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

# MASTER OF SCIENCE IN TRANSLATIONAL MEDICINE (MSTM)

A Joint Program with Keck Graduate Institute (KGI)

Student Handbook 2021-2022



**BECKMAN RESEARCH INSTITUTE** 

IRELL & MANELLA GRADUATE SCHOOL OF BIOLOGICAL SCIENCES

#### Contents

INTRODUCTION	4
MISSION STATEMENT	6
MESSAGE FROM THE DEAN	7
MESSAGE FROM THE PROGRAM CO-DIRECTORS	
PROGRAM LEARNING OUTCOMES	9
PROGRAM OVERVIEW	
GRADUATE SCHOOL ADMINISTRATION	11
MSTM PROGRAM LEADERSHIP AND COMMITTEE	12
MSTM RESEARCH MENTORS 2021-2022	13
CURRENT MASTERS STUDENT LIST	24
MSTM ALUMNI	25
CURRICULUM AND DEGREE REQUIREMENTS	26
COURSE INFORMATION	27
MSTM ACADEMIC CALENDAR AT CITY OF HOPE	30
MSTM RESEARCH THESIS	33
THESIS COMMITTEE	33
THESIS DOCUMENT FORMAT	
THESIS FINAL DRAFT	33
LABORATORY NOTEBOOK	34
GRADING SYSTEM	35
GRADE CHANGE POLICY	35
Application and Admissions to PhD in Translational Medicine (PhDTM)	36
Application and Admissions Process	36
POLICIES AND PROCEDURES	37
ATTENDANCE	37
Leaves of absence	37
Holidays	37
International Students: Attendance and Traveling	
MANDATORY COMPLIANCE TRAINING	38
TRANSCRIPT REQUEST FEE	38
REPLACEMENT DIPLOMAS FEE	

LAPTOPS	
WELLNESS	
ACADEMIC STANDARDS	
ACADEMIC STANDING	40
Satisfactory Academic Progress	40
Unsatisfactory Progress	40
FAILURE TO MEET ACADEMIC STANDARDS	41
EXCEPTIONS TO ACADEMIC REGULATIONS	41
SANCTIONS	41
Warning	41
Probation	42
Mandatory Leave of Absence	42
Termination	42
DISMISSAL AND SUSPENSION POLICIES	42
ETHICAL PRINCIPLES AND PRACTICES	43
USE OF ALCOHOL / ILLEGAL SUBSTANCES	43
Alcohol	43
Drug Policy	44
Tobacco Policy	
GRIEVANCE PROCEDURE	44
TITLE IX EQUAL EDUCATION OPPORTUNITIES	45
Harassment / Discrimination	
Reasonable Accommodation	45
FERPA-FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT	46
ANTI-BULLYING ENVIRONMENT	46
PREGNANCY AND/OR PARENTAL LEAVES OF ABSENCE	48
Pregnancy anti-discrimination policy	
Childbirth Accommodation	48
Support for Expecting and New Parents	48
RESPECTFUL TREATMENT OF OTHERS	
GRADUATE STUDENT TRAVEL GRANT	50
MSTM TUITION, FEES AND FINANCIAL AID	51

APPENDIX A: PhDTM MENTOR SELECTION FORM	52
MENTOR'S ACCEPTANCE	53
APPENDIX B: ABSENCE REQUEST FORM	54
APPENDIX C: GRADUATE STUDENT LAPTOP POLICY	56
APPENDIX D: LAPTOP CHECKOUT AGREEMENT FORM	59
APPENDIX E: ACADEMIC/ADMINISTRATIVE EXCEPTION FORM	61
APPENDIX F: FEDERAL COMPLIANCE	63
APPENDIX G: GRADUATE STUDENT TRAVEL GRANT PROGRAM OVERVIEW	71
APPENDIX H: IMPORTANT CONTACTS	78

## **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; 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; Molecular Medicine; 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 bloodforming 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**

The mission of the Irell & Manella Graduate School of Biological Sciences at City of Hope is to train students in an academically stimulating, collaborative, and diverse environment to apply their creativity, curiosity and talents to advance understanding of the complexities of the life sciences and to apply research discoveries toward finding cures for disease.

## **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 students 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. City of Hope has a strong track record in training both predoctoral students and postdoctoral fellows. In 2018, the graduate school initiated a new joint master's program in translational medicine with the Henry E. Riggs School of Applied Life Sciences at Keck Graduate Institute. 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.

## **MESSAGE FROM THE PROGRAM CO-DIRECTORS**

Keck Graduate Institute (KGI) and City of Hope have a remarkable history of innovation in science and medical care. Our faculty members have made major contributions in translational research and biomedicine, and are widely recognized as leaders in their fields. This program joins two great innovators KGI, dedicated to application-based scientific research and education, and City of Hope, an institution that helped establish the biotechnology industry.

KGI was established in response to a call by our nation's leaders to rethink higher education and embrace an interdisciplinary education. Bringing together engineering, the life sciences and business, with an emphasis on professional degrees prepares students for careers in clinical and regulatory affairs, pharmaceuticals, bioinstrumentation, medical devices, and biotechnology. The broad, interdisciplinary approach to science education makes KGI graduates of great potential value to a broad range of biotech industry companies and to governmental agencies and nonprofit organizations that are tasked with regulatory responsibilities and the advancement of safe and effective medicines and medical products.

City of Hope helped launch the biotechnology industry by investigators creating the technology that led to the first human recombinant gene products, insulin and human growth hormone, which are now used 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.

We welcomed our inaugural class in 2018 and look forward to the growth of this program. We know that the partnership between the Henry E. Riggs School of Applied Life Sciences at KGI and the Irell & Manella Graduate School of Biological Sciences (IMGS) at City of Hope will serve as a great stepping stone to a variety of research careers for our graduates. The Master of Science in Translational Medicine (MSTM) degree will open the door to careers in biotechnology, pharmaceutical industry, clinical or academic laboratories, as well as doctoral research or medical education.

Yilun Liu, Ph.D. Irell & Manella Graduate School of Biological Sciences City of Hope Anastasia Levitin, Ph.D. Henry E. Riggs School of Applied Life Sciences Keck Graduate Institute

## **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 an industry 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 both the Henry E. Riggs School of Applied Life Sciences at KGI and the Irell & Manella Graduate School of Biological Sciences at City of Hope throughout the entire two-year program. During the first year, students will spend 90 percent of their academic hours at KGI, where they will take a series of core and advanced courses that emphasize the process of taking our basic science discovery at the bench side to therapeutic development at the bedside. The courses will cover fundamental and advanced molecular biology techniques (Molecular Biotechnology, Fundamental Papers in Applied Medicine); population genetics in human diseases (Molecular Basis of Disease, Pharmacogenomics and Precision Medicine); drug target discovery and development (Pharmaceutical Discovery, Pharmaceutical Development, Advanced Pharmaceutical Discovery with Lab), statistical analysis for clinical trials (Application of statistics, Clinical Biostatistics). In addition to classes at KGI, students will go through advanced technical trainings conducted by the core facilities of City of Hope (Flow Cytometry, Microscopy and Digital Imaging, Integrative Genomic and Bioinformatics, Mass Spectrometry & Proteomics, Multi-Scale Translational Research, Animal Model, CRISPR and 3d Tumor Imaging Center). MSTM students will also attend City of Hope Phase I/Early Therapeutic Disease Team meetings to learn how clinical trials work. MSTM students will attend roundtable discussions with City of Hope faculty and visit laboratories to learn about available City of Hope research topics (Independent Research). By the end of the first year, the students will identify a suitable thesis mentor and will spend 95 percent of their time at City of Hope during the second year to conduct their thesis research. Throughout the entire two years of the program, students will also go through rigorous training in scientific writing and research presentation.

## **GRADUATE SCHOOL ADMINISTRATION**

Irell & Manella Graduate School of Biological Sciences at City of Hope: Dean, David Ann, Ph.D. Vice Dean & Co-Director of MSTM/MSRA Programs, Yilun Liu, Ph.D. Director of Assessment and Development, Susan Neuhausen, Ph.D. Director of Diversity and Education, Rick Kittles, 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. Associate Director of MSTM Program, Ke Ma, Ph.D. Associate Director of Ph.D. Admissions, Tijana Jovanovic-Talisman, Ph.D. Registrar/Business Manager, Tracy Kurzy, MBA, MEd Supervisor, Business Operations, Sarah Bannister Postdoctoral Program Manager, Stephanie Alexander Administrative Assistant, Marina Sanchez

*Henry E. Riggs School of Applied Life Sciences at KGI:* **Dean**, Martin Zdanowicz, Ph.D.

Co-Director of MSTM Program, Anastasia Levitin, Ph.D.

Administrative Assistant, Susie Haynes

## **MSTM PROGRAM LEADERSHIP AND COMMITTEE**

The MSTM program is jointly led by the Irell & Manella Graduate School of Biological Sciences at City of Hope and the Henry E. Riggs School of Applied Life Sciences at KGI Co-Directors. The program Co-Directors are:

#### Yilun Liu, Ph.D.

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

#### Anastasia Levitin, Ph.D.

Professor of Practice in Translational Medicine Henry E. Riggs School of Applied Life Sciences Keck Graduate Institute

The MSTM Co-Directors oversee the needs and development of this joint program. At City of Hope, the MSTM Admissions Committee is co-chaired by the City of Hope's Co-Director and the Associate Director of MSTM Program. The MSTM Admissions Committee at City of Hope works closely with KGI's MSTM committee on admission decisions and curriculum design. The MSTM program is assessed by the Assessment Sub-Committee under the guidance of Director of Assessment and Development.

#### **MSTM ADMISSIONS COMMITTEE at CITY OF HOPE**

Yilun Liu, Ph.D. (co-chair) Ke Ma, Ph.D. (co-chair) Patrick Fueger, Ph.D. Jeannine McCune, Pharm.D. Mustafa Raoof, M.D. Hung-Ping (Ben) Shih, Ph.D. Yanzhong (Frankie) Yang, M.D., Ph.D.

## MSTM RESEARCH MENTORS 2021-2022

#	Name	Appointment Year	Professional Training	Title	Department
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.	Leslie Bernstein, Ph.D.	2007	UCLA	Professor	Population Sciences
8.	Andrea Bild, Ph.D.	2017	University of Colorado	Professor	Medical Oncology and Therapeutics Research
9.	Mark Boldin, M.D., Ph.D.	2011	Weizmann Institute of Science (Israel)	Associate Professor	Molecular & Cellular Biology
10.	Charles Brenner, Ph.D.	2020	Stanford University	Professor	Diabetes & Cancer Metabolism
11.	Christine Brown, Ph.D.	1998	UC Berkeley	Professor	Hematology and Hematopoietic Cell Transplantation
12.	Elizabeth Lihua Budde, M.D., Ph.D.	2013	Duke University	Associate Professor	Hematology and Hematopoietic Cell Transplantation
13.	John Burnett, Ph.D.	2008	UC Berkeley	Assistant Professor	Center for Gene Therapy
14.	Michael Caligiuri, M.D.	2018	Stanford University School of Medicine	Physician-in- Chief Distinguished Chair	Hematopoietic Cell Transplantation
15.	Edouard Cantin, Ph.D.	1983	University of Cambridge	Professor Emeritus	Molecular Imaging & Therapy

#	Name	Appointment Year	Professional Training	Title	Department
16.	Angelo Cardoso, M.D., Ph.D.	2016	University Paris- Sud, France	Research Professor	Center for Gene Therapy
17.	Nadia Carlesso, M.D., Ph.D.	2016	University of Turin, University of Genova	Professor	Hematologic Malignancies Translational Science
18.	Wing-Chun (John) Chan, M.D.	2013	University of Hong Kong	Professor	Pathology
19.	Saswati Chatterjee, Ph.D.	1991	Georgetown University	Professor	Surgery
20.	Ammar A. Chaudhry, M.D.	2016	USF College of Medicine	Assistant Clinical Professor	Diagnostic Radiology
21.	Chun-Wei (David) Chen, Ph.D.	2017	University of Rochester	Assistant Professor	Systems Biology
22.	Jianjun Chen, Ph.D.	2018	Shanghai Institute of Biochemistry, Chinese Academia of Sciences	Professor	Systems Biology
23.	Mike Y. Chen, M.D., Ph.D.	2015	Thomas Jefferson University/ Medical College of Virginia	Associate Professor	Surgery
24.	Shiuan Chen, Ph.D.	1985	University of Hawaii	Professor	Cancer Biology
25.	Wenyong Chen, Ph.D.	2005	University of Alabama	Associate Professor	Cancer Biology
26.	Zhen Chen, B.Med, Ph.D.	2016	UC Riverside	Associate Professor	Diabetes Complications and Metabolism
27.	Alexey Danilov, M.D., Ph.D.	2020	Yaroslavl Medical Academy	Professor	Hematology and Transplantation
28.	Thanh Dellinger, M.D.	2015	UC Irvine	Assistant Clinical Professor	Surgery

#	Name	Appointment Year	Professional Training	Title	Department
29.	Yingfeng Deng, Ph.D.	2021	Albert Einstein College of Medicine	Associate Professor	Diabetes and Cancer Metabolism
30.	Sangeeta Dhawan, Ph.D.	2017	Indian Institute of Science, Bangalore	Assistant Professor	Translational Research and Cellular Therapeutics
31.	Don Diamond, Ph.D.	1989	Harvard University	Professor	Hematology and Hematopoietic Cell Transplantation
32.	Richard Ermel, Ph.D., D.V.M., M.P.V.M	2002	UC Davis	Professor	Comparative Medicine
33.	Marwan Fakih, M.D.	2012	American University of Beirut, Lebanon	Professor	Medical Oncology & Therapeutics Research
34.	Mingye Feng, Ph.D.	2018	Johns Hopkins University	Assistant Professor	Immuno-Oncology
35.	Betty Ferrell, Ph.D.	1989	Texas Women's University	Professor	Nursing Research and Education/ Population Sciences
36.	Yuman Fong, M.D.	2016	Weill Cornell Medical College	Professor	Surgery
37.	Stephen Forman, M.D.	1979	University of Southern California	Professor	Hematopoietic Cell Transplantation
38.	Patrick Fueger, Ph.D.	2016	Vanderbilt University	Associate Professor	Molecular and Cellular Endocrinology
39.	Carlotta Glackin, Ph.D.	1993	University of Southern California	Associate Professor	Developmental and Stem Cell Biology
40.	Ajay Goel, Ph.D.	2019	Panjab University	Professor	Molecular Diagnostics, Therapeutics and Translational Oncology
41.	Stacy Gray, M.D.	2016	University of Chicago	Associate Clinical 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

#	Name	Appointment Year	Professional Training	Title	Department
43.	Zhaohui Gu, Ph.D.	2020	Shanghai Jiao Tong University	Assistant Professor	Computational & Quantitative Medicine
44.	Nora Heisterkamp, Ph.D.	2017	University of Rotterdam	Professor	Systems Biology
45.	Robert J. Hickey Ph.D.	2011	City University New York	Associate Professor	Molecular Medicine
46.	David Horne, Ph.D.	2006	Massachusetts Institute of Technology	Professor	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.	Rahul Jandial, M.D., Ph.D.	2008	UC San Diego	Associate Professor	Neurosurgery
50.	Marta Jankowska, Ph.D.	2021	San Diego State University	Associate Professor	Population Sciences
51.	Lei Jiang, Ph.D.	2017	Shanghai Institutes for Biological Sciences	Assistant Professor	Molecular & Cellular Endocrinology
52.	Tijana Jovanovic- Talisman, Ph.D.	2013	Columbia University	Associate Professor	Molecular Medicine
53.	John Kaddis, Ph.D.	2015	University of Southern California	Assistant Professor	Diabetes and Cancer Discovery Science
54.	Michael Kahn, Ph.D.	2018	Yale University	Professor	Molecular Medicine
55.	Markus Kalkum, Ph.D.	2003	Free University of Berlin	Professor	Molecular Imaging and Therapy
56.	Fouad Kandeel, M.D., Ph.D.	2008	Cairo University	Professor	Clinical Diabetes, Endocrinology and Metabolism
57.	Rick Kittles, Ph.D.	2018	George Washington University	Professor	Population Sciences

#	Name	Appointment Year	Professional Training	Title	Department
58.	Marcin Kortylewski, Ph.D.	2005	Univ. School of Medical Sciences	Professor	Immuno-Oncology
59.	Hsun Teresa Ku, Ph.D.	2007	Medical University South Carolina	Associate Professor	Translational Research and Cellular Therapeutics Research
60.	Ya-Huei Kuo, Ph.D.	2008	University of Connecticut	Associate Professor	Hematologic Malignancies Translational Science
61.	Larry W. Kwak, M.D., Ph.D.	2015	Northwestern University	Professor	Hematology and Hematopoietic Cell Transplantation
62.	Mark LaBarge, Ph.D.	2016	Stanford University	Professor	Population Sciences
63.	James Lacey, Ph.D., M.P.H.	2009	University of Michigan	Professor	Computation and Quantitative Medicine
64.	Keane Lai, M.D.	2018	University of Pittsburgh	Assistant Professor	Pathology
65.	Kyuwan Lee, Ph.D.	2020	University of Southern California	Assistant Professor	Population Sciences
66.	Peter Lee, M.D.	2011	UC San Diego	Professor	Hematology and Hematopoietic Cell Transplantation
67.	Ling Li, Ph.D.	2018	Zhejiang University	Associate Professor	Hematological Malignancies Translational Science
68.	Yun (Rose) Li, M.D., Ph.D.	2022	University of Pennsylvania	Assistant Professor	Radiation Oncology
69.	Ren-Jang Lin, Ph.D.	1993	Pennsylvania State University	Professor	Molecular and Cellular Biology
70.	Yilun Liu, Ph.D.	2011	Yale University	Professor	Cancer Genetics and Epigenetics
71.	Qiang Lu, Ph.D.	2002	UC San Diego	Professor	Developmental and Stem Cell Biology
72.	Ke Ma, Ph.D.	2018	Baylor College of Medicine	Associate Professor	Diabetes Complications & Metabolism

#	Name	Appointment Year	Professional Training	Title	Department
73.	Ellie Maghami, M.D.	2004	Washington University School of Medicine at St. Louis	Professor	Surgery
74.	Linda Malkas, Ph.D.	2011	City University of New York	Professor	Molecular & Cellular Biology
75.	Edwin Manuel, Ph.D.	2015	Harvard University	Assistant Professor	Immuno-Oncology
76.	Guido Marcucci, M.D.	2016	Catholic University of Sacred Heart, Rome	Professor	Hematologic Malignancies Translational Science
77.	Jeannine McCune, Pharm.D.	2017	University of North Carolina	Professor	Population Sciences
78.	Heather McGee, M.D. Ph.D.	2021	Yale University	Assistant Professor	Radiation Oncology
79.	Marcia Miller, Ph.D.	1975	UC Los Angeles	Professor Emeritus	Molecular & Cellular Biology
80.	Jose Enrique Montero Casimiro, M.D.	2019	Havana University	Research Professor	Diabetes Immunology
81.	Kevin Morris, Ph.D.	2015	UC Davis	Professor	Center for Gene Therapy
82.	Rama Natarajan, Ph.D.	1990	Indian Institute of Science	Professor	Diabetes Complications and Metabolism
83.	Susan Neuhausen, Ph.D.	2009	University of Minnesota	Professor	Population Sciences
84.	Edward Newman, Ph.D.	1981	Yale University	Associate Professor	Medical Oncology and Therapeutics Research
85.	Vu Nguyen Ngo, Ph.D.	2010	UC San Francisco	Associate Professor	Systems Biology
86.	Joyce Niland, Ph.D.	1988	University of Southern California	Professor	Diabetes and Cancer Discovery Science

#	Name	Appointment Year	Professional Training	Title	Department
87.	Timothy O'Connor, Ph.D.	1996	Purdue University	Professor Emeritus	Cancer Biology
88.	Javier Gordon Ogembo, Ph.D.	2018	Nagoya University	Associate Professor	Immuno-Oncology
89.	Sumanta Kumar Pal, M.D.	2009	UCLA David Geffen School of Medicine	Clinical Professor	Medical Oncology & Therapeutic Research
90.	Sunita Patel, Ph.D.	2003	Alliant University	Associate Clinical Professor	Population Sciences
91.	Jeff Perry, Ph.D.	2021	University of Cambridge UK	Assistant Professor	Molecular Diagnostics, Therapeutics and Translational Oncology
92.	Flavia Pichiorri, Ph.D.	2016	University of Rome	Associate Professor	Hematologic Malignancies Translational Science
93.	Saul Priceman, Ph.D.	2019	UC Los Angeles	Assistant Professor	Hematology and Hematopoietic Cell Transplantation
94.	Christiane Querfeld, M.D., Ph.D.	2016	University of Cologne, University of Heidelberg	Associate Professor	Surgery
95.	Mustafa Raoof, M.D.	2015	Aga Khan University, Pakistan	Assistant Clinical Professor	Surgery
96.	Dan J. Raz, M.D.	2012	University of Pennsylvania	Associate Clinical Professor	Surgery
97.	Anne Reb, Ph.D., N.P.	2016	Catholic University of America	Assistant Professor	Population Sciences
98.	Helena Reijonen, Ph.D.	2018	University of Turkey	Associate Professor	Diabetes Immunology
99.	Arthur Riggs, Ph.D.	1969	California Institute of Technology	Professor	Diabetes and Metabolism Research Institute

#	Name	Appointment Year	Professional Training	Title	Department
100.	Russell C. Rockne, Ph.D.	2013	University of Washington, Seattle	Assistant Professor	Computational and Quantitative Medicine
101.	Andrei S. Rodin, Ph.D.	2013	University of Texas, Houston	Associate Professor	Diabetes Complications and Metabolism
102.	Bart Roep, M.D., Ph.D.	2016	Leiden University	Professor	Diabetes Immunology
103.	Steven Rosen, M.D.	2016	Northwestern University	Provost	Hematopoietic Cell Transplantation
104.	John Rossi, Ph.D.	1996	University of Connecticut	Professor	Molecular and Cellular Biology
105.	Ravi Salgia, M.D., Ph.D.	2018	Loyola University School of Medicine	Professor	Medical Oncology
106.	Dustin E. Schones, Ph.D.	2010	SUNY Stony Brook	Associate Professor	Diabetes Complications and Metabolism
107.	Mina Sedrak, M.D.	2016	Rush Medical College	Assistant Professor	Medical Oncology and Therapeutics Research
108.	Victoria Seewaldt, M.D.	2015	UC Davis	Professor	Population Sciences
109.	Binghui Shen, Ph.D.	1996	Kansas State University	Professor	Cancer Genetics and Epigenetics
110.	Yanhong Shi, Ph.D.	2004	Northwestern University	Professor	Developmental and Stem Cell Biology
111.	Ben Hung- Ping Shih, Ph.D.	2015	Oregon State University	Assistant Professor	Diabetes and Metabolic Diseases Research
112.	John E. Shively, Ph.D.	1975	University of Illinois	Professor	Molecular Immunology
113.	Sarah Shuck, Ph.D.	2021	Indiana University School of Medicine	Assistant Professor	Diabetes and Cancer Metabolism
114.	Christopher Sistrunk, Ph.D.	2016	North Carolina State University	Assistant Professor	Population Sciences
115.	Jeremy Stark, Ph.D.	2006	University of Washington	Professor	Cancer Genetics and Epigenetics

#	Name	Appointment Year	Professional Training	Title	Department
116.	Virginia Sun, Ph.D., R.N.	2002	UCLA	Associate Professor	Population Sciences
117.	Zuoming Sun, Ph.D.	2005	Duke University	Professor	Molecular Immunology
118.	Zijie (ZJ) Sun, Ph.D. Dsc	2016	Shanghai Medical University	Professor	Cancer Biology
119.	Srividya Swaminathan, Ph.D.	2019	University of Southern California	Assistant Professor	Systems Biology
120.	Timothy Synold, Pharm.D.	1994	UC San Francisco	Professor	Cancer Biology
121.	John Termini, Ph.D.	1998	Columbia University	Professor	Molecular Medicine
122.	Debbie C. Thurmond, Ph.D.	2015	University of Iowa	Professor	Molecular and Cellular Endocrinology
123.	Lindsey Treviño, Ph.D.	2018	Cornell University	Assistant Professor	Population Sciences
124.	Nagarajan Vaidehi, Ph.D.	2005	India Institute of Technology	Professor	Molecular Immunology
125.	Rupangi Vasavada, Ph.D.	2018	University of Pennsylvania	Associate Professor	Translational Research and Cellular Therapeutics
126.	Edward Wenge Wang, M.D., Ph.D.	2018	Harbin Medical University	Assistant Professor	Medical Oncology and Therapeutics Research
127.	Leo Wang, M.D., Ph.D.	2017	University of Chicago	Assistant Professor	Immuno-Oncology
128.	Lili Wang, M.D., Ph.D.	2018	China Medical University/ Tokai University	Associate Professor	Systems Biology
129.	Qiong (Annabel) Wang, Ph.D.	2009	The University of Chinese Academy of Sciences	Assistant Professor	Molecular and Cellular Endocrinology
130.	Ping Wang, M.D.	2020	Kaohsiung Medical College, Taiwan	Professor	Diabetes

#	Name	Appointment Year	Professional Training	Title	Department
131.	Sophia Wang, Ph.D.	2013	Johns Hopkins University	Professor	Population Sciences
132.	Xiuli Wang, Ph.D.	2019	Inner Mongolia Medical University /University of Oslo	Research Professor	Hematology and Hematopoietic Cell Transplantation
133.	Zhao Wang, Ph.D.	2021	Albert Einstein College of Medicine	Associate Professor	Diabetes and Cancer Metabolism
134.	Susanne Warner, M.D.	2015	Texas A&M College of Medicine	Assistant Professor	Surgery
135.	John Williams, Ph.D.	2008	Columbia University	Professor	Molecular Medicine
136.	Terence Williams <i>,</i> Ph.D., M.D.	2021	Albert Einstein College of Medicine	Professor	Radiation Oncology
137.	F. Lennie Wong, Ph.D.	2006	University of Los Angeles	Associate Professor	Population Sciences, Computational and Quantitative Medicine
138.	Anna Wu, Ph.D.	2018	Yale University	Professor	Molecular Imaging and Therapy
139.	Yanzhong (Frankie) Yang, M.D., Ph.D.	2015	Shanxi Medical University/ Fudan University	Associate Professor	Cancer Genetics and Epigenetics
140.	Jiing-Kuan Yee, Ph.D.	1998	University of Texas, Austin	Professor	Diabetes Complications and Metabolism
141.	Lisa Yee, M.D.	2017	Yale University	Professor	Surgery
142.	Hua Yu, Ph.D.	2005	Columbia University	Professor	Immuno-Oncology
143.	Jianhua Yu, Ph.D.	2018	Purdue University	Professor	Hematology and Hematopoietic Cell Transplantation
144.	Yuan Yuan, M.D., Ph.D.	2017	UC Riverside	Associate Clinical Professor	Medical Oncology
145.	John Zaia, M.D.	1980	Harvard University	Professor	Center for Gene Therapy
146.	Defu Zeng, M.D.	2002	Fujian Medical University	Professor	Diabetes Complications and Metabolism

#	Name	Appointment	Professional	Title	Department
		Year	Training		
147.	Bin (Amber)	2020	Sun Yat-Sen	Associate	Hematologic
	Zhang, Ph.D.		University of	Professor	Malignancies
			Medical Sciences		Translational Science

## **CURRENT MASTERS STUDENT LIST**

Last Name	First Name	Mentor	Dept/Div
Bibikova	Liliia	1 <sup>st</sup> year student	
Brase	Jordyn	Yuman Fong, M.D.	Surgery
Bustillos	Christian	Michael Caligiuri, M.D.	Hematopoietic Cell
			Transplantation
Collado	Judd	Zhaohui Gu, Ph.D.	Computational and Quantitative
			Medicine
Ghassami	Bita	Christine Brown, Ph.D.	Hematology and Hematopoietic
			Cell Transplantation
Hall	Jeremy	Marcin Kortylewski, Ph.D.	Immuno-Oncology
Hui	Fion	Nadia Carlesso, M.D.,	Hematologic Malignancies
		Ph.D.	Translational Science
Jiang	Nan	1 <sup>st</sup> year student	
Kiperman	Tali	Ke Ma, Ph.D.	Diabetes Complications &
			Metabolism
Mora	Mark	1 <sup>st</sup> year student	
Perez	Eric	1 <sup>st</sup> year student	
Wang	Sadira	Mingye Feng, Ph.D.	Immuno-Oncology

## **MSTM ALUMNI**

Last Name	First Name	Mentor	Dept/Div	Year of Graduation
Dang	Jessica	Mingye Feng, Ph.D.	Immuno-Oncology	2021
Faustino	Vroniqa Ku'ulei	Javier Gordon Ogembo, Ph.D.	Immuno-Oncology	2021
Felix	Gerardo	Qiong (Annabel) Wang, Ph.D.	Molecular & Cellular Endocrinology	2021
Otazu	Kyle Griffith	Behnam Badie, M.D.	Surgery	2021
Seymour	Gubidxa	Jeffery Weitzel, M.D.	Medical Oncology & Therapeutics Research/Population Sciences	2020
Sharkas	Shawn	John Rossi, Ph.D.	Molecular & Cellular Biology	2021
Tizpa	Eemon	Ammar A. Chaudhry, M.D.	Radiology	2020
Valerio	Melissa	Guido Marcucci, M.D.	Hematologic Malignancies Translational Science	2021
Zimmerman	Cloe	Javier Gordon Ogembo, Ph.D.	Immuno-Oncology	2021

## **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. IMGS at City of Hope and KGI will grant a joint MSTM degree upon completion of all of the necessary requirements. Of the 60 total units, students must complete 12.0 units of core courses (C), 3.0 units of professional development courses (PD), 12 units of advanced technical (AT) and general elective courses, 3 units of Independent Research, and 30 units of the MSTM Thesis Research. The ALS 342 and ALS 360 requirements could be waived for students who pass the initial assessment. Waived units must be replaced with advanced technical or general elective units.

Course ID	Course Name	Location	Credits	
Year One –	Fall			
ALS 300	Molecular Biotechnology (C)	KGI	1.5	
ALS 330	Pharmaceutical Discovery (C)	KGI	1.5	
ALS 333	Pharmaceutical Development (C)	KGI	1.5	
ALS 397	Professional Development (PD)	KGI	0.0	
ALS 434	Clinical Biostatistics (AT)	KGI	3.0	
ALS 481a	Fundamental Papers in Applied Medicine (C)	KGI	1.5	
ALS 360	Business/Science Communications (PD)	KGI	1.5	
ALS 342	Applications of Statistics (C)	KGI	1.5	
ALS 493	Independent Research	City of Hope	1.5	
Year One -	Spring			
ALS 341	Healthcare / Life Sciences Industry Ethics (PD)	KGI	1.5	
ALS 402	Molecular Basis of Disease (C)	KGI	3.0	
ALS 407	Pharmacogenomics and Precision Medicine (AT)	KGI	3.0	
ALS 430	Advanced Pharmaceutical Discovery (AT)	KGI	3.0	
ALS 481b	Fundamental Papers in Applied Medicine (C)	KGI	1.5	
ALS 493	Independent Research	City of Hope	1.5	
	Elective Course – Independent Research	City of Hope	1.5	
Year One -	Fall or Spring			
	General Elective Courses	KGI	1.5	
Year One - Summer				
ALS 496	Master's Thesis Research	City of Hope	0.0	
Year Two – Fall				
ALS 496	Master's Thesis Research	City of Hope	15.0	
Year Two -				
ALS 496	Master's Thesis Research	City of Hope	15.0	

A summary of the MSTM curriculum is as follows:

## **COURSE INFORMATION**

#### ALS 300 Molecular Biotechnology (KGI)

#### https://www.kgi.edu/course/molecular-biotechnology/

Students will be exposed to the conceptual foundations of biotechnology and the role played by discoveries and applications of molecular biology principles in advancing biotechnology horizons. This is a case-based course in which students will read landmark original papers and patents that shaped biotechnology, and discuss these in the class. The case-based approach will follow the first few weeks of background material where a more standard lecture style will be used so as to bring students with different backgrounds on par with modern molecular biology.

#### ALS 330 Pharmaceutical Discovery (KGI)

#### https://www.kgi.edu/course/pharmaceutical-discovery/

This course is designed to provide students with an understanding of how pharmaceutical and biotechnology companies discover new drugs. This course will focus on the discovery of small molecule drugs. The course will follow the process of pharmaceutical drug discovery from selection of targets to discovery of a product candidate, and the characterization of that drug necessary for initiation of clinical trials.

#### ALS 333 Pharmaceutical Development (KGI)

#### https://www.kgi.edu/course/pharmaceutical-development/

The course will provide the terminology, timelines and practical examples for successfully understanding the challenges in progressing an idea for a drug from the earliest discovery stages through to product approval and launch. Case studies from industry will be presented detailing companies and products that utilize state-of-the-art discovery technologies and advanced drug delivery systems.

#### ALS 341 Healthcare/Life Sciences Industry Ethics (KGI)

#### https://www.kgi.edu/course/healthcare-and-life-sciences-industry-ethics/

This course explores the ethical challenges for commerce in healthcare systems and biosciences industry as it will be increasingly important for healthcare and bioscience leaders to consider the ethical ramifications of their work. The class will focus more on the practical application of ethical principles through real-world case studies, rather than emphasizing theories.

#### ALS 342 Applications of Statistics (KGI)

#### https://www.kgi.edu/course/applications-of-statistics/

This course offers an introduction to the terms, concepts and applications of statistical analysis, and re-enforces the necessary algebraic skills. Topics covered include data types, single variable regression, normal distributions, and significance tests. Students will apply concepts to practical examples in the life sciences using MS Excel software and gain proficiency in the visual interpretation and communication of data.

#### ALS 360 Business/Science Communication (KGI)

#### https://www.kgi.edu/course/business-science-communications/

This course is designed around four broad themes: effective writing, oral communication, teamwork and leadership. Classes will be a blend of interactive lectures from faculty and industry executives, and workshops. Students will participate in faculty and peer reviews to help each other improve professional skills.

#### ALS 397 Professional Development (KGI)

#### https://www.kgi.edu/course/professional-development/

In two four-hour intensive workshops and a selection of modules, students learn how to build their professional presence, gain insight into the process and timing of finding employment, learn skills that will improve their competitiveness, and develop expertise at showcasing their accomplishments.

#### ALS 402 Molecular Basis of Disease (KGI)

#### https://www.kgi.edu/course/molecular-basis-of-disease/

This course examines the role of genes, proteins and RNA in causing or combating diseases, and emphasizes the current conceptual and analytical tools that are brought to bear, and their limitations, on our understanding.

#### ALS 407 Pharmacogenomics and Precision Medicine (KGI)

#### https://www.kgi.edu/course/pharmacogenomics-and-precision-medicine/

This course will focus on the opportunities presented by the growing contribution of human evolutionary and population genetics, and of human genomic information and technologies to interdisciplinary approaches in the study of variable responses of humans to drugs and toxic agents, and how research may benefit the individual. The course will provide an in depth analysis of salient examples where genetical thinking has impacted pharmacological sciences, including issues on genetic variability in biochemistry and physiology of drug action, drug uptake and metabolism; the opportunities for discovery and design of new therapeutic agents.

#### ALS 430 Advanced Pharmaceutical Discovery (KGI)

#### https://www.kgi.edu/course/advanced-pharmaceutical-discovery/

This course should provide students with a deeper knowledge of drug pharmacokinetics and pharmacodynamics, as well as with a deeper understanding of how pharmaceutical and biotechnology companies discover new drugs, and how larger companies manage their drug discovery portfolios.

#### ALS 434 Clinical Biostatistics (KGI)

#### https://www.kgi.edu/course/clinical-biostatistics/

This course provides a basic primer in statistical methods commonly used in the design of clinical trials. Topics covered are expected to include data reporting and descriptive statistics, probability,

estimation, hypothesis testing (parametric, non-parametric, and categorical), multisample inference, regression and correlation. Sample size and power estimation methods will be developed for various hypothesis testing scenarios.

#### ALS 481 Fundamental Papers in Applied Medicine (KGI)

#### https://www.kgi.edu/course/fundamental-papers-in-applied-medicine-2/

This course delves into a few ground-breaking original research papers that have shaped the concepts and technologies of modern biomedical research, with a special focus on cancer. The goal is to understand the logic and principles of doing biological experiments: the importance of models and hypotheses, testable versus untestable hypotheses, controls, the limits of interpretation dictated by the results, how changing paradigms influence the progress of science.

#### ALS 493 Independent Research (City of Hope)

The goal of this course is to enable students to gain a comprehensive understanding of the recent biomedical research advances and Phase I clinical studies at City of Hope through roundtable discussions with the City of Hope faculty, laboratory experiences, and City of Hope Phase I/Early Therapeutic Disease Team meetings. Students will also go through rigorous hands-on training on how to use various instruments and computational technologies within City of Hope Share Resource Facilities and apply these technologies to their thesis studies. By the end of the course, students are expected to identify thesis research topic and thesis mentor.

#### ALS 496 Master's Research Thesis (City of Hope)

The goal of this course is to enable students to conduct rigorous primary research leading to the completion of a master's thesis in a research laboratory at City of Hope. Students must complete ALS 493 Independent Research prior to this course. Please see section on MSTM Research Thesis for more information about the Master's Research Thesis.

## MSTM ACADEMIC CALENDAR AT CITY OF HOPE

August 2021				
1	Year 2 Students: ALS 496 MSTM Thesis Research			
	<ul> <li>MSTM Thesis Contract (see ALS 496 syllabus) due to City of</li> </ul>			
	Hope's Registrar via email			
16-20	Year 1 Students: City of Hope's Student Orientation			
	(A separate MSTM student Orientation is held at KGI. Please refer to KGI			
	Academic Calendar for more information)			
September 20	21			
1 <sup>st</sup> Week	Year 2 Students: ALS 496 MSTM Thesis Research due to KGI via ALS 496			
	Dropbox			
	MSTM Thesis Contract			
	Thesis Milestones Checklist			
	<ul> <li>Laboratory Safety Training certificates of completion</li> </ul>			
	<ul> <li>Training in Responsible Conduct of Research (RCR) certificate</li> </ul>			
	of completion			
3	Year 1 Students: ALS 493 Independent Research (Fridays, 9:00 am to			
	5:00pm) begins			
6	Labor Day			
October 2021				
1	Year 2 Students: ALS 496 MSTM Thesis Research			
	<ul> <li>Research Proposal Outline due to KGI via ALS 496 Dropbox</li> </ul>			
November 202	21			
25-26	Thanksgiving Holiday			
December 202	21			
1	Year 2 Students: ALS 496 MSTM Thesis Research			
	<ul> <li>Preliminary Thesis due to thesis committee and KGI via ALS 496 Dropbox</li> </ul>			
15	Year 2 Students: ALS 496 MSTM Thesis Research			
	<ul> <li>Presentation of Preliminary Thesis to thesis committee due</li> </ul>			
	<ul> <li>Preliminary Thesis Evaluation Form and Rubric (see ALS 496</li> </ul>			
	syllabus) <b>due</b> to City of Hope's Registrar and KGI via ALS 496			
	Dropbox			
17	Year 1 Students: ALS 493 Independent Research (Fridays, 9:00 am to			
	5:00pm) ends			
25	Christmas Holiday			
January 2022				
1	New Year Holiday			

7	Year 1 Students: ALS 493 Independent Research (Fridays, 9:00 am to		
and and	5:00 pm) begins		
2 <sup>nd</sup> or 3 <sup>rd</sup>	Year 2 Students: ALS 496 MSTM Thesis Research		
week (TBD)	KGI Research Symposium Poster Presentation		
17	Martin Luther King Jr Day		
February 2022	2		
1	Year 2 Students: PhDTM application due to PhDTM Admissions		
	Committee		
	Cover Letter		
	<ul> <li>MSTM transcript including grades from Fall semester of Year 2</li> </ul>		
	<ul> <li>Supporting letter from the PhDTM mentor</li> </ul>		
	<ul> <li>PETITION for SELECTION of PhDTM MENTOR for DISSERTATION</li> </ul>		
	RESEARCH form (APPENDIX A)		
28	Year 2 Students: Announcement of the PhDTM Admissions decisions		
March 2022			
31	Year 2 Students (PhDTM track): ALS 496 MSTM Thesis Research		
	<ul> <li>MSTM Thesis Seminar due at City of Hope</li> </ul>		
	Year 2 Students (PhDTM track): BIOSC 550 FSR begins		
April 2022			
15 or 22	Year 2 Students (all): ALS 496 MSTM Thesis Research		
	<ul> <li>MS/MSTM Research Symposium – Thesis Oral Defense at KGI</li> </ul>		
30	Year 2 Students (non-PhDTM track): ALS 496 MSTM Thesis Research		
	<ul> <li>MSTM Thesis Seminar due at City of Hope</li> </ul>		
May 2022			
6	Year 1 Students: ALS 493 Independent Research (Fridays, 9:00 am to		
	5:00 pm) ends		
2 <sup>nd</sup> week	Year 2 Students (all): ALS 496 MSTM Thesis Research due to the		
	Registrar at City of Hope and to the KGI via ALS 496 Dropbox		
	MSTM Thesis Cover Sheet		
	MSTM Final Thesis		
	MSTM Oral Defense Committee Report		
	<ul> <li>Final Thesis Rubric (see ALS 496 syllabus)</li> </ul>		
30	Memorial Day		
31	Year 1 Students: ALS 496 MSTM Thesis Research begins		
	Formulate hypothesis and aims		
	Select thesis committee members		
June 2022			
3	Year 2 Students (PhDTM track): BIOSC 550 FSR ends		

6	Year 2 Students (PhDTM track): BIOSC 565 FSR Practicum begins
10	Year 2 Students: GRADUATION in the Rose Garden at 4:00 pm
July 2022	
1	MSTM Graduates (PhDTM track): BIOSC 565 FSR Practicum ends
4	Independence Day
11	MSTM Graduates (PhDTM track): PhDTM Trimester begins
15	<ul> <li>Year 1 Students: ALS 496 MSTM Thesis Research</li> <li>Hypothesis/Goal and Aims document due to the thesis committee for approval</li> </ul>

## **MSTM RESEARCH THESIS**

Please refer to ALS 496 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 has to be a COH faculty, as the voting members for their thesis committee. A second voting member can be a faculty from either COH or KGI. 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 co-Directors 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.

Letter Grade	Percentage	
A+	97% - 100%	Pass
А	93% - 96%	Pass
A-	90% - 92%	Pass
B+	87% - 89%	Pass
В	83% - 86%	Pass
В-	80% - 82%	Pass
C+	77% - 79%	Pass
С	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 for ALS 493 or ALS 496, 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 Directors. 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).
# Application and Admissions to 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 IMGS 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 28.

# **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 expected to advise the Graduate School Office before beginning any employment, so that City of Hope and the student may determine that the employment does not pose a conflict of interest. Additionally, any student holding employment will be expected to meet all expectations of the MSTM Program.

### 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. At City of Hope, students are provided ten sick days per year. If a student has a serious illness, personal emergency, pregnancy, military deployment or other event that requires more than ten 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. Before requesting a leave, students who receive financial aid should meet with a financial aid counselor at KGI for more information on how their loans may be affected by a leave of absence. International students should meet with the International Student Advisor at KGI 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 and KGI. 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.

#### <u>Holidays</u>

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. Additionally, the Graduate School encourages students to take additional days off (e.g. 10 per year) as part of maintaining balance. Sixteen days (including observed holidays) is the amount of time the Graduate School believes is reasonable for students to be absent for non-illness related reasons and still be able to meet the program commitments. However, given the program commitments, students must receive approval from their mentor 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 school official at KGI. 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 school's Designated School Officials (DSOs) at KGI. 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 through KGI's Registrar Office.

### **REPLACEMENT DIPLOMAS FEE**

Replacement Diplomas can request if the original has been lost or destroyed, or to request a reissue after a graduate's legal name change. Documentation of your legal name change is required. Examples of documentation are court order, a new passport, driver's license, marriage certificate or other government issued identification. A fee of \$50 will be charged per request payable by personal check. Checks should be made payable to "Keck Graduate Institute". Please mail <u>form</u> and check to The Office of the Registrar, 535 Watson Dr., Claremont, CA 91711. Please allow about 6–8 weeks for processing.

### 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 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.

#### WELLNESS

The Graduate School Administration (Dean, Vice Dean, Directors, Co-Directors, Associate Directors, Assistant Directors 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 <u>https://coh.mycarpool.net/</u> 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, child care/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 <u>mvasamd@gmail.com</u> 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

### 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 program Co-Directors, in consultation with the Dean and Vice Dean of the Irell & Manella Graduate School of Biological Sciences at City of Hope and the Dean of the Henry E. Riggs

School of Applied Life Sciences at KGI, shall oversee the academic standards of the MSTM program including verification of fulfillment of academic and graduation requirements.

# ACADEMIC STANDING

Students are expected to make satisfactory academic and professional progress throughout their academic program.

# Satisfactory Academic Progress

All enrolled students are required to demonstrate good academic standing and satisfactory progress toward their degree. Students with particular questions concerning satisfactory progress should contact the registrars or program co-Directors. The following policy statements describe the general parameters for satisfactory academic progress at the Irell & Manella Graduate School of Biological Sciences at City of Hope.

Satisfactory Academic Progress and good academic standing are generally defined as:

- Meeting the professional and academic expectations as defined in the degree requirements section in the Student/Faculty Handbook
- Behaving consistently with professional and ethical standards as outlined in the Ethical Principles and Practices in the Student/Faculty Handbook
- Completing academic and educational projects, reports, and programs by deadlines

# 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 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

### 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 Co-Directors.

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.

# **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 a Dean and/or the program Co-Directors for a final decision. Students are encouraged to maintain their own personal copies of all paperwork submitted.

### **SANCTIONS**

When a MSTM 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 program Co-Directors will review all student cases of students who are not in Good Standing and 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 to the Deans of the Irell & Manella Graduate School of Biological Sciences at City of Hope and the Henry E. Riggs School of Applied Life Sciences at KGI.

### 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.

### 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 Deans of the Irell & Manella Graduate School of Biological Sciences at City of Hope and the Henry E. Riggs School of Applied Life Sciences at KGI, and taking into consideration the program co-Directors' recommendations, requires serious remediation that necessitates withdrawal from the Graduate School in order to complete the required remediation.

### 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, insufficient grade point average and/or multiple Fail grades occurs, when a serious violation of the Graduate School's standards of conducts and ethics occurs 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.

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.

### **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 on the City of Hope campus, the Dean of the Irell & Manella Graduate School of Biological Sciences will appoint three faculty to form an *ad hoc* investigation committee. The program Co-Directors from both City of Hope and KGI 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 Co-Directors, shall determine what, if any, disciplinary action shall be taken. Appeals should be addressed to the Dean of the Irell & Manella Graduate School of Biological Sciences. If the violation is committed on the KGI campus, the program Co-Director from City of Hope will be notified by KGI and will participate in the investigation according to KGI's Honor Code Procedures.

# **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.

# <u>Alcohol</u>

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. Members of the grievance committee and the participants in the process must respect confidentially for students and faculty and conform to FERPA regulations.

If an alleged unauthorized or unjustified act or decision is made by a member of the faculty, staff, and/or management employee at City of Hope, student appeals and grievances should be addressed to the Dean of the Irell & Manella Graduate School of Biological Sciences 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, which consists of three faculty members. 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.

#### 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 Kety Duran, Chief Human Resource Officer, located in 4920 Rivergrade 17.0504; email: kdurin@coh.org (extension 80545). 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, Kety Duran, Chief Human Resource Officer, located in 4920 Rivergrade 17.0504; email: kdurin@coh.org (extension 80545). 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 accommodations with Mark Briske, 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 Kety Duran, Chief Human Resource Officer, located in Human Resources, Needleman 2<sup>nd</sup> Floor, Room 204A; email: kdurin@coh.org (extension 80545).

# 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 a 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 late stages of pregnancy, childbirth, taking care of a

newborn, or adopting a child should reach out to their mentor to discuss whether an 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.

#### **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 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 to 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 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 <u>before</u> the meeting. Applications should be submitted to the Registrar by these Deadlines:

- January 1<sup>st</sup>, for conferences that will be held in March, April, May, June and July
- May 1<sup>st</sup>, for conferences that will be held in July, August, September, October and November
- September 1<sup>st</sup>, 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, FEES AND FINANCIAL AID**

MSTM tuition is billed and payable through KGI Financial Aid Office. All students are required to pay tuition and fees at the current year's rate. IMGS and KGI reserve the right to change tuition and fees at any time. Please refer the student accounts at KGI website: <u>https://www.kgi.edu/student-life/student-accounts/</u>

The current tuition and fees are:

- Full Year Tuition \$ 41,400
- Application Fee \$ 75
- Enrollment Fee \$ 400
- 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

Due dates for tuition payment are as follows:

- Fall Term September 1
- Spring Term January 19

For information on MSTM fellowships, student loans and bill and payments:

Fellowships: KGI Admission Office Email: Admissions@kgi.edu

Student Loans: Financial Aid Office Email: <u>Financial Aid@kgi.edu</u>

Bill and Payments: Student Account Office Email: <u>Student\_Accounts@kgi.edu</u> **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 graduatestudent makes. The mentor-student relationship involves rights and responsibilities. Ideally, this relationshipendures 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 Depa		Department Name
Location		
**************************************	******	******************
I commit to the training and mentorsh	nip of Graduate Stude	ent's Full Name
Mentor's Full Name		Mentor's Signature
**************************************		*****************
 Department Chair's Full Name		Department Chair's Signature
GRADUATE SCHOOL APPROVA		***********
<b>υκάρυα ι ε συπυυς αγγκυν</b>	1L	
Signature:		Date:

# **APPENDIX B: ABSENCE REQUEST FORM**



# **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 Advisor at KGI 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 M	leetingLeave of Absence
-	onal leave reason (please note	onference name and dates, expected materni e: some absence or leaves may require a medic
Requested Start Date:	Return Date:	Total Business Day(s) Off:
Student Signature:		Date:
MENTOR'S APPROVAL (Approv	al from the mentor can also b	e sent by email to the Registrar.)
Mentor's Name:	ntor's Name: Mentor's Signa	
Department Name:	Locatic	on:
GRADUATE SCHOOL APPROVA		

# **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
  <a href="http://www.coh.org/policy/Policies%20and%20Procedures/ENTERPRISE">http://www.coh.org/policy/Policies%20and%20Procedures/ENTERPRISE</a> INFORMATION SECURITY POLICY.pdf
- Electronic Information Security
  <a href="http://www.coh.org/policy/Policies%20and%20Procedures/INFORMATION\_SECURITY\_AND\_RISK\_MANAGEMENT\_P\_0/LICY.pdf">http://www.coh.org/policy/Policies%20and%20Procedures/INFORMATION\_SECURITY\_AND\_RISK\_MANAGEMENT\_P\_0/LICY.pdf</a>
- Electronic Mail (Email), Instant Messaging (IM), and the Internet <u>http://www.coh.org/policy/Policies%20and%20Procedures/EXTERNAL\_MASS\_EMAIL\_DISSEMINATION.pdf</u>
- Remote Electronic Access
  <u>http://www.coh.org/policy/Policies%20and%20Procedures/REMOTE\_ACCESS\_VPN\_SECURITY\_MANAGEMENT\_POLI</u>
  <u>CY.pdf</u>
- Software Policy <a href="http://www.coh.org/policy/Policies%20and%20Procedures/ACCEPTABLE\_USE\_POLICY.pdf">http://www.coh.org/policy/Policies%20and%20Procedures/ACCEPTABLE\_USE\_POLICY.pdf</a>

http://www.coh.org/policy/Policies%20and%20Procedures/HARDWARE\_AND\_SOFTWARE\_BASE\_OPERATING\_ENVIR ONMENT\_MANAGEMENT.pdf

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

<u>Changes to Application Software</u>: Software provided include: 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.

<u>Software Installation</u>: 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.

<u>Anti-Virus Program Installed</u>: 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.

<u>Playing with Viruses Prohibited</u>: 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.

<u>Changes to Operating System Configurations</u>: 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).

<u>Changes to Hardware:</u> 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.

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

<u>Disallowed Content on Computers:</u> **Computers and its 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.

<u>Posting Information to Discussion Groups</u>: 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 preauthorized 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.

<u>Custodians of Equipment</u>: The primary user of a computer is considered a custodian for the equipment. Students take possession of the computer on the first day of classes. User 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.

<u>Return of Equipment</u>: 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

Office of Graduate	Education Use only			_
	aptop Accessories	Out	In	
	leeve/Bag	X		
	Iectrical Cord	Х		
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 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 student handbook and school catalog.

#### **REQUEST FOR ACADEMIC/ADMINSITRATIVE EXCEPTION**

Name:	Student ID#:
Year Level:	Trimester/Year:
	the following: (List specific academic policy/regulation or requirement as
stated in the Catalog, Stud	ent Handbook, or other documents. Indicate source.)
-	or your request (attached supporting documents if appropriate). <u>If you are</u> Iline date please indicate the date you expect to complete the item.
Student Signature	Date:
Mentor/P.I. Approval (if applic	able):
Approved Deni	ed
Name:	Signature:
Faculty Recommendation (if ap	plicable):
Approved Deni	ed Date:
Name:	Signature:
Dean's Approval (if applicable)	
Approved Deni	ed Date:
Name:	Signature:
Graduate Leadership (if applica	ble):
Approved Denie	ed Date:
Name:	Signature:
Received by the Registrar	
Name:	Signature:
	62

**APPENDIX F: FEDERAL COMPLIANCE** 

### TITLE IX COMPLAINT PROCEDURES

### I. Introduction

Irell & Manella Graduate School of Biological Sciences at City of Hope (the "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 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 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 School and claiming to have been discriminated against by the 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: Kety Duran, Chief Human Resource Officer, located in Human Resources, Needleman 2<sup>nd</sup> Floor, Room 204A; email: kdurin@coh.org (extension 80545)

Kety Duran, Title IX Coordinator City of Hope Human Resources 1500 E. Duarte Road, Duarte, CA 91010 kdurin@coh.org, 626-218-0545 (Extension 80545)

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:

Chief Compliance Officer <u>CorporateCompliance@coh.org</u> (ext.88084)

- 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 became 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 occurred, 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 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 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 IMGS 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 IMGS to amend a record should write to the Registrar to identify clearly the part of the record the student wants changed and specify why it should be changed.

If the IMGS 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 school discloses education records without a student's prior written consent under the FERPA exception for disclosure to 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 IMGS 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 FORMATTING

# 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 IMGS 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 IMGS 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 IMGS 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 IMGS who performs an institutional service of function for which the 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 after5:00 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 or not 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 Tracy Kurzy

- 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:				
•	t activities that you have participated in at the City of Grant Writing Workshops, and Monthly Seminars):			

# **PI/Mentor Information**

First Name:		Last Name:			
Email:		Campus Ex	tension:		
Department:_					
	Scientific Meeting Information				
Meeting Title:					
Meeting Date: Meeting Location: Abstract accepted?					
If no, explain v	when you will receive confirma	tion:			
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	•			
•	Method of Approach	•	Keyword/Area of Concentration		
Recent results obtained since the abstract was written:					

Please contact <u>Tracy Kurzy</u> 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 3 deadlines each year. Graduate Students can apply for:

- January 1<sup>st</sup>, for conferences that will be held in March, April, May, June and July
- May 1<sup>st</sup>, for conferences that will be held in July, August, September, October and November
- September 1<sup>st</sup>, 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 <u>Tracy Kurzy</u> 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 at 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 or not they have been awarded a grant on the following days:

- February 1<sup>st</sup> for the January 1<sup>st</sup> deadline
- June 1<sup>st</sup> for the May 1<sup>st</sup> deadline
- October 1<sup>st</sup> for the September 1<sup>st</sup> 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 <u>Tracy Kurzy</u> for additional information or with questions.

Appendix H: Important Contacts

# **IMGS Direct Line:** (877) 715-4723 or extension 60518

# Counseling:

The City of Hope Employee Assistance Program is open to students it provides access to confidential counseling for a variety of issues. You are eligible for **six (6) face-to-face**, **onsite or phone counseling sessions per issue per year** for you and your dependents. The EAP can assist you with a variety of personal life matters, including:

- Stress Management
- Balancing work and family life
- Legal/Financial Services
- Managing relationships
- Child care/Elder care referrals
- Parenting skills
- Managing finances
- Grieving

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

Onsite Support: Dr. Monisha Vasa (949)-612-3955, mvasamd@gmail.com

# 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.

**Shuttles:** Shuttle Services approximately every ½ hour between the hours of 7:00 am and 4:30 pm. If 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**: Kety Duran, Chief Human Resource Officer, located in Human Resources, Needleman 2<sup>nd</sup> Floor, Room 204A; email: kdurin@coh.org (extension 80545).