive introduction to the biological question addressed by the project
- Describe the significance of the question to the field of study and human health

4. Results (no page number suggestion, but should be comprehensive)

- Describe the findings of the research project
- Encouraged, but not required, to include details of experiments that did not technically succeed, and what was learned from the experiment

5. Discussion (5-7 pages)

- Describe the importance of the findings in the context of the literature
- Describe future directions of the research

6. Methods (no page number suggestion, but should be comprehensive)

- Describe the methodology, including protocols, reagents, and statistical analysis

7. Bibliography (List all references, using the Cell output style)

LABORATORY NOTEBOOK

A lab notebook is a complete record of procedures followed and the observations a scientist makes while conducting research. It should contain any necessary background, references, information on how the experiments were performed and the experimental results. The lab notebook is a legal document should the conducted research contribute to the issuing of a patent and the lab's scientific legacy.

- The entries in the lab notebook must be in English, detailed, clear and legible
- Identified with an entry or experiment's date
- Each entry should contain a summary of a finding and possibly a plan of future experiments
- The lab notebook can be either hard copy, or an electronic notebook

GRADING SYSTEM

Students will receive letter grades for their course work. Students must receive a grade of 70 percent or above (C- or better) in all course work to continue in the program. Non-graded courses receive a Pass or Fail. For each trimester, a cumulative GPA below 3.0 indicates that a student is not in good academic standing. Such students are ineligible to apply for the Graduate Student Travel Grant or other scholarship.

Letter Grade	Percentage	
A+	97% - 100%	Pass
A	93% - 96%	Pass
A-	90% - 92%	Pass
B+	87% - 89%	Pass
B	83% - 86%	Pass
B-	80% - 82%	Pass
C+	77% - 79%	Pass
C	73% - 76%	Pass
C-	70% - 72%	Pass
D+	67% - 69%	Fail
D	63%-66%	Fail
D-	60% - 62%	Fail
F	0% - 59%	Fail

GRADE CHANGE POLICY

Evaluating student work and maintaining academic standards are the responsibility of the faculty, and faculty decisions about grades will only be overruled in cases where there is clear evidence of arbitrary and/or inconsistent grading. If a student wishes to challenge a grade, the student should discuss the grade with the course coordinator. If the matter cannot be resolved at this level, the student should make a request to the Dean to appoint a three person Grade Change Committee, which will include the course coordinator, and two faculty actively involved in teaching and/or curriculum, but excluding the Dean, Vice Dean or Program Director. The Dean will also appoint one member as the Chair (not the course coordinator), who will work to find consensus, but the final decision will be made by committee majority vote. This committee will consider the grading issue separate from any potential consequences of the grade for the student's academic standing, which is covered under a separate policy (see Academic Standards section).

CREDIT HOUR POLICY

Definitions

Trimester: Irell & Manella Graduate School of Biological Sciences at City of Hope is on a trimester system. Each trimester (Fall, Spring, Summer) is approximately 17 weeks.

Credit Hour: Per WSCUC “Except as provided in 34 CFR 688.8(k) and (l), a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than – (1) one hour of classroom or direct faculty instruction and a minimum of two hours of out of class work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practical, studio work, and other academic work leading to the award of credit hours.”

Classroom hours: class or supervised meeting times for lecture, exams, or classroom discussion.

Non-classroom hours: supervised or non-supervised student work out of classes.

Full Time Credit Hours Policy

All full-time students at Irell & Manella Graduate School of Biological Sciences at City of Hope are required to be enrolled in a minimum of 10 credits per trimester. Each course provides the student with 1-5 credits. Laboratory research shall have an equivalent level of effort, with one credit hour being awarded for forty-five hours of research or study. Course syllabi should clearly indicate the credit hours and expectation of effort of the class. The Curriculum Committee will annually review the application of the policy on credit hours for accuracy and reliability.

PHD IN TRANSLATIONAL MEDICINE (PhDTM)

The strategic goals of the City of Hope support education as one of the major efforts of the institution. Areas of translational and precision medicine are critical for development of treatment strategies, drug development, and disease prevention. The PhD in Translational Medicine program permits students graduated from Master of Science in Translational Medicine who have discovered that they are interested in furthering their career in research and developing research at the level of a PhD to continue at the Irell & Manella Graduate School of Biological Sciences.

To be eligible for engagement in the PhD in Translational Medicine, students must have demonstrated the foundational experience for success in study at the PhD level. Validation of requisite skills and ability are satisfied with:

- Successful completion of the MSTM program by the start date of enrollment to the Graduate School as a PhD student.
- A cumulative GPA of 3.4 from the MSTM program; and
- Support from the MSTM thesis mentor and/or future PhD thesis mentor by the beginning spring semester of the MSTM program.

APPLICATION AND ADMISSIONS PROCESS

A complete application package, which consists of the following documents, should be submitted to the Dean, Vice Dean and Director of PhD Administration, by February 1:

- Cover letter from the student to indicate the student's interest and commitment to the PhDTM program.
- Unofficial MSTM transcript that includes grades from Year 1 and Fall Semester of Year 2.
- Signed PETITION for SELECTION of PhDTM MENTOR for DISSERTATION RESEARCH form (**Appendix A**)
- A letter of support to confirm mentor's commitment to continue training the student at PhD level and to support the student's PhD stipend starting July 1 of Year 1 on the PhDTM program. The letter should be sent directly from the mentor to the Dean, Vice Dean and Director of PhD Administration.

Admissions decisions will be communicated to the applicants and their proposed PhDTM mentors by February 5.

POLICIES AND PROCEDURES

ATTENDANCE

Students are required to be in attendance full-time for both instructional and research activities. The student commitment is full time, subject to any rights to time off under applicable law and with reasonable consideration for holidays, illness, and leaves of absence as described below. Students are expected to make steady progress on their dissertation topic because the outcome of their research impacts their mentors, colleagues in the lab, and the entire institute. Students are discouraged from engaging in part-time employment on the side as this will diminish the quality of their research and slow their progress toward their degree. Occasionally, an advanced student may begin to transition to their next position, such as teaching part-time at night, but given the nature of the program, students are expected to advise the Graduate School Office before beginning any outside employment, so that City of Hope and the student may determine that the outside employment does not pose a conflict of interest. This policy is specifically for employment that provides a unique/distinct training experience for the student that is not possible without such employment. Additionally, any student holding outside employment will be expected to meet all expectations of the Graduate School Program, regardless of any outside employment.

Remote Work Outside the Region

Graduate students are required to be in attendance full time for both instructional and research activities. Some classes or laboratories may allow students to work from home in the immediate area (Southern California) of City of Hope. If a student requests to work away from the area, they must fill out this Request to Work Outside the Region Form ([Graduate School Intranet - Find in Graduate Student Documents](#)) and submit it via email to the student's mentor, and the Registrar. First year students are ineligible for such work outside of the region. As a reminder, international students on Visa status should contact the City of Hope Immigration Services Administrator before travelling abroad. The purpose of this form is to understand where the students are working for data security and safety reasons.

Leaves of Absence

The student's advisor and the Graduate School Office must be informed when a student is not available to conduct their laboratory research or attend classes at City of Hope. If a student has a serious illness, personal emergency, pregnancy, military deployment or other event that requires more than seven days, they may request a leave of absence from their mentor and the Graduate School Office by submitting the Absence Request Form (**Appendix B: Absence Request Form**). Students should be aware that more than six months on leave will cause many student loans to go into repayment. International students should meet with the International Student and Scholar Office for more information on how the leave will affect their ability to stay in the United States. A leave of absence may be approved only if the request is consistent with the policies at both City of Hope. Tuition for a semester may be waived only if a student is on leave (1) for military deployment and (2) for a significant part of the semester.

Holidays

The Irell & Manella Graduate School of Biological Sciences observes the same seven holidays observed by City of Hope [New Year's Day, Martin Luther King Jr. Day, Memorial Day, July 4th, Labor Day, Thanksgiving, and Christmas]. For standard holidays, an Absence Request Form is not required. However, given the program commitments, students must receive approval from their mentor (if applicable) and Graduate School before taking time off. To obtain approval, students should:

1. Consult with their mentor.
2. Complete an Absence Request Form and submit the form to the student's mentor, the Graduate School Registrar and the mentor's Business Manager.

Students should contact the Registrar with any questions about attendance or requests for time off. Form is located under **Appendix B: Absence Request Form**.

International Students: Attendance and Traveling

When traveling internationally ensure your I-20 document has been signed by a designated Graduate School official. To maintain their immigration status, international students on F-1 visa must maintain full course of study at all times. International students seeking to take leave or drop below full course of study must first obtain approval from the Graduate School and the International Student and Scholar Office. Requests may be approved for the following reasons (8 CFR 214.2(f)(6)(i) and (iii)):

1. Initial academic difficulties.
2. A temporary illness or medical condition (with medical documentation from a licensed medical doctor, doctor of osteopathy, or licensed clinical psychologist but not to exceed an aggregate of 12 months); or
3. Need fewer courses than a full course load in their last term to complete the program of study.

MANDATORY COMPLIANCE TRAINING

All students must comply with yearly mandatory compliance, harassment training and submit annual health paperwork (in the month of birth). If students fail to complete these requirements by the due date, they will be suspended from the Graduate School until all requirements are completed.

TRANSCRIPT REQUEST FEE

Official academic transcripts can be ordered from the Registrar using the Transcript Request Form ([Graduate School Intranet - Find in Graduate Student Documents](#)). A fee of \$10 will be charged per transcript payable by personal check. Checks should be made payable to City of Hope. This fee shall be waived if the Graduate School receives proof that a fellowship or grant application has been submitted. Standard orders are processed within four business days of receipt of the order. Delivery time is not included in processing time and varies by delivery service and local area. Transcripts held for in-person delivery are picked up from the Registrar. If you have outstanding financial obligations to the Graduate School your transcript request will be delayed until payment is received.

REPLACEMENT DIPLOMAS FEE

A graduate of the Irell & Manella Graduate School of Biological Sciences can request a replacement diploma if the original has been lost or destroyed, or to request a re-issue after a graduate's legal name change. Evidence of a court order changing the legal name is required. A fee of \$25 will be charged per request payable by personal check. Checks should be made payable to City of Hope. The replacement diploma bears a re-issue date and the signatures of the current Dean and City of Hope signatories. A replacement diploma has an eight-week processing time. Delivery is not included in the processing time and varies by delivery service and local area.

LAPTOPS

The Irell & Manella Graduate School of Biological Sciences provides each MSTM student with a laptop during orientation. It is each student's responsibility to maintain the laptop in good working order and utilize it appropriately (see the Graduate Student Laptop Policy – **Appendix C** and Laptop Checkout Agreement Form **Appendix D**). Should the laptop be damaged, it is the student's responsibility to contact the City of Hope IT department to arrange for repairs at the student's expense. The student shall return the laptop and all peripheral equipment to the registrar within 15 days of when the student completes/exits the program. If laptops are not returned the Graduate School will be unable to provide transcripts upon request or degree diplomas. Also, students run the risk of being personally responsible for full repair or replacement cost of the computer.

BENEFITS

Graduate Student/Non-Employees receive medical and dental benefits through Gallagher (formerly named Garnett Powers), and they are administered through City of Hope Human Resources. Details about benefits may be found at <http://www.garnett-powers.com/coh>.

While on an approved leave of absence, students are eligible to continue coverage under the Trainee and Affiliate's health benefit plans (administered by Gallagher). City of Hope will pay the student's portion of the cost of benefits until the student returns from leave up until twelve (12) weeks. When the student returns from leave, he/she/they will be required to repay missed contributions through payroll deduction. If the approved leave becomes unpaid after twelve (12) weeks, health benefits will terminate on the 1st of the following month and the student will be offered COBRA continuation coverage at their own expense.

To obtain more information regarding leave of absence, disability payments and filing a claim with Aflac, students may contact City of Hope's Benefits department at benefitsLOA@coh.org.

Re-enrollment after > 12 months of leave of absence requires Graduate School approval.

WELLNESS

The Graduate School Administration (Dean, Vice Dean, Program Director, MSTM Admissions and Administration Committee and Office Staff) are here to assist if a graduate student needs help. There are resources that may not be listed. If the student reaches out, we can connect them accordingly. Please feel free to email or come into the Graduate School if additional assistance is needed.

- Rideshare Program: Benefits include free shuttle from Baldwin Park station, reserved carpool spaces, bike lockers, bike racks, and a public transportation subsidy for a Metrolink/Metro Pass up to \$100.00 depending on the type of pass. You can view these at <https://coh.mycarpool.net/> with the access code: climate.
- Employee Assistance Program – Students are eligible to participate in this program which helps with a variety of personal life matters including stress management, legal/financial services, childcare/elder care referrals, parenting skills, grieving, managing relationships or balancing work and life. There is online help as well as access to Dr. Vasa, our onsite EAP provider. The member services receive calls 24 hours a day 7 days a week at (800) 342-8111. To schedule an on-site counseling appointment, contact Dr. Monisha Vasa at mvasamd@gmail.com or call 949.612.3955.
- Wellness Program: Students can earn points towards up to \$300.00 in gift cards for daily activities such as tracking healthy habits, reading about healthy habits, walking, and for getting an annual biometric screening or flu shot. Plus, you will receive an additional \$25.00 credit toward purchasing a step-tracking device. You can join this program by visiting join.VirginPulse.com/CityofHope then download the Virgin Pulse app

FOOD VOUCHER FOR HOPE CAFE

Students may apply for food vouchers for Hope Café, up to \$1,500 per year (subject to funding availability). Eligibility is limited to students without PI-sponsorship or other City of Hope scholarship/stipend support.

STUDENT LOANS

Irell and Manella Graduate School of Biological Sciences at City of Hope is currently seeking Title IV status and not yet qualified to offer federal financial aid. The Graduate School does participate in Title IV loan deferment as an exempt institution so that students may defer student loans from previous education. Please contact the Registrar to assist graduate students in good academic standing to defer their government and private undergraduate study loans and obtain the U.S. Department of Education Office of Post-Secondary Education identification number (OPEID). When a graduate student in good academic standing needs to provide a certification of current enrollment letter to their private loan agency or other entity, the Registrar can also help with this matter.

HARDSHIP SUPPLEMENT

Students with demonstrable financial hardship due to unexpected circumstances may apply to the Graduate School for a "Hardship Supplement." Supplements will be provided as funding permits. Applications should be submitted to the Director of Ph.D. Administration and Admissions. The application form can be found under ([Graduate School Intranet - Find in Graduate Student Documents](#)). To apply the student must supply a complete budget justification, supporting documents, and a request for a specific total dollar amount. Additional documentation may be requested to verify financial hardship. To qualify students must be in good academic standing.

ACADEMIC STANDARDS

The Faculty and Staff of the Irell & Manella Graduate School of Biological Sciences value high academic standards and believe that they are critical to ensure the overall quality of the Graduate School. The Graduate School Leadership, in consultation with the Dean and Vice Dean of the Graduate School shall oversee the academic standards of the MSTM program including verification of fulfillment of academic and graduation requirements.

Good Academic Standing:

For the purposes of eligibility and renewal of internal award programs, students must meet all the SAP requirements and maintain a minimum cumulative grade of B- or GPA of 2.7 (80-82%). This includes adherence to City of Hope and IMGS policies, procedures, and codes of conduct. First year and transfer students must complete one trimester to meet good academic standing requirements.

SATISFACTORY ACADEMIC PROGRESS (SAP)

Students are expected to make satisfactory academic progress throughout their academic program. SAP will be evaluated at the end of every trimester.

SAP Requirements:

- Maintaining a minimum passing grade of C- for MS or B- for PhD in every course
- Maintaining a minimum of cumulative grade point average of 2.0 for MS or 3.0 for PhD
- Adhering to all Dissertation guidelines, meetings, and deadlines as defined in the Student/Faculty Handbook
- Maintain a satisfactory pace of progress towards the degree by completing at least 67% of all units *attempted* **cumulatively**.
- Progressing through the program at a sufficient pace to ensure completion within the maximum timeframe of 150% of the published length of the program (2 years for MSTM, average 5.5 years for PhD).

Transfer Credit:

MSTM program does not accept transfer of credit.

Course Dropping Policy:

A student may withdraw from a course if they notify the registrar and course coordinator during the first third of the course. The student will receive a "W" on her/his transcript. This grade bears no grade point equivalent and is not added into the end-of-term average for a student. It is not possible to drop the course after the first third of the course.

Incomplete Course:

A grade of incomplete is given when a student, who has been making satisfactory progress in a course, experiences an unexpected hardship or illness making it impossible for her/him to complete the course requirements. If a student received an "I" in a given course at the end of the term, she/he is required to remove this condition to the satisfaction of her/his instructor by the end of the first month of the following term. Failure to do so will result in a failing grade for the course.

Repeating Courses:

If a student receives a failing grade in a required course, she/he must retake the course. If the course is a part of a sequential series, the student will not be allowed to move to the next part of the sequence until a passing grade is obtained in that course. If the student repeats the failed course and improves her/his grade, the "F" grade will be supplanted by the improved grade. The improved grade will be the grade used in determining the cumulative grade point average of the student.

If the student receives a failing grade in a non-required course, she/he has two choices:

1. If she/he repeats the elective, an improved grade will supplant the failed grade and will be used in determining the cumulative grade point average.
2. If she/he does not choose to repeat the elective, the "F" grade will remain on the transcript and will be used in the determination of the cumulative grade point average.

Unsatisfactory Progress

The following are grounds for determining that satisfactory progress in the academic program is not being made:

- Failure to maintain a minimum of C- in every course
- Failure to adhere to all Dissertation guidelines, meetings, and deadlines as defined in the Student/Faculty Handbook
- Receipt of a "Fail" grade in a course or required activity
- Violation of professional or ethical conduct policies
- Little or no progress on the dissertation, as determined by dissertation mentor and/or committee meetings
- Failure to comply with Graduate School and/or City of Hope rules and procedures.
- Evidence of personal factors (interpersonal or intrapersonal) that may hinder the student's professional and academic competence
- Violation of Student/Faculty Handbook policies and procedures
- Violation of City of Hope policies and procedures

One of the consequences of unsatisfactory academic performance is that it inevitably slows a student's progress toward the master's degree. Another consequence of unsatisfactory academic performance is that a student is not eligible for travel grants and merit fellowships.

FAILURE TO MEET ACADEMIC STANDARDS

At the close of each semester the academic status of every student will be audited. All students who have met standards for academic progress will be deemed to be in “Good Standing.” Any student who has failed to meet the standards described above will have their file reviewed by the Program Director.

The following sanctions will apply to any student not in Good Standing:

- A registration hold may be placed on the student record which will prohibit registration for courses. This also includes auditing a course.
- The student may not apply for travel funding, institutional fellowships, or other Graduate School funding.
- The student may not submit to or collect business requests from the registrar’s office. This may include certifications, loan deferrals, proof of student status, academic audits, diploma requests, official or unofficial transcripts, and grade requests.

Financial Aid Warning:

One of the consequences of unsatisfactory academic performance is that it inevitably slows a student’s progress toward the graduate degree. Failure to meet SAP requirement also impacts eligibility for financial aid. Students who do not meet the SAP requirements at end of each trimester will automatically be placed on Financial Aid Warning for one payment period. Students on Financial Aid Warning will continue to receive financial aid for the next payment period following the assignment of the warning status. The student’s academic progress will be re-evaluated at the end of the warning period. The Warning status is applied only to students with a reasonable expectation of improvement in one payment period. Financial Aid Warning status cannot be assigned for consecutive payment periods. If a student meets SAP requirements at the end of the Financial Aid Warning period, they shall be returned to normal SAP status with no loss of financial aid eligibility. A student who has not improved his standing and still fails to comply with the satisfactory academic progress policy at the end of the Warning Period will be ineligible for future aid disbursements. The student may continue on a cash-pay basis with an approved payment plan. Arrangements for payment must be approved within 10 school days after notification of loss of SAP.

SAP Appeal:

Students who do not meet SAP requirements may submit a SAP appeal to have their financial aid eligibility reconsidered prior to the beginning of the academic year. Submission of an appeal is not a guarantee of approval.

EXCEPTIONS TO ACADEMIC REGULATIONS

A request for an exception to a published Graduate School academic policy or a request for any special academic privilege must be made in writing and initiated through the submission of the Academic/Administrative Exception Form (See **Appendix E** for form). All documentary evidence in support of each application for academic exception or academic privilege should be submitted with the written request. Each case will be decided on its own merits. All exceptions, waivers and special privileges are subject to review by the Dean and/or the Program Director for a final decision. Students are encouraged to maintain their own personal copies of all paperwork submitted.

SANCTIONS

When a student does not meet the standards for adequate academic progress, the following procedures will be used to determine whether the student is failing to make satisfactory progress and/or whether an ethical or behavioral problem exists.

The Graduate School Leadership will review all cases of students who are not in Good Standing. For cases which result in a finding of insufficient academic performance or progress, professional practice field training unsuitability, or unethical or inappropriate behavior the following actions may be recommended.

Warning

Warning Status, with or without a remediation plan, can be recommended when a student's academic work or professional development falls below the Graduate School's standards but the nature of the difficulty or infraction does not require more serious or more immediate action.

Probation

Probationary status is recommended when a student's academic progress or professional development has been inconsistent with the Graduate School's requirements. A student is given a specific amount of time (usually one term) in which to remediate the cause(s) of probation or will otherwise face dismissal from the program. The process for monitoring students includes regular reports from the student and/or their mentor, reviewing student files and, as necessary and appropriate, recalling students to meet with the Graduate School Leadership. It shall be the responsibility of the Graduate School Leadership in such circumstances to review the case and to determine whether the student has completed all of the requirements of the remediation, in which case the removal of the Probationary status will be recommended. In the event that the Graduate School Leadership determines that the conditions that resulted in Probation have not been remediated, the Graduate School Leadership may recommend other action including a) continuance of the status of Probation or b) that a more severe sanction be imposed.

Mandatory Leave of Absence

A student is recommended for Mandatory Leave of Absence in those cases in which the academic work or professional development, in the opinion of the Dean of the Graduate School, and taking into consideration the Graduate School Leadership's recommendations, requires serious remediation that necessitates a temporary leave from the Graduate School in order to complete the required remediation. Required leave of absences may result in the termination of stipend payments.

Termination

A student may be terminated from the academic program when conditions are judged to be of a serious nature and are not judged to be remediable. Grounds for termination include insufficient grade point average and/or multiple Incompletes or Fail grades, serious violation of the Graduate School's standards of conducts and ethics or when a student has failed to remediate previously identified deficiencies within the specified time.

DISMISSAL AND SUSPENSION POLICIES

Students may be suspended or dismissed as a result of unsatisfactory performance as judged by their advisor or dissertation committee.

The grounds for dismissal are:

- Twice failing a required course
- Unsatisfactory performance as judged by the thesis committee
- Unethical performance - scientific misconduct, plagiarism, cheating
- Unexcused failure to meet Graduate School requirements
- Prolonged, unexcused absence
- Violation of applicable laws and policies, including but not limited to those set forth herein, or other inappropriate misconduct, as may be determined by the Dean of the Graduate School;
- Unauthorized leaves of absence or failure to return from an approved leave
- Failure to comply with Graduate School and/or City of Hope code of conduct and procedures
- Failure to submit program fees, such as tuition
- Evidence of personal factors (interpersonal or intrapersonal) that may hinder the student's professional and academic competence

ETHICAL PRINCIPLES AND PRACTICES

Any academic violation, such as fabrication, plagiarism, and cheating, shall be dealt with firmly. When a violation by any MSTM student is reported, the Dean of the Graduate School will appoint three faculty to form an *ad hoc* investigation committee. The Program Director will be notified and will participate in the committee as *ex officios*. The findings of the investigation committee will be transmitted to the Dean, and the Dean, in consultation with the Program Director, shall determine what, if any, disciplinary action shall be taken. Appeals should be addressed to the Dean of the Graduate School.

USE OF ALCOHOL / ILLEGAL SUBSTANCES

Use of alcohol or drugs that violates applicable laws is strictly prohibited. In addition, students must comply with rules regarding campus activities involving the legal use of such substances.

The illegal or abusive use of alcohol and/or other drugs by students impacts educational outcomes. Students needing assistance in addressing issues involving drug or alcohol use are encouraged to seek help through the Horizon Health assistance plan offered to students, which may be accessed by calling (888) 293-6948 / TTD (866) 846-5949. This service is available 24 hours a day, 365 days a year.

Alcohol

Expectations regarding alcohol use includes for on and off campus events, but are not limited to, the following:

1. The purchase, possession, or consumption of any alcoholic beverages (including beer and wine) by any person under the age of 21 is prohibited.
2. Alcoholic beverages will not be provided to individuals under 21 years of age.
3. The selling, either directly or indirectly, of alcoholic beverages (including beer and wine) except under the authority of a California Alcoholic Beverage Control Board license is prohibited. This includes selling cups, mixes, ice, tickets for admission, required donations, etc.
4. The serving of alcohol to an intoxicated person or to the point of intoxication is prohibited.
5. The act(s) of being drunk and disorderly in public view, including on campus and public sidewalks and walkways surrounding the campus, is prohibited.
6. Behavior that is disruptive or abusive to others as a result of using intoxicants is strictly prohibited.

Individuals planning to serve alcohol at any on-campus function must get prior approval. Contact the Academic Programs Specialist for additional information. Approval must be obtained for all events on campus.

Drug Policy

The Graduate School expects all students and student groups to comply with all local, state, and federal laws regarding the use, possession, sale, or consumption of illegal drugs. It is the responsibility of each individual to be aware of, and abide by, all federal, state, and local ordinances and Graduate School regulations regarding the same. Current laws provide for severe penalties for violations which may result in criminal records.

Tobacco Policy

The use of all tobacco products, including E-Cigarettes, is prohibited inside and on all City of Hope premises, including in student housing and vehicles parked on City of Hope premises.

GRIEVANCE PROCEDURE

A grievance is any alleged unauthorized or unjustified act or decision by a member of the faculty, staff, and/or management employee that adversely impacts the status, rights, or privileges of a student. This process should be used to settle grievances that are not considered in the Handbook with respect to specific policies or investigations and that have not been amicably resolved. Members of the grievance committee and the participants in the process must respect confidentiality for students and faculty and conform to FERPA regulations.

Student appeals and grievances should be addressed to the Dean of the Graduate School within thirty days of the date of the action notice. Students will be entitled to a hearing, if an appropriate, timely request is made, as determined by the Dean. The request for a hearing should include the student's reasons for requesting the meeting and name parties, if any, who the student believes are pertinent to the grievance.

Within thirty days, the Dean will constitute an *ad hoc* grievance committee comprising at least two faculty members, two student members, and one Director who will chair the committee. None of the members of the committee should be personally involved in the subject matter of the grievance. The grievance committee shall interview parties as they see fit, including those suggested by the student, and gather all materials from the Graduate School that allow them to make a fair and unbiased decision which they should submit to the Dean within thirty days after constitution of the committee.

The Dean shall inform the student of the committee's decision within fifteen days of receipt of the decision and indicate if the Dean supports the committee's decision. If the Dean does not support the committee's decision, the Dean shall indicate the reason in writing.

All cases for dismissal will be brought before the Graduate School Leadership who will make a recommendation to the Dean of the Graduate School.

The Dean will make the final decision in all cases. The proceedings shall become part of the student's record.

TITLE IX EQUAL EDUCATION OPPORTUNITIES

The Graduate School wants its students to be fully informed about Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. (1988), which prohibits sex discrimination in federally assisted education programs.

This law states in part:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.

The Title IX coordinator for City of Hope's Irell & Manella Graduate School of Biological Sciences is Joline Treanor, Chief Human Resource Officer, email: jtreatnor@coh.org. The purpose of the Title IX coordinator is to coordinate the Graduate School's efforts to comply with and carry out its responsibilities under Title IX. The Graduate School has adopted grievance procedures to govern the resolution of complaints alleging any action prohibited by Title IX. These procedures are attached **Appendix F: Federal Compliance** to the student handbook disseminated annually to students and are also available from the Title IX coordinator.

Harassment / Discrimination

The Graduate School is committed to providing an environment that is free from discrimination and harassment. No one may be discriminated against because of national or ethnic origin, sex, sexual orientation, marital status, race, color, religious creed (including religious dress and religious grooming), national origin, citizenship, ancestry, age, physical disability, mental disability, medical condition, genetic information, legally protected family care or medical leave status, marital status, sexual orientation, domestic partner status, military status, veteran status, military caregiver status, gender, gender identity, gender expression, sex (including pregnancy, perceived pregnancy, childbirth, breastfeeding, or related medical conditions), or any other basis protected by local, state or federal laws. Harassment in any form is prohibited, including verbal, physical and visual sexual harassment. Any student who believes they have been harassed by a fellow student, staff member, mentor, or representative of the institution should promptly report the incident to Title IX Coordinator, Joline Treanor, Chief Human Resource Officer, email: jtreatnor@coh.org. The Graduate School follows the same policy set forth in the Enterprise EEO Policy.

Reasonable Accommodation

The Graduate School complies with the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA) and has adopted a policy that assures continued reasonable accommodation will be provided for students with disabilities, so they can participate fully in the educational program and activities.

The general definition of a student with a disability is any person who has "a physical or mental impairment which substantially limits one or more of such person's major life activities," and any person who has "a history of, or is regarded as having, such an impairment." The Graduate School is not required by law to change the "fundamental nature or essential curricular components of its programs in order to accommodate the needs of disabled students," but it must provide reasonable academic accommodation.

Students with learning disabilities as well as physical disabilities may register for accommodation with Mark Briskie, Senior Disability Administrator, 4920 Rivergrade (extension 85367). The Graduate School follows the same policy set forth in the Enterprise EEO Policy.

FERPA-FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act of 1974, commonly referred to as FERPA, is designed to protect the privacy of student education records. It affords eligible students certain rights with respect to their education records and describes circumstances under which the institution may disclose education records. These rights include:

- The right to inspect and review their educational records
- The right to request an amendment of their education records
- The right to consent to the disclosure of their education records
- The right to file a complaint with the US Department of Education

ANTI-BULLYING ENVIRONMENT

The Graduate School will not in any instance tolerate abusive, disrespectful, or bullying behavior (referred to in this policy as “bullying behavior”) by or towards any person, including but not limited to, students, staff, leadership, chairs, faculty, and visitors. Any bullying behavior, regardless of intent, is unacceptable. The Graduate School defines bullying as severe and/or repeated mistreatment of one or more people by one or more perpetrators. Bullying generally includes abusive conduct such as:

- Threatening, humiliating, or intimidating behaviors.
- Work interference/sabotage that prevents work from getting done (or attempts to prevent work from getting done).
- Verbal abuse.

Bullying conduct does not need to be based upon any aspect of an individual’s identity that is protected by law in order to constitute a violation of this policy.

Although it is not possible to identify every type of conduct that may violate this policy, the Graduate School considers the following types of behavior to be examples of bullying:

- Verbal bullying: Slandering, ridiculing, or maligning a person or their appearance, lifestyle, family, or culture; persistent name-calling that is hurtful, insulting or humiliating; using a person as the butt of jokes or pranks; abusive and offensive remarks; or spreading rumors.
- Physical bullying: Pushing, shoving, kicking, poking, tripping, assault, or threat of physical assault; or damage to a person’s work area or property.
- Gesture bullying: Nonverbal gestures that can convey threatening messages.
- Exclusion: Socially or physically excluding or disregarding a person in work-related activities.
- Sabotage: Subverting, obstructing, or disrupting another person’s work performance.

Cyberbullying refers to bullying, as defined above, that occurs using a computer, cell phone, smartphone, tablet, pager, or other device that transmits electronic information, regardless of whether the device is owned by or connected to City of Hope's network. Cyberbullying is also prohibited.

There is a difference between bullying and appropriate supervision. Examples of reasonable supervisory actions, when carried out in an appropriate manner, include:

- Providing performance appraisals, where applicable;
- Coaching or providing constructive feedback;
- Monitoring or restricting access to sensitive information for legitimate business reasons;
- Scheduling ongoing meetings to address performance issues;
- Setting aggressive performance goals to help meet departmental goals; and
- Counseling or disciplining for misconduct.

This policy in no way prohibits students from engaging in any activities that are protected under applicable state and federal laws, including but not limited to any activity that is protected under Section 7 of the National Labor Relations Act, which includes the right of employees to speak, raise concerns and/or debate about their wages, hours and working conditions.

All personnel are strongly encouraged to report any bullying conduct they experience or witness as soon as possible to an Associate Director/Director, the Dean, or the Vice Provost; or to Human Resources so that the concerns can be addressed. Individuals may also report any issues and concerns on a completely confidential basis by completing a TIPS form or by contacting Corporate Compliance.

Anyone in a management or leadership capacity who becomes aware of or receives a complaint of bullying, through any channel, must immediately inform Human Resources. The Graduate School will conduct a fair and timely investigation whenever it receives an allegation of bullying. Complaints and investigations will be kept confidential to the extent possible.

If the Graduate School concludes that a violation of this policy has occurred, prompt and effective remedial action will be taken. The Graduate School may also report to law enforcement, if appropriate. Retaliation is strictly prohibited, and no action will be taken against any person for reporting possible violations of this policy in good faith.

PREGNANCY AND/OR PARENTAL LEAVES OF ABSENCE

City of Hope neither requires nor prohibits a Pregnancy or Parental Leave of Absence. Non-birth parents may request a Parental Leave of Absence. Non-birth parents may include:

- Spouses/partners anticipating or recently experiencing the birth of a child;
- Adoptive parents; or
- Parents through surrogacy.

Pregnancy anti-discrimination policy

City of Hope prohibits discrimination on the basis of any protected characteristic, including discrimination on the basis of pregnancy, in the administration of its graduate programs. To that end, City of Hope will neither require nor prohibit leaves of absence for pregnancy or childbirth. In addition, City of Hope will reasonably accommodate its graduate students, including pregnant graduate students, so that they may continue to make progress toward the completion of their graduate degree.

Any student who believes that they have not been treated equitably under the provisions of this policy should promptly report the incident to Joline Treanor, Chief Human Resource Officer, email: jtreator@coh.org.

Childbirth Accommodation

City of Hope offers expecting and new parents with a Childbirth Accommodation during the period of time around the birth of a child that allows the graduate student to enroll full-time and maintain active student status throughout the period so that graduate student rights and privileges are not impacted. Under a Childbirth Accommodation, a parent (either birth or nonbirth) is eligible for a twelve (12) week accommodation period during which the parent can work with their mentor and department to reschedule assignments, examinations, and other academic requirements. The Childbirth Accommodation period is not a Leave of Absence from City of Hope. Rather, graduate students on Childbirth Accommodation are expected to remain actively engaged in classwork and research, and if applicable, clinical activities, even if at a reduced level.

Support for Expecting and New Parents

City of Hope understands that welcoming a new child to one's family can be an exciting and demanding time in one's life and provides several options to support its graduate students throughout this period. Students who are in the late stages of pregnancy, childbirth, taking care of a newborn, or adopting a child should reach out to their mentor to discuss whether accommodation or leave of absence may be a better option. Except as specified below, all provisions of the Leaves of Absence policy defined above will apply in the case of Pregnancy and Parental Leaves of Absences.

Student Accessibility Services

Irell & Manella Graduate School of Biological Sciences (IMGS) is committed to providing appropriate and reasonable accommodation to students with disabilities including those with mobility, visual, speech, hearing impairments; chronic illnesses, psychological and intellectual disabilities; and temporary disabilities.

Section 504 Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 prohibits discrimination against an otherwise qualified individual with a disability, solely on the basis of the disability, in any program or activity that receives federal financial assistance.

Confidentiality:

IMGS follows the same policy set forth in the Enterprise EEO Policy. IMGS complies with Section 504 of the Rehabilitation Act of 1973 as amended, the Americans with Disabilities Act of 1990 as amended, and other applicable state and federal law prohibiting discrimination against individuals with disabilities. Under these laws, students have the privilege to confidentiality. IMGS recognizes that student health information is confidential information as per state and federal laws.

Registering for Accommodations

Self-identification is voluntary. All students with a disability that are seeking accommodations must register with Mark Briskie (mbriskie@coh.org), Senior Disability Administrator, and Monique Mooring (mmooring@coh.org), Senior Leave of Absence & RTW Specialist, who will work with the Graduate School to determine appropriate and reasonable accommodation and communicate with their faculty.

Accommodation:

All academic accommodations must be registered with City of Hope. Please note that information will be kept strictly confidential. Accommodation may be given for all categories of disabilities.

Examples of Academic Accommodation

- Extended time on exams
- Proctored exams
- Distraction reduced testing environment
- Ability to take breaks during class and exams
- Extensions on assignments
- Assistive technology
- Alternate format for requisite readings
- Use of a calculator

Unreasonable accommodations would include those that impose an undue economic or administrative burden on IMGS or would fundamentally alter the academic program or lower the academic standards of the program.

RESPECTFUL TREATMENT OF OTHERS

The Graduate School is a multicultural community of people from diverse racial, ethnic and class backgrounds, national origins, religious and political beliefs, physical abilities, and sexual orientations. Our interactions are enriched by our acceptance of one another, and we strive to learn from each other in an atmosphere of positive engagement and mutual respect. Students are expected to take responsibility for awareness of racism, sexism, ageism, xenophobia, homophobia, and other forms of oppression.

Discrimination will not be tolerated in our community. This includes, but is not limited to, verbal or written abuse, threats, harassment, intimidation, or violence against a person or property. In this context, we do not accept alcohol or substance abuse as an excuse, reason, or rationale for such abuse, harassment, intimidation, or violence. Such inappropriate behavior will subject a student to discipline.

GRADUATE STUDENT TRAVEL GRANT

MSTM students may apply for the graduate student travel grant for attending national and international scientific meetings. Students planning to attend meetings are expected to apply to the meeting organizers for student assistance funds. In addition, as funding permits, the Graduate School will grant up to \$2000 of support to graduate students who wish to present their work at scientific meetings to offset the costs of registration, travel, lodging, and food. Students will be reimbursed for expenses after submitting their receipts to their departmental business manager. To qualify, students must be in good academic standing and presenting their research at the conference.

Students must apply before the meeting. Applications should be submitted to the Registrar by these Deadlines:

- January 1st, for conferences that will be held in March, April, May, June, and July
- May 1st, for conferences that will be held in July, August, September, October, and November
- September 1st, for conferences that will be held in November, December, January, February, and March

The application must follow the Graduate Student Travel Grant Program Overview (**Appendix G**).

MSTM TUITION

MSTM tuition is billed and payable through the Registrar Office. All students are required to pay tuition and fees at the current year’s rate. The Graduate School reserves the right to change tuition and fees at any time.

The current tuition and fees are:

- Full Year Tuition - \$ 25,000 (\$12,500 waived for 2024-25 academic year)
- Application Fee - \$ 0
- Enrollment Fee - \$ 300
- Late Payment Fee** – The greater of 1% of the past due Student Account Balance or \$ 50
- Late Registration Fee - \$50

** Late Payment Fees are accrued on a weekly basis beginning with the first business day following the payment deadline

REFUND POLICY

For all continuing or readmitted graduate students: There is a service charge of \$10 for cancellation of registration or withdrawal before the first day of instruction. Beginning with the first day of instruction, the below is applied to the total of charges assessed. For all new graduate students: The \$300 Acceptance of Admission Fee is non-refundable.

REFUND AMOUNT PER ACADEMIC TERM						
Week	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
% refund	100%	100%	60%	40%	20%	0%

APPENDIX A: PhDTM MENTOR SELECTION FORM



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

PETITION for SELECTION of PhDTM MENTOR for DISSERTATION RESEARCH

Selecting a mentor, a lab, and a topic for one's dissertation research is the most important decision a graduate student makes. The mentor-student relationship involves rights and responsibilities. Ideally, this relationship endures well beyond graduation.

Please submit this form as part of your PhDTM application. This form must be completed and signed by the PhDTM applicant, their potential PhD dissertation research mentor, and the dissertation research mentor's department chair before submission. If the student chooses to have a co-mentor, please fill out a second form and indicate which mentor is your main mentor.

STUDENT REQUEST

Date

Badge #

Last Name

First Name

Signature

I wish to pursue my dissertation research with:

Full Name of Dissertation Research Mentor

Department Name

Location

MENTOR'S ACCEPTANCE

I commit to the training and mentorship of _____

Graduate Student's Full Name

Mentor's Full Name

Mentor's Signature

DEPARTMENT CHAIR'S APPROVAL

Department Chair's Full Name

Department Chair's Signature

GRADUATE SCHOOL APPROVAL

Signature: _____

Date: _____

APPENDIX B: ABSENCE REQUEST FORM



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

ABSENCE REQUEST FORM

Before leaving campus for day(s) off, the current graduate student must fill-out this Absence Request Form and submit it via email to the Registrar, the student's mentor, and the mentor's business director. The completed form will remain on file in the office of Graduate Education. As a reminder, international students on Visa status should contact the International Student and Scholar Office before going on a leave.

STUDENT INFORMATION

Last Name First Name Badge #

Personal Email Address Cell Phone and/or Home Phone

Please check one: ___ Vacation _____Conference/Business Meeting _____Leave of Absence

Description of Absence or Leave such as personal day off, conference name and dates, expected maternity leave dates, medical leave, personal leave reason (please note: some absence or leaves may require a medical note and subject to international student policies):

Requested Start Date: _____Return Date: _____Total Business Day(s) Off: _____

Student Signature: _____Date: _____

MENTOR'S APPROVAL (Approval from the mentor can also be sent by email to the Registrar.)

Mentor's Name: _____Mentor's Signature: _____

Department Name: _____Location: _____

GRADUATE SCHOOL APPROVAL

Approval Signature: _____Date: _____

APPENDIX C: GRADUATE STUDENT LAPTOP POLICY



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

Laptops for Graduate Students

Policy and Procedure Manual

I. PURPOSE/BACKGROUND

The Irell & Manella Graduate School of Biological Sciences (GSBS) at City of Hope (COH) will provide first-year graduate students with loan laptops. Along with the privilege of using the GSBS owned computers, students assume additional responsibility set forth in this policy. Following these guidelines will assist in protecting GSBS' computers and other interconnected devices. This policy applies whether computers are stand-alone or connected to a network such as a LAN or the intranet. All computer users are expected to comply with this policy as a condition of continued enrollment in the Graduate School.

II. POLICY

Students are subject to the City of Hope computer-related policies listed below. Please read through all the policies on the intranet carefully.

- **Computer Use Policy**
http://www.coh.org/policy/Policies%20and%20Procedures/ENTERPRISE_INFORMATION_SECURITY_POLICY.pdf
- **Electronic Information Security**
http://www.coh.org/policy/Policies%20and%20Procedures/INFORMATION_SECURITY_AND_RISK_MANAGEMENT_POLICY.pdf
- **Electronic Mail (Email), Instant Messaging (IM), and the Internet –**
http://www.coh.org/policy/Policies%20and%20Procedures/EXTERNAL_MASS_EMAIL_DISSEMINATION.pdf
- **Remote Electronic Access**
http://www.coh.org/policy/Policies%20and%20Procedures/REMOTE_ACCESS_VPN_SECURITY_MANAGEMENT_POLICY.pdf
- **Software Policy**
http://www.coh.org/policy/Policies%20and%20Procedures/ACCEPTABLE_USE_POLICY.pdf
http://www.coh.org/policy/Policies%20and%20Procedures/HARDWARE_AND_SOFTWARE_BASE_OPERATING_ENVIRONMENT_MANAGEMENT.pdf

Specific policies which students should pay close attention to are detailed below. Special software purchased and installed will be approved and paid for by the graduate students' mentors.

Changes to Application Software: Software provided includes Microsoft Office Suites, anti-virus software, Endnote, and Adobe Acrobat. Students shall **not** install other software packages on computers without obtaining advance permission from the COH Information Technology Service (ITS) Support Group. Likewise, users must not permit automatic software installation routines to be run on GSBS computers unless the appropriate ITS Support Group has first approved these routines. Unless separate arrangements are made with the ITS Support Group, upgrades to authorized software will be downloaded to computers automatically. Auto-discovery license management software is used to remotely determine which software packages are resident on user computer hard disks. Unapproved software, i.e., non-business-related Internet Peer-to-Peer file sharing application, Spyware, Adware, refer to GSBS' software policy regarding unapproved software, may be removed without advance notice to the involved user.

Software Installation: In general, any software package being installed on GSBS computers must be installed by a technician from ITS. The responsible technician will take appropriate steps to verify proper storage of the software and associated licensing information. If authorized by ITS/Data Security or GSBS, specialized scientific software can be installed and maintained by end-users, as long as all licensing requirements are met and operation of the COH network and other

operations are not compromised.

Anti-Virus Program Installed: All computers must continuously run the current version of virus detection package approved by the ITS Department. The current version of this virus package will be automatically downloaded to each computer when the machine is connected to COH's internal network.

Playing with Viruses Prohibited: Users must not intentionally write, compile, copy, propagate, execute, nor attempt to introduce any computer code designed to self-replicate, damage, or otherwise hinder the performance of any COH computer system. Such software may be called a virus, bacteria, worm, or a Trojan horse.

Changes to Operating System Configurations: On GSBS-supplied computer hardware, users must not change operating system configurations, upgrade existing operating systems, or install new operating systems. If such changes are required, they will be performed by the ITS Support Group (in person or with remote system maintenance software).

Changes to Hardware: Computer equipment supplied by GSBS must not be altered or added to in any way (e.g., upgraded processor, expanded memory, or extra circuit boards) without the prior knowledge of and authorization from the ITS Support Group. Auto-discovery software is used to determine what equipment is installed in each computer so that unauthorized hardware reconfigurations are detected automatically.

Remote Access and Control Application: The ITS Security Group must approve all remote access and control applications such as Dameware, PC Anywhere, Timbuktu, Carbon Copy, and the like prior to installation of the software. Without such approval, Remote Access Application installations are prohibited.

Disallowed Content on Computers: **Computers and their contents must be in support of education and research.** The following are disallowable content that should not be stored on any GSBS owned computers including user's home directory on network servers: Data including non-business-related MP3 songs, movies, games, TV shows, E-books, offensive materials such as sexually explicit, cult, racial jokes, etc.

Internet use privilege is not a right: All users at COH have been given Internet access; however, this access is a privilege not a right. Therefore, any inappropriate use of COH's Internet facilities defined in the "Use of Electronic Mail (E-mail), Instant Messaging (IM), and the Internet" policy may result in this privilege being taken away by COH management.

Posting Information to Discussion Groups: Users must not post confidential information to public discussion groups ("listservs"), blogs, chat rooms, social networking sites, or other public forums on the Internet unless they have been pre-authorized to make this type of representation on behalf of GSBS. GSBS reserves the right to remove any Internet posting by Users deemed inappropriate and potentially damaging to COH's reputation. Similarly, users must not post any specific technical information/problems on listservs without proper authorization from Information Technology Services (ITS) /Data Security.

Custodians of Equipment: The primary user of a computer is considered a custodian of the equipment. Students take possession of the computer on the first day of classes. Users must take appropriate steps to protect the computer/laptop. If the equipment has been damaged, lost, stolen, borrowed, or is otherwise unavailable for normal business activities, a custodian must promptly inform the GSBS. **GSBS will not replace damaged, lost, or stolen computers/laptops.** GSBS reserves the right to revoke your computer privileges if they are abused.

Return of Equipment: In the event of early departure from the Graduate School or misuse of computer privileges, the student shall return the computer within 15 days to the Registrar. If computers are not returned in a timely fashion, students run the risk of being personally responsible for full repair or replacement cost of the computer. Students also run the risk of disciplinary action, can't request transcripts, and services provided by GSBS. **The computers/laptops and all peripheral equipment shall be returned in working condition to the Registrar.**

Attachment: Student Checkout Laptop Agreement Form
Adapted from the COH Laptop/Computer Usage Policy
Sponsored by Dean, Irell & Manella Graduate School of Biological Sciences

APPENDIX D: LAPTOP CHECKOUT AGREEMENT FORM



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

Laptop Checkout Agreement Form

Student's Name: _____ Student ID #: _____
Last First

Current Address: _____
Street Address City Zip code

Cell Phone #: _____ Personal Email: _____

Equipment: _____

Serial #: _____ Blue Tag #: _____

I have read and will comply with the terms and conditions set forth in the Laptop Usage Policy.

Computer Use Policy

This policy governs the proper use of City of Hope (COH), computers (PCs, Macintoshes, UNIX workstations, portable computers, handheld computers, personal, digital assistants, and similar computers dedicated to a single user's activity) for its employees, medical staff, contractors, and other agents. Following these guidelines will assist in protecting COH's computers and other interconnected devices.

Software Policy

The purpose of this policy is to set forth the guidelines to be followed such that software at City of Hope is used in compliance with all applicable laws, regulations, and end-user licensing agreements, recognizing that COH computers are used for research, medical and administrative functions, each with their own requirements. This policy:

- (i) Establishes procedures and standards with respect to software purchase, copying, and use.
- (ii) Apprises COH users (employees, contractors, and volunteers) of the seriousness of software misuse.
- (iii) Sets forth disciplinary procedures for such misuse. If the property is damaged, lost, or stolen, I am responsible for the cost of the repair or its market value. If I do not return the laptop in a timely fashion, the Graduate School will declare me in default of this policy. If I do not comply with this policy, I run the risk of losing the privilege of using the laptop.

If the laptop is damaged, lost, or stolen, I am responsible for the cost of the repair or its market value. I declare to return the laptop in good condition before leaving the Irell & Manella Graduate School of Biological Sciences of City of Hope.

Student Signature: _____ Date: _____

Office of Graduate Education Use only

Laptop Accessories	Out	In
Sleeve/Bag	X	
Electrical Cord	X	

Comments:

Check-out:

Staff Signature: _____ Date: _____

Check-in:

Staff Signature: _____ Date: _____

APPENDIX E: ACADEMIC/ADMINISTRATIVE EXCEPTION FORM



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

Irell & Manella Graduate School of Biological Sciences

Students are responsible for becoming familiar with the information presented in the student handbook and school catalog. Students are personally responsible for following all policies and meeting deadlines and requirements. This responsibility includes, but is not limited to, academic requirements and general rules listed in the student handbook and school catalog.

REQUEST FOR ACADEMIC/ADMINISTRATIVE EXCEPTION

Name: _____

Student ID#: _____

Year Level: _____

Trimester/Year: _____

I hereby petition to waive the following: (List specific academic policy/regulation or requirement as stated in the Catalog, Student Handbook, or other documents. Indicate source.)

Rationale or justification for your request (attached supporting documents if appropriate). If you are petitioning to delay a deadline date please indicate the date you expect to complete the item.

Student Signature _____

Date: _____

Mentor/P.I. Approval (if applicable):

☐ Approved

☐ Denied

Name: _____

Signature: _____

Faculty Recommendation (if applicable):

☐ Approved

☐ Denied

Date: _____

Name: _____

Signature: _____

Dean's Approval (if applicable):

☐ Approved

☐ Denied

Date: _____

Name: _____

Signature: _____

Graduate Leadership (if applicable):

☐ Approved

☐ Denied

Date: _____

Name: _____

Signature: _____

Received by the Registrar

Name: _____

Signature: _____

APPENDIX F: FEDERAL COMPLIANCE

TITLE IX COMPLAINT PROCEDURES

I. Introduction

Irell & Manella Graduate School of Biological Sciences at City of Hope (the “Graduate School”) has developed the following procedures to provide prompt and equitable resolution of complaints alleging any action prohibited by Title IX of the Education Amendments Act of 1972 (“Title IX”). Title IX prohibits sex discrimination in federally assisted education programs. This law states in part:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance...

Use of these procedures does not affect other rights and remedies that may be available to a complainant under federal and state statutes prohibiting discrimination. These procedures are available to anyone who, at the time of an alleged violation, is enrolled at or employed by the Graduate School.

II. Definitions

Complainant: person filing the complaint of discrimination (including harassment) on the basis of sex.

Respondent: person alleged to have discriminated (including harassment) on the basis of sex.

Title IX Coordinator: means the employee designated to coordinate the Graduate School’s efforts to comply with and carry out its responsibilities under Title IX and the Title IX implementing regulations.

III. Procedures

A. Any person enrolled at or employed by the Graduate School and claiming to have been discriminated against by the Graduate School in its education programs or activities on the basis of sex may use these procedures. All complaints of sex discrimination will be promptly investigated by the Title IX Coordinator or their designee.

1. Complaints should be addressed to: Joline Treanor, Chief Human Resource Officer, email: jtreatnor@coh.org

Joline Treanor, Title IX Coordinator
City of Hope Human Resources
1500 E. Duarte Road, Duarte, CA 91010
jtreatnor@coh.org

2. Complaints against the Title IX Coordinator will be processed in accordance with these procedures except that all responsibilities of the Title IX Coordinator will be fulfilled by

the Corporate Compliance Officer of City of Hope or their designee. Under these circumstances, complaints should be addressed to:

Donetta Horseman, SVP, Chief Ethics & Compliance Officer
Compliance Office
4900 Rivergrade, Suite E210, Irwindale, CA 91706
dhorseman@coh.org (ext.80595)

B. Informal Resolution

1. Any person subject to this policy may seek advice or information on matters relating to discrimination or harassment without having to lodge a formal complaint. However, a person subject to this policy is not required to pursue informal resolution before making a formal complaint.
2. The Title IX Coordinator or the Corporate Compliance Officer, if the matter relates to the Title IX Coordinator, may be able to mediate the conflict by discussing the allegation informally with relevant parties in an attempt to end the alleged discrimination or harassment and resolve the issue. If there is a resolution acceptable to both parties, the matter will not proceed further.
3. Records will be kept of materials generated by such informal mediation along with an informal written agreement that will be reviewed and signed by both parties and maintained by the Title IX Coordinator.

C. Formal Complaint Procedures

1. In order for a complaint to be formally investigated, the complaint must be filed in writing. The complaint must be filed within one hundred eighty (180) days after the complainant becomes aware of the alleged violation. Complaints must contain the following information:
 - Name, address and telephone number of the complainant
 - A brief description of the alleged violation, including the location and date of the incident(s) and the names of all participants and known observers of the offensive conduct
 - The relief the complainant seeks
 - The complainant's signature
2. Within ten (10) days of receipt of the complaint, the Title IX Coordinator will determine whether the complaint merits formal review. A formal complaint may be dismissed at this stage if the complaint is deemed groundless for such reasons as the following: the complaint is not filed in a timely fashion; or the alleged behavior does not constitute a violation of Title IX. The Title IX Coordinator will seek the advice of the Office of General Counsel as needed.

3. If the Title IX Coordinator determines that the complaint merits formal review, the Title IX Coordinator will advise the Dean about the complaint and will, in consultation with the Office of General Counsel, initiate a formal investigation of the complaint. An individual, a committee or an outside party may conduct the investigation. The purpose of the investigation is to determine the facts relating to the complaint. The investigation will include, at a minimum, the following steps:
 - interviews with each of the complainant and the respondent
 - interviews with others identified as witnesses
 - review of any relevant documents submitted to the investigator

If appropriate, the respondent may be placed on a leave of absence during the investigation.

4. It is expected that the investigation of a complaint will be completed within sixty (60) days of receipt of the complaint. This timeline, however, is subject to change depending on various factors, including but not limited to, the complexity of the investigation.
5. Within thirty (30) days of the conclusion of the investigation, the investigator shall issue to the Title IX Coordinator, and, if appropriate, the Office of General Counsel, a written report of the findings and conclusions of the investigation. The report will provide a determination of the merits of the complaint related to Title IX and, if applicable, options for substantive resolution of the complaint and recommendations for corrective measures. The Title IX Coordinator shall review the written report and submit it to the Dean within five (5) days of receipt of the report.
6. The Dean shall make a decision based on the record and shall notify the complainant and the respondent in writing of the decision and the basis for the decision, including any corrective action to be taken, within fifteen (15) days of receipt of the investigator's report.
7. If a violation of Title IX occurs, sanctions will be imposed, and actions will be taken to prevent any further discrimination or harassment. Depending on the severity of the case, possible sanctions include, but are not limited to:
 - verbal counseling/training
 - a formal written warning placed in respondent's file
 - transfer of advisees and/or removal from positions of administrative responsibility
 - removal from a supervisory position
 - enforced leave of absence/suspension
 - termination of employment or permanent dismissal

IV. Appeal

A. If the complainant is not satisfied with the Dean's decision, the complainant may file a written appeal to the Corporate Compliance Officer. The written appeal must include a detailed statement of the basis of the appeal. The Corporate Compliance Officer shall notify the complainant of the final decision within thirty (30) days of receipt of the appeal.

V. General Considerations

- A. Retaliation Prohibited. No person shall be subject to discharge, suspension, discipline, harassment, or any form of discrimination for having used or having assisted others in using the grievance process. The Title IX Coordinator will, where warranted, investigate a complaint of alleged retaliation in the same manner as is described herein.
- B. Calculation of Time. Saturdays, Sundays, and holidays shall be disregarded in calculating time periods specified in these grievance procedures.
- C. Respondent Not a Student or Employee. If the respondent is not enrolled at or employed by the Graduate School, there may be additional procedures that apply. For example, if a respondent were a member of the City of Hope National Medical Center Medical Staff, the provisions of City of Hope's Harassment Policy addressing harassment by a member of the Medical Staff would be applied.

FERPA-FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An "eligible student" under FERPA is a student who is 18 years of age or older or who is attends a postsecondary institution.)

These rights include:

1. The right to inspect and review your education records within 45 days after the day the Graduate School receives a request for access. A student should submit to the Registrar a written request that identifies the record(s) the student wishes to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar to whom the request was submitted, that Registrar shall advise the student of the correct official to whom the request should be addressed.
2. The right to request an amendment to your student education records that you believe is inaccurate, misleading, or otherwise in violation of the privacy rights under FERPA.

A student who wishes to ask the Graduate School to amend a record should write to the Registrar to clearly identify the part of the record the student wants changed and specify why it should be changed.

If the Graduate School decides not to amend the record as requested, the Registrar will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before the Graduate School discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

The Graduate School discloses education records without a student's prior written consent under the FERPA exception for disclosure to Graduate School officials with legitimate educational interests or in the case the information is designated as directory information.

4. The right to file a complaint. An eligible student has the right to file a complaint with the U.S. Department of Education concerning alleged failures by the Graduate School to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

Definitions

Directory Information: Under FERPA directory information is information contained in a student's education record that generally would not be considered harmful or an invasion of privacy if disclosed. Institutions may disclose designated directory information without written consent at the discretion of the Registrar. The Graduate School considers the following to be directory information:

- Name
- Email address
- Program
- Dates of attendance
- Enrollment status
- Degree status
- Major Field of Study
- Awards received including honors, scholarships, fellowships, grants, and dean's list
- ☐ Photographic, video, or electronic images

If you do not want the Graduate School to disclose directory information from your education records without written consent, you must notify the Registrar in writing.

Note: Once a student's record has been made confidential, no information can be shared about the individual without the student's written consent. In such a case, problems may

occur thereafter when potential employers or other parties make inquiries about the student.

Education Records: An education record is defined as any information or data that is directly related to a student and is maintained by an educational agency, or institution, or by a party acting for the agency or institution. Education records include any information or data recorded in any medium.

Examples of education records include, but are not limited to the following:

- Academic assessments
- General counseling and advising records
- Disciplinary records
- Financial aid records
- Admissions information for students who are accepted and enrolled
- Biographical information (date and place of birth, gender, nationality, race and ethnicity, and identification photographs)
- Course work, schedules or communication that are part of the academic process

Education records DO NOT include (narrowly defined):

- Records in the sole possession of the maker
- Law enforcement records
- Employment records when employment is not contingent on being a student
- Medical or psychological treatment records
- Alumni records

School Official: A school official is a person employed by the Graduate School in an administrative, managerial, academic, research, or support staff position (including human resources and health staff); a person serving on the board or committee; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of the Graduate School who performs an institutional service of function for which the Graduate School would otherwise use its own employees and who is under the direct control of the Graduate School with respect to the use and maintenance of educational records, such as an attorney, auditor, collection agent, a hosted software company or a verification agency.

Legitimate Educational Interest: A school official has a legitimate educational interest when the official needs to review an education record in order to fulfill their responsibility on behalf of the Graduate School, such as when the official is performing a task that is specific in their job description, or by a contract agreement, or other official appointment; performing a task related to a student's education; performing a task related to the discipline of a student; or providing a service or benefit relating to the student or student's family, such as health care, counseling, job placement, or financial aid.

The complete regulations and full definitions of terminology are on the [U.S. Department of Education site](#).

APPENDIX G: GRADUATE STUDENT TRAVEL GRANT PROGRAM OVERVIEW

Graduate Student Travel Grant Program Overview

The Graduate Student Travel Grant Program is designed to provide the opportunity for Graduate Students to make presentations at scientific meetings. This program is designed not only to give graduate students valuable experience in making research presentations, but also to increase awareness of City of Hope's excellence in research and training.

Program Guidelines

- The award is open to any Graduate Student in their second year or beyond, regardless of research area or career progression.
- Graduate Student may receive only one travel award per academic year, and a maximum of two awards during the applicant's training at City of Hope.
- No more than two applications will be accepted from a lab in each award cycle. The Principal Investigator (PI)/Mentor of the lab should make the decision as to which two applications should be submitted for a travel grant.
- Only complete applications will be considered. Without exception, applications received after 5:00 p.m. on the deadline day will not be reviewed.
- No awards will be given for past meetings.
- All award winners are required to present their work at the Annual City of Hope Poster Session held every fall. Travel Grant awardees will be highlighted at the Poster Session.

The Review Process

All applications will be reviewed by the Graduate School Office Faculty Review Committee. Reviewers will read each application and score them using a set of established criteria and a rubric. Applications will be evaluated on the following criteria:

- Whether the application is for a platform or poster presentations.
- The quality of the abstract
 - o Novelty/Innovation
 - o Maturity of the Work
 - o Significance to the Field
 - o Cohesiveness and Style
 - o Grammar and Spelling
- Research productivity of the applicant during their graduate student training as judged by their publication record, and previous conference presentations
- The strength of the PI/Mentor's letter of recommendation for the applicant
- Potential impact of meeting attendance on the applicant's professional development
- Previous participation in City of Hope Professional Development events

Application Components

- Completed Application Form
- Biosketch
- Letter of recommendation from PI/Mentor
- Short description (no longer than one page) of the scientific meeting as well as the potential benefits to their career plans
- Budget of anticipated expenses
- Budget of anticipated expenses

Deadlines

There are three deadlines each year. Graduate Students can apply for:

- January 1st, for conferences that will be held in March, April, May, June, and July
- May 1st, for conferences that will be held in July, August, September, October, and November
- September 1st, for conferences that will be held in November, December, January, February, and March

Notification of Awards

The Graduate School Office will send the Faculty Review Committee's final decisions to each applicant by email. All travel grant applicants will be notified via email as to whether they have been awarded a grant on the following days:

- February 1st for the January 1st deadline
- June 1st for the May 1st deadline
- October 1st for the September 1st deadline

How funds are dispersed

Travel Grants are awarded for up to \$2,000 per award. Reimbursements are processed through the Awardee's Business Manager. The Business Manager will make sure that the travel grant is applied to eligible travel expenses. The Business Manager will work with the Graduate School to then complete a non-labor cost transfer for the entire amount and provide the Graduate School with copies of all receipts. Awardees must submit their expenses for reimbursement within 30 days of travel.

Contacts

The Graduate Student Travel Grant Program is administered by the Graduate School Office. Please contact the Registrar for additional information or with questions.



IRELL & MANELLA GRADUATE SCHOOL
OF BIOLOGICAL SCIENCES

Application Form: Graduate Student Travel Grant Program

To apply, you must submit the following (in a single PDF) to registrar@coh.org

- Completed Application Form (Fillable Form)
- Biosketch
- Letter of Recommendation from PI/Mentor
- Short description (no longer than one page) of the scientific meeting as well as the potential benefits to your career plans
- Budget of anticipated expenses
- Letter of invitation from the meeting or conference organizers to give a presentation or poster (not needed for initial application but if awarded letter will be needed)

There are 3 deadlines each year:

- January 1st, for conferences that will be held in March, April, May, June, and July
- May 1st, for conferences that will be held in July, August, September, October, and November
- September 1st, for conferences that will be held in November, December, January, February, and March

Applications must be received by 5:00pm on the deadline date. No applications will be accepted after the deadline.

Applicant Information

First Name: _____ Last Name: _____

Email: _____ Campus Extension: _____

Department: _____ Years in Current Laboratory: _____

I have previously been awarded a Graduate Student Travel Grant: ____

Year of Previous Award(s): ____

Title(s) of Previous Abstract (if awarded).

Enter N/A if you have not previously received a Graduate Travel Grant:

Please list the Professional/Career Development activities that you have participated in at the City of Hope (e.g., RSO Advance, Annual Poster Session, Grant Writing Workshops, and Monthly Seminars):

PI/Mentor Information

First Name: _____ Last Name: _____

Email: _____ Campus Extension: _____

Department: _____

Scientific Meeting Information

Meeting Title: _____

Meeting Date: _____ Meeting Location: _____ Abstract accepted? _____

If no, explain when you will receive confirmation: _____

A summary of your submitted abstract, which should include brief sections labeled by the following with bolded section headers. The abstract should not be more than 300 words (not including the title or authors). (Please note that your application will be administratively withdrawn if this format is not followed):

- | | |
|---------------------------|---------------------------------|
| • Hypothesis/Significance | • Results |
| • Introduction | • Discussion/Interpretation |
| • Method of Approach | • Keyword/Area of Concentration |

Recent results obtained since the abstract was written:

Please contact the Registrar with any questions

Graduate Student Travel Grant Program FAQ

When should I apply?

Graduate Students in their second year or beyond should apply based on the date of conference travel.

What is the Application Deadline for the Travel Grant?

There are three deadlines each year. Graduate Students can apply for:

- January 1st, for conferences that will be held in March, April, May, June, and July
- May 1st, for conferences that will be held in July, August, September, October, and November
- September 1st, for conferences that will be held in November, December, January, February, and March

Where do I submit my application?

All completed applications must be submitted to the Registrar by 5 p.m. on the application deadline. Late applications will not be considered.

What should I submit?

- A single PDF that contains the following:
 - Completed Application Form
 - Biosketch
 - Letter of Recommendation from PI/Mentor
 - Short description (no longer than one page) of the scientific meeting as well as the potential benefits to your career plans
 - Budget of anticipated expenses
 - Letter of invitation from the meeting or conference organizers to give a presentation or poster (not needed for initial application but if awarded letter will be needed)

What expenses can be supported by a travel grant?

Eligible expenses are airfare/mileage, lodging, registration fees, and production expenses (photocopies, posters). All expenses must comply with City of Hope Travel Policies.

Is it possible to receive funding before traveling to a conference?

No. The Travel Grant program works through a reimbursement process. Travel Grant awardees receive grant funds after the department, or the individual has incurred the cost.

How many travel awards can I receive?

Graduate Students may receive only one travel award per academic year, and a maximum of two awards during their graduate training at City of Hope.

How many awards are given out?

The Graduate School will fund up to four travel grants each evaluation period. The Travel Grant Review Committee will try to fund as many applications as possible, based on availability of funds.

Can I apply for a travel grant if I'm not presenting at the conference?

No. Travel grants are intended for students who will be contributors to the conference.

What information should I include in my application to make it competitive?

Applicants who are giving a talk typically will have a slight (though not definitive) advantage. Your recommendation letter will be taken into account as well. By far the most important criterion is the overall quality of your abstract. Be sure to provide a well-composed and compelling argument for the significance of your travel and how it relates to success during your graduate training.

How does the review process work?

There will be a panel of reviewers. Each reviewer will get to read your application and independently score it from a rubric. The composite score from all reviewers will be ranked, which determines funding.

Please note that this is a selective travel grant. Correctly completing an application does not ensure funding. Excellent applications may not be selected for the grant because of the number of requests submitted and the limited availability of funds.

When will I know if I have received a Travel Grant?

All travel grant applicants will be notified via email as to whether they have been awarded a grant on the following days:

- February 1st for the January 1st deadline
- June 1st for the May 1st deadline
- October 1st for the September 1st deadline

How are funds dispersed?

Travel Grants are awarded for up to \$2,000 per award. Reimbursements are processed through the Awardee's Business Manager. The Business Manager will make sure that the travel grant is applied to eligible travel expenses. The Business Manager will work with the Graduate School to then complete a non-labor cost transfer for the expenses up to the awarded amount and provide the Graduate School with copies of all receipts. Awardees must submit their expenses for reimbursement within 30 days of travel.

Contacts

The Graduate School Travel Award Program is administered by the Graduate School Office. Please contact the Registrar for additional information or with questions.

Appendix H: Important Contacts

Graduate School Direct Line: (877) 715-4723 or extension 60518

Lyra:

Lyra makes it easier to find and receive confidential, personalized, short-term mental health care. Their online platform allows you to sign up in just a few clicks, find the right coach or therapist for your needs, and quickly book an appointment in-person or via live video. You and your spouse or domestic partner, dependents under age 26 and household members are each eligible for up to 12 sessions per year with a Lyra Therapist or coach covered at no cost to you.

- Register at coh.lyrahealth.com
- Complete a brief wellness questionnaire to receive personalized care recommendations
- Review high-quality coaches and therapists matched to your needs.
- Book an appointment in-person or via video as early as the next day or tap into self-care apps.

Learn more at coh.lyrahealth.com; care@lyrahealth.com; 877-672-1266

Hotlines:

988 Lifeline is the Suicide and Crisis Lifeline. Students can call, text, or chat. They also have a deaf and hard of hearing options plus spanish language speakers. It's available 24 hours. The website is <https://988lifeline.org/>

National Alliance on Mental Illness (NAMI) Helpline: Call 1-800-950-NAMI (6264) to speak with a specialist who can provide information, resources, and support.

Substance Abuse and Mental Health Services Administration (SAMHSA) Helpline: Call 1-800-662-HELP (4357) for immediate assistance.

National Hopeline Network: Call 1-800-SUICIDE (784-2433) for immediate assistance.

National Maternal Mental Health Hotline: Call or text 1-833-TLC-MAMA for support.

National Depression Hotline: Call 866-629-4564

National Anxiety Hotline: 866-903-3787

Employee Assistance Program Phone Number: (800) 342-8111 24 hrs a day, 7 days a week

Security:

Emergency **on Duarte Campus:** Call 55 or 626-218-5555

Emergency **off Campus:** Call 911

If you are uncomfortable walking to your vehicle, call security (ext. 84000) and they will take you to it.

Shuttles: Shuttle Services approximately every ½ hour between the hours of 7:00 am and 4:30 pm. If a shuttle is needed before or after those hours call ext. 82006 or 626-218-2006 for assistance.

ITS: Computer Support 84357 or (626) 218-4357

Title IX Coordinator: Joline Treanor, Chief Human Resource Officer, located in Human Resources, Needleman 2nd Floor, Room 204A; email: jtreanor@coh.org (extension 80545).