Weill Cornell Medicine
Graduate School of Medical Sciences
A partnership with the Sloan Kettering Institute

Physiology, Biophysics and Systems Biology Program

(PBSB Program)

STUDENT HANDBOOK

2025

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PREFACE

This edition of the Student Handbook is intended to provide general guidance to students regarding the organization and policies of the University, the Medical College, the Graduate School and the PBSB Program. Although a good faith attempt has been made to provide accurate information, this Handbook does not constitute a complete or legally binding statement of rights and responsibilities. Policies and procedures, as well as instructor assignments and curriculum, are subject to change. When circumstances require assurance of completeness or validity of information, the office that is the authority on that matter should be consulted. The faculty and staff of the PBSB Program will also be pleased to assist students in such consultations.

All academic policies shall be in effect for all settings, whether instruction is provided in person, remotely, or in a hybrid fashion combining in person and remote learning. Please contact the PBSB Program administration if the application of any specific policy to remote/hybrid situations remains unclear.

All information contained in this Student Handbook is subject to change. The Weill Cornell Graduate School of Medical Sciences PBSB Program staff is here to assist any student with further clarification and/or questions regarding Weill Cornell and/or the PBSB Program. Although every effort has been made to ensure the accuracy of the information presented herein, the PBSB Program is not responsible for typographical errors. Students will be notified in writing of any errors as soon as they are discovered.

University policy actively supports equality of educational opportunity. No person will be denied admission to the PBSB Program on the basis of any legally prohibited discrimination including, but not limited to, race, color, creed, religion, national or ethnic origin, sex, sexual orientation, age, or disability. Cornell University has an enduring commitment to support equality of education and employment opportunity by affirming the value of diversity and by promoting an environment free from discrimination.

ABOUT THE INSTITUTION

Weill Cornell Medicine

Weill Cornell Medicine (including the Weill Cornell Graduate School of Medical Sciences and Weill Cornell Medical College) provides top-quality education, outstanding patient care, and groundbreaking research. The institution is renowned for its commitment to "Care. Discover. Teach." Weill Cornell Medicine has evolved in response to contemporary challenges and opportunities, while advancing steadily in its mission to improve human health, both in New York and around the world.

Weill Cornell Medical College

Founded in 1898 and affiliated with what is now New York-Presbyterian Hospital since 1927, Weill Cornell Medical College is among the top-ranked clinical and medical research centers in the country. In addition to offering degrees in medicine, Weill Cornell also has seven PhD programs in biomedical research and education at the Weill Cornell Graduate School of Medical Sciences, and with neighboring Sloan Kettering Institute and The Rockefeller University, has established a joint MD-PhD program for students to intensify their pursuit of Weill Cornell's triple mission of education, research, and patient care and two Tri-Institutional Doctoral Programs in Computational Biomedicine and Chemical Biology. Weill Cornell has seven Master's programs in Biomedical Imaging, Clinical & Translational Investigation, Clinical Epidemiology & Health Services Research, Computational Biology, Executive MBA/MS in Healthcare Policy and Research, Assistants, Genetic Counseling, and Population Health Sciences.

Weill Cornell Medical College is divided into 24 basic science and patient care departments that focus on the sciences underlying clinical medicine and/or encompass the study, treatment, and prevention of human diseases. In addition to its affiliation with NewYork-Presbyterian Hospital, Weill Cornell Medical College and the Weill Cornell Graduate School of Medical Sciences maintain major affiliations with Memorial Sloan Kettering Cancer Center, The Rockefeller University, the Hospital for Special Surgery, as well as with the metropolitan-area institutions that constitute NewYork-Presbyterian Healthcare Network. Weill Cornell Medical College and the Weill Cornell Graduate School of Medical Sciences are accredited by the Liaison Committee for Medical Education of the American Medical Association and the Association of American Medical Colleges, and the Middle States Commission on Higher Education.

Weill Cornell Graduate School Of Medical Sciences

Graduate work leading to an advanced general degree has occupied a place in the Medical College since 1912, when the degree was offered through a cooperative arrangement with the Graduate School of Cornell University. While under the Medical College, the Graduate School was always subject to the rules and regulations prevailing at the University. The departments offering graduate instruction were identified in the first announcement as the “scientific departments”. In June 1950, the trustees of Cornell University entered into an agreement with the Sloan Kettering Institute for Cancer Research whereby a new division of the Medical College, named the Sloan Kettering Division, was created for the purpose of offering additional opportunities for graduate study toward advanced degrees, thus extending the areas of the basic sciences. The expansion of the New York City component of the Graduate School prompted the faculty of the University’s Graduate School to give consideration to matters of administration, with the result that, by action of the trustees in January 1952, the Graduate School of Medical Sciences was established on the Campus of the Cornell University Medical College with the following PhD Programs and with associated modifications:

- Anatomy (1952-1982) converted to Cell and Molecular Biology (1982-present)
- Biochemistry (1952-1996) converted to Biochemistry and Structural Biology (1996-present)
- Pharmacology (1952-present)
- Physiology and Biophysics (1952-2002) converted to Physiology, Biophysics, and Systems Biology (2002-present)
- Bacteriology and Immunology (1952-1982) converted to Bacteriology, Immunology, and Pathology (1982-1986) converted to Microbiology, Immunology, and Pathology (1986-2000) converted to Immunology and Microbial Pathogenesis (2000-present)
- Public Health and Preventive Medicine (1952-1982)
- Pathology (1952-1982)

Memorial Sloan Kettering Cancer Center

Memorial Sloan Kettering Cancer Center is the world's oldest and largest privately operated center devoted to prevention, patient care, research, and education in cancer. The prototype of the National Cancer Institute-designated comprehensive cancer centers, Memorial Sloan Kettering has two operating organizations: Memorial Hospital, which provides inpatient care, newly expanded outpatient services, an extensive array of specialized and support services, and a broad program of clinical research; and the Sloan Kettering Institute, with some 80 laboratories dedicated to biomedical investigation.

Programs of basic and clinical research at Memorial Sloan Kettering aim to advance the understanding of the nature and the fundamental causes of cancer, and to improve the means for prevention, diagnosis, and treatment. The close collaboration between the Center's scientists and clinicians facilitates the rapid translation of results from the laboratory to the patient's bedside.

Originally established in 1884, Memorial Hospital has been affiliated with the Medical College since 1914. Many staff members of Memorial Hospital and Sloan Kettering Institute hold faculty appointments either in the Weill Cornell Medical College or in the Graduate School of Medical Sciences, which offers doctoral degree programs through the Sloan Kettering Division.

New York-Presbyterian Hospital - Cornell Campus

Founded in 1771 under a charter granted by King George III of England, The New York Hospital was the first hospital in the city and the second in the country. Originally built downtown, the hospital has been located adjacent to the Medical College since 1932. A nonprofit, voluntary institution maintained by The Society of the New York Hospital, it has cared for more than five million patients since its founding. Three hospitals have merged with The New York Hospital over the years: The Lying-In Hospital, the Manhattan Maternity and Dispensary, and the New York Nursery and Child's Hospital.

The New York Hospital was the first hospital in the United States to care for the mentally ill. Today, mental and emotional illnesses are treated at the Payne Whitney Psychiatric Clinic, an integral part of The New York Hospital complex, and the Westchester Division of The New York Hospital, in White Plains, New York.

In 1927, the hospital integrated with Cornell University Medical College through the establishment of The New York Hospital-Cornell Medical Center. The agreement joined the facilities of the two institutions and provided for cooperation in the advancement of patient care, medical education, and scientific research.

Graduate School Leadership and Staff

(https://gradschool.weill.cornell.edu/team)

Dean, Weill Cornell Medicine:	Robert A. Harrington, M.D.
Dean, Weill Cornell Graduate School:	Barbara L. Hempstead, M.D., Ph.D.
Associate Dean, Academic Affairs:	Randi B. Silver, Ph.D.
Associate Dean, Program Development:	David Eliezer, Ph.D.
Assistant Dean, Student Affairs	Judith Cukor, Ph.D.
Assistant Dean, Access, Belonging, and Student-Centered Success	Yazmin Carrasco, Ph.D.
Director of Education Administration	Karla Jacome, M.S. ED
Director, Enrollment & Educational Programs	Heather DiTullio, M.S.
Assistant Director, Finance & Grants	Tatiana Belinskaya
Associate Director, Career and Professional Development	Aubrey DeCarlo, Ph.D.
Senior Grants Administrator	Anastasia Efthymiou, Ph.D.
Assistant Director, Office of Access, Belonging and Student Success (OABS)	Roxana Mesías, Ph.D.
Senior Manager, Training and Grants	Dikaury Hernandez-Guner
Admissions and Marketing Manager	TBA
Financial Coordinator	Natalia Serrano
Student Services Administrator	Clive Liew
Senior Coordinator, Academic Operations	Katrina Pearsall, MHA
Senior Administrative Specialist	Fernando Arzu
Diversity Coordinator, Office of Access, Belonging and Student Success (OABS)	Rashain Adams
Senior Administrative Specialist	Bouchra Hannaoui
Operations Coordinator	Judith Farber, M.S.

Weill Cornell Graduate School of Medical Sciences Leadership and Administrators

Students may also contact these administrators to share any personal concerns:

Associate Dean (Academic Affairs) WCGS Randi B. Silver, Ph.D.	(212) 746-6340 rbsilve@med.cornell.edu
Associate Dean (Program Development) WCGS David Eliezer, PhD	(212) 746-6557 dae2005@med.cornell.edu
Assistant Dean (Student Affairs), WCGS Judith Cukor, Ph.D.	(212) 746-4492 juc2010@med.cornell.edu
Assistant Dean (Access, Belonging and Student Success) WCGS Yazmin Carrasco, Ph.D.	(646) 962-4937 ypc4001@med.cornell.edu
Director (Education Administration) WCGS Karla Jacome, M.S.ED	(212) 746-4809 kjjacome@med.cornell.edu
Associate Director (Enrollment & Educational Programs) WCGS Heather DiTullio, MS	(212) 746-6981 had4003@med.cornell.edu
Associate Director (Career and Professional Development) WCGS Aubrey DeCarlo, PhD	(212) 746-6502 aul4001@med.cornell.edu
Assistant Director (Finance & Grants) WCGS Tatiana Belinskaya	(212) 746-6737 tab2017@med.cornell.edu
Assistant Director (Office of Access, Belonging and Student Success (OABS)) WCGS Roxana Mesias, Ph.D.	(212) 746-1060 rem4008@med.cornell.edu
Student Services, Administrator (International Student Services) WCGS Clive Liew	(212) 746-6565 cll4002@med.cornell.edu

PHYSIOLOGY, BIOPHYSICS AND SYSTEMS BIOLOGY (PBSB)

Overview

The central mission of the Physiology, Biophysics, and Systems Biology (PBSB) graduate program is to educate and train doctoral students who use quantitative experimental, computational, and theoretical approaches to advance biomedical research. Through courses, research, and seminars, we aim to endow our students with the skills and knowledge to acquire data with fine resolution and large scale, to analyze these data using rigorous thinking and appropriate statistical and computational tools, and to use these analyses to develop and test quantitative models that elucidate hypotheses.

The quantitative approaches taught to our students stem from a broad set of disciplines represented by the background and expertise of the faculty, which include physics, mathematics, chemistry, statistics, and computer science. The biomedical subject matter with which we engage students is anchored in the research and experience of the faculty that ranges from genomics and proteomics, to molecular and cellular biophysics, to the physiology of systems and organs, and to quantitative aspects of integrative biology. Through educational and research opportunities across this multi-disciplinary and multi-scale spectrum, our students learn and develop quantitative methods that generalize to every arena of biomedical research.

Within the integrative construct of the PBSB program, students can choose to emphasize their training in either of two complementary areas of quantitative biomedical science with specialized curricula.

The **Bioinformatics** concentration of the program covers a broad spectrum of investigations, primarily using tools from statistics and computer science, into how biological information is expressed and organized in molecular and cellular systems. Coursework focuses on building expertise with the strategies and algorithms used to understand the organization of information at the genetic, proteomic, cellular, and integrated physiological systems levels. In their research, students in the bioinformatics concentration will often develop and use approaches like single-cell sequencing, spatial transcriptomics, epigenomics, metabolomics, multi-omic integration, and deep learning to identify patterns in normal and pathological settings that guide understanding, therapeutic strategy, and drug development.

The **Biophysics** concentration of the program draws heavily from approaches in mathematics, chemistry, and especially physics to understand the mechanisms by which molecular and cellular systems engender physiological processes. The coursework is geared towards developing an understanding of fundamental biophysical principles governing molecular interactions and cellular dynamics. To uncover biophysical mechanisms underlying health and disease, students in the biophysics concentration often develop and use advanced tools like single-molecule imaging, atomic-force microscopy, cryo-electron microscopy, electrophysiology, magnetic resonance imaging, multi-photon fluorescence microscopy, molecular dynamics simulations, network theory and simulations, mathematical modeling, and machine learning algorithms.

The PBSB program is a special place for doctoral studies. Our favorable faculty-to-student ratio and dedicated mentorship and administrative support ensures that every student receives the guidance and advice they need to find their own path. Our incorporation within Weill Cornell Medicine and the Sloan Kettering Institute provides a wealth of translational opportunities that greatly leverages our research efforts. Our location on the Upper East Side of Manhattan fosters immersion within the scientific and

cultural critical mass formed by the New York City community. And our focus on quantitative experimental, computational, and theoretical approaches provides a powerful vehicle with which to drive forward the ongoing revolution in biomedical research.

The PBSB program is part of the Weill Cornell Graduate School of Medical Sciences, a partnership with Weill Cornell Medical College and the Sloan Kettering Institute, and as such, many of the policies set forth in this document are in accordance and subject to its guidelines as well as those of Cornell University.

PBSB Administrative Offices / Contact Information

Program Chair	**Program Coordinator**
Emre Aksay, Ph.D.	Audrey Rivera, M.S.
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Whitney 820-B	E-509
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Emre Aksay, Ph.D.	Alessio Accardi, Ph.D.
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212-746-6207	646-962-6548
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Academic Standards Monitor, Bioinformatics	**Academic Standards Monitor, Biophysics**
Luce Skrabanek, Ph.D.	Trine Krogh-Madsen, Ph.D
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212-746-6363	212-746-5992
LC-501-E	LC-501-B

PBSB RESEARCH AND FACULTY

Students in the PBSB program learn, apply, and develop a range of quantitative experimental, computational, and theoretical tools in their work to advance biomedical research. Experimental approaches range from cryo-electron microscopy to single-molecule functional imaging, from single-cell sequencing to subcellular optical perturbations, and from susceptibility mapping to whole-retina information encoding. Computational and theoretical tools range from molecular dynamics to time-series analysis, from Bayesian inferencing to pattern-recognition networks, and from dynamical systems analysis to large-scale network simulations, with many of the applied tools refined and adapted to work across different biological scales. The quantitative approaches emphasized in the PBSB program enable our students and faculty to tackle biomedical challenges with a rigor that accelerates research, deepens understanding, and leads to testable predictions.

Our students begin research within days of arriving on campus and stay heavily involved in research throughout their graduate career. During their first year, students complete a minimum of three immersive research rotations, from which students select their thesis mentor (or mentors). We provide students with a wealth of resources and support during their graduate years and encourage them to take the lead in moving their project forward shortly after joining their thesis lab.

Faculty in the PBSB program are unified by their common conviction that quantitative approaches should be used and developed to advance biomedical research. To this effort they bring backgrounds and advanced research experience in mathematics, statistics, chemistry, physics, engineering, and computer science, combined with knowledge and productive perspectives on specific biomedical research areas. Together, the areas covered by PBSB faculty span a very broad swath of biomedical and medical sciences ranging from cell fate and cell signaling at various scales, to the functions of specific tissues (e.g., electrogenic tissue) and organs, and the biology underlying diseases including cancer and brain disorders.

Core Program Faculty

Name	Research Interests	Methods
Alessio Accardi, Ph.D. ala2022@med.cornell.edu 212-746-8696	The Accardi lab seeks to elucidate the structural and mechanistic underpinnings of ion and lipid transport.	● Cryo-Electron Microscopy ● Crystallography ● Electrophysiology ● Binding assays ● Bioinformatics
Emre Aksay, Ph.D. ema2004@med.cornell.edu 212-746-6207	The Aksay laboratory is interested in understanding the molecular, cellular, and circuit mechanisms that give rise to dynamics in neural networks.	● Multi-photon microscopy ● Electrophysiology ● Connectomics ● Modeling; machine learning ● Optogenetics
Effie Apostolou, Ph.D. efa2001@med.cornell.edu 646-962-6235	The Apostolou lab focuses on the study of three-dimensional chromatin architecture and its dynamic rearrangements upon differentiation and reprogramming.	● High-throughput sequencing ● Computational analysis

Douglas J. Ballon, Ph.D. dballon@med.cornell.edu 212-746-5679	The Ballon lab is focused on the development of imaging biomarkers for diagnosis, prognosis, staging, and therapeutic efficacy in cancer and neurologic diseases.	● Magnetic resonance imaging ● Hardware and software design
Zhirong Bao, Ph.D. baoz@mskcc.org 212-639-7744	The Bao lab studies developmental systems biology and emergent behaviors, including (1) the developmental landscape integrating space, time and gene expression, and (2) the emergence of neural circuit activity patterns in development.	● Deep learning ● Optical microscopy ● Molecular genetics
Michael F. Berger, Ph.D. bergerm1@mskcc.org 646-888-3386	The Berger lab's focus is to characterize the spectrum of genetic mutations in human tumors in order to identify biomarkers of cancer progression and drug response.	● Next-generation DNA sequencing ● Computational cancer genomics
Doron Betel, Ph.D. dob2014@med.cornell.edu 646-962-5602	The Betel lab is interested in the development of computational genomic tools and data integration approaches for the study of human diseases and cellular development.	● Data integration, translational approaches ● Machine learning, Statistical Inference, ● Genomic, epigenomic and transcriptome data analyses
Carl Blobel, M.D., Ph.D. blobelc@hss.edu 212-606-1429	The Blobel lab studies how the cell surface metalloprotease ADAM17 and its regulators, the inactive Rhomboids (iRhoms), control TNFa and EGF-receptor signaling in development and autoimmune diseases such as RA and SLE.	● Biochemistry ● Collaborative structural modeling studies ● Cell Biology ● Mouse models of disease ● Translational studies and drug development
Olga Boudker, Ph.D. olb2003@med.cornell.edu 212-746-6634	The Boudker lab is interested in how molecular motions underlie function in ion-driven membrane transporters.	● Bioinformatics ● Cryo-Electron Microscopy ● Crystallography ● Nuclear Magnetic Resonance ● Single-Molecule fluorescence microscopy
John Chodera, Ph.D. choderaj@mskcc.org 646-888-3400	The Chodera lab uses computation and experiments to develop quantitative, multiscale models of the effects of small molecules on biomolecular macromolecules and cellular pathways.	● Molecular dynamics simulations ● High-throughput experiments ● High-performance computing, AI
Ronald G. Crystal, M.D. rgcryst@med.cornell.edu 646-962-4363	The Crystal lab's current projects include gene transfer strategies for cancer, inherited CNS disorders, α1-	● Microarray technologies ● Next-generation sequencing

	antitrypsin deficiency, anti-bioterrorism applications and development of vaccines.	
Kushal K. Dey, Ph.D. deyk@mskcc.org 312-709-0680	The Dey lab develops statistical methods to link human genetics with omics data to identify molecular underpinnings of complex disease.	● Statistical Genetics ● Genomics ● Computational Biology ● Bioinformatics
Jeremy Dittman, M.D., Ph.D. jed2019@med.cornell.edu 646-962-2784	The Dittman lab is interested in synaptic function at the molecular, cellular, and circuit levels	● Genetic model systems ● Quantitative imaging ● Membrane biophysics ● Protein Biochemistry
Melinda Diver, Ph.D. diverm2@mskcc.org (212) 639-2131	The Diver laboratory is interested in the molecular mechanisms through which membrane-embedded ion channels and transporters perform their specialized biological functions and how these proteins contribute to human physiology, disease, and therapeutics.	● Single particle Cryo EM ● Electrophysiology ● Transport assays ● Structure-function analysis
Laura Donlin, Ph.D. DonlinL@hss.edu 212-774-2743	The Donlin lab aims to deepen our understanding of autoimmune and musculoskeletal disorders by uncovering molecular patterns found within patient samples.	● Next-generation sequencing ● Cell culture models
Olivier Elemento, Ph.D. ole2001@med.cornell.edu 646-962-5726	The Elemento lab combines Big Data analytics with experimentation to develop entirely new ways to help prevent, diagnose, understand, treat and ultimately cure cancer.	● High performance computing ● Machine learning, AI, deep learning ● Mathematical modeling ● Genome and DNA sequencing
Todd Evans, Ph.D. tre2003@med.cornell.edu 212-746-9485	The Evans lab's goal is to understand the molecular regulation of normal organ development during embryogenesis, and thereby to reveal the underlying genetic programs that, when deregulated, cause developmental defects and organ-based disease throughout life.	● Pluripotent stem cell models ● Animal models ● Drug screens ● Omics
Bishoy Morris Faltas, Ph.D. bmf9003@med.cornell.edu 646-962-2072	The Faltas lab focuses on studying bladder cancer as a model disease for dissecting the fundamental biological mechanisms that drive the evolution of human cancers and resistance to therapy.	● Genomics ● Animal models ● Translational research
Benjamin Greenbaum, Ph.D. greenbab@mskcc.org 646-608-7667	The Greenbaum laboratory is interested in quantifying the interaction of tumors with the immune system and to predict	● Statistical physics ● Computational analysis ● Evolutionary biology

	immune driven evolution of tumors and viruses.	
Iman Hajirasouliha, Ph.D. imh2003@med.cornell.edu 646-962-7804	The Hajirasouliha lab is passionate about developing new algorithms, machine learning and deep learning methods, and their applications to genomics, metagenomics, cancer research, and In Vitro Fertilization (IVF).	● High performance computing ● AI, Machine Learning, Deep Learning ● Combinatorial and Graph Algorithms ● Bioinformatics
Katherine Hajjar, M.D. khajjar@med.cornell.edu 212-746-2034	The Hajjar lab focuses on the receptor-mediated assembly of the fibrinolytic zymogen, plasminogen, and its endothelial cell-derived activator.	● Animals models ● Confocal microscopy
Daniel A. Heller, Ph.D. hellerd@mskcc.org 646-888-3438	The Heller lab is inventing novel nanotechnologies to treat advanced cancers, detect disease at early stages, and investigate disease mechanisms.	● Nanotechnology ● Machine learning, AI ● Microscopy and optics ● Drug delivery ● Sensors
Barbara L. Hempstead M.D., Ph.D. blhempst@med.cornell.edu 212-746-6215	The Hempstead lab is focused on defining the actions of neurotrophin growth factors in the vasculature and in neurons.	● Confocal microscopy
Richard K. Hite, Ph.D. hiter@mskcc.org 212-639-8694	The Hite lab is focused upon determining the mechanisms of intracellular ion transport with a particular focus upon the lysosome and its role in the development of neurodegenerative disease.	● Cryo-electron microscopy ● X-ray crystallography ● Electrophysiology
Xin-Yun Huang, Ph.D. xyhuang@med.cornell.edu 212-746-6362	The Huang lab's research focuses on the molecular mechanisms of cellular signaling pathways and their physiological functions, mainly signaling and regulatory mechanisms of G proteins and tyrosine kinases.	● Animal models ● Single-cell sequencing and analyses ● Confocal microscopy ● Cryo-electron microscopy ● Crystallography
Steven Z. Josefowicz, Ph.D. szj2001@med.cornell.edu 212-746-2074	The Josefowicz lab develops functional histone genetic tools and investigates epigenetic regulation to understand immune cell development and function.	● Single-cell sequencing ● Epigenomics
Alex Kentsis, M.D., Ph.D. kentsisresearchgroup@gmail.com 646-888-3557	The Kentsis lab seeks to understand the fundamental causes of cancers, especially in children and young adults, and develops definitive therapies for their control.	● Functional genomics ● Quantitative proteomics ● Protein engineering ● Animal models ● Computational modeling and drug design

Kayvan Keshari, Ph.D. rahimikk@mskcc.org 646-888-3631	The Keshari lab's goal is to improve our biochemical understanding of cancer metabolism and use metabolic changes to develop imaging agents for diagnosis and treatment.	● Hyperpolarized magnetic resonance (MR)
George Khelashvili, Ph.D. gek2009@med.cornell.edu 212-746-6348	The Khelashvili lab investigates dynamic mechanisms in fundamental biological processes of signal transduction by cell surface proteins such as G protein-coupled receptors, transporters in the family of neurotransmitter: sodium-symporters, and lipid scramblases.	● Mathematical modeling and simulations ● Molecular dynamics simulations ● Computational biophysics
Ekta Khurana, Ph.D. ekk2003@med.cornell.edu 646-962-6374	The Khurana lab develops integrative computational models to understand the relationship between genomic sequence variation and disease.	● Bioinformatics ● High performance computing ● Machine learning, AI, deep learning
Trine Krogh-Madsen, Ph.D. trk2002@med.cornell.edu 212-746-5992	The Krogh-Madsen lab is interested in understanding mechanisms underlying cardiac arrhythmias, from the molecular to the tissue level.	● Mathematical and computational modeling ● Multiscale modeling; Electrophysiology
Jan Krumsiek, Ph.D. jak2043@med.cornell.edu 646-962-4152	The Krumsiek lab develops and applies novel methods for the analysis of metabolomics and multi-omics data.	● Bioinformatics ● Machine learning, AI, deep learning ● Mathematical modeling and simulations
Eric C. Lai, Ph.D. laie@mskcc.org 212-639-5578	The Lai lab's guiding interest is to comprehend how complex biological patterns can be assembled with stereotyped precision.	● Genomics
Dan A. Landau, M.D., Ph.D. dal3005@med.cornell.edu 212-746-5867	The Landau lab is committed to discovering fundamental principles in evolutionary biology and biological regulation of mammalian cells.	● Bioinformatics ● High-performance computing ● Omics
Caleb Lareau, Ph.D. lareauc@mskcc.org 646-888-2069	The Lareau Lab utilizes artificial intelligence methods and petabyte-scale datasets to uncover novel associations in the immune system that may have a translational impact.	● Protein design ● Single-cell genomics ● Computational virology
Ashley Laughney, Ph.D. asl4003@med.cornell.edu 646-962-2739	The Laughney Lab seeks to discover context-dependent interactions supporting the adaptive abilities of disseminated tumor cells and their interplay with anti-tumor immunity.	● Bioinformatics ● Next-generation sequencing ● Animal models ● Fluorescence microscopy and FRAP ● High performance computing

Christina Leslie, Ph.D. cleslie@cbio.mskcc.org 646-888-2762	The Leslie lab develops novel computational methods to study cellular biological systems from a global and data-driven perspective.	● Machine learning, AI ● High-performance computation
Joshua Levitz, Ph.D. jtl2003@med.cornell.edu 212-746-3432	The Levitz Lab seeks to understand synaptic signaling molecules with a focus on neurotransmitter-gated G protein-coupled receptors.	● Chemical optogenetics ● Single molecule fluorescence-based assays
Massimo Loda, M.D. mloda@med.cornell.edu 212-746-6464	The Loda laboratory is interested in investigating the mechanisms by which prostate cancer hijacks cell metabolism to allow tumors to flourish.	● Genomics ● Biochemical assays ● Electron microscopy ● Computational pathology
Stephen Long, Ph.D. longs@mskcc.org 212-639-2903	The Long lab focuses on the mechanisms of eukaryotic ion channels involved in calcium signaling and membrane-embedded enzymes.	● Cryo-electron microscopy ● X-ray crystallography
Yicheng Long, Ph.D. yil4011@med.cornell.edu 646-962-8708	The Long Lab studies how epigenetics is regulated by macromolecular interactions (protein-RNA, protein-DNA, protein-protein and RNA-DNA) using human stem cell differentiation model with a special interest in cardiac differentiation.	● Epigenomics and Multiomics ● CRISPR engineering ● hiPSC/hESC differentiation ● Nucleic acids biochemistry ● Protein biochemistry
Christopher Mason, Ph.D. chm2042@med.cornell.edu 646-962-5643	The Mason lab develops and deploys computational and experimental methodologies to identify the functional genetic elements of the human genome and metagenome and engineer them into cells and clinical trials.	● Space genetics and genome defense ● Epigenetics and genome technologies ● Machine learning, AI, bioinformatics ● Global metagenomics
Jason G. Mezey, Ph.D. jam2054@med.cornell.edu 646-962-4546	The Mezey lab is focused on understanding the genetics, development, and evolution of complex phenotypes and disease.	● Computational statistics and analysis ● Machine learning ● Next-generation sequencing data
Crina Nimigean, Ph.D. crn2002@med.cornell.edu 212-746-5947	The Nimigean lab's research is geared toward understanding how ion channel protein structure and mechanism interrelate at the molecular level to allow channels to elaborate various biological properties.	● Cryo-electron microscopy ● Crystallography ● Electrophysiology (patch-clamp; whole cell) ● Isothermal Titration Calorimetry
Shelia Nirenberg, Ph.D. shn2010@med.cornell.edu 212-746-6372	The Nirenberg lab's research seeks to advance basic understanding of computational neuroscience, and, in	● Optogenetics ● Electrophysiology (Multi-electrode arrays)

	parallel, use what we learn to address practical problems that improve quality of life.	● Brain-machine interfaces
Thomas Norman, Ph.D. normantm@mskcc.org	The Norman Lab combines large-scale functional genomics experiments with computational modeling to enable rational engineering of fibroblasts and other cell types.	● Computational Biology ● CRISP functional genomics ● Single-cell technologies
Lawrence G. Palmer, Ph.D. lgpalm@med.cornell.edu 212-746-6355	The Palmer lab is interested in the cellular and molecular events involved in the transport of Na+ and K+ between blood and urine, and in the hormonal mechanisms underlying the regulation of these transport processes.	● Animal Models ● Electrophysiology (Patch-clamp; whole cell)
Dana Pe'er, Ph.D. peerd@mskcc.org 646-888-3186	The Pe'er lab aims to address fundamental questions in biomedical science addressing regulatory cell circuits, cellular development, tumor immune eco-system, genotype to phenotype relations and precision medicine.	● Machine learning ● Genomics ● Single cell technologies
Shahin Rafii, M.D. srafii@med.cornell.edu 212-746-4538	The Rafii lab focuses on the molecular and cellular mechanisms of angiogenesis, cancer, and stem cell biology.	● Genetic, genomic, molecular and cell biological techniques ● Animal models
Ed Reznik reznike@mskcc.org 646-608-7553	Quantitative Cancer Metabolism and Physiology	● Genomics/Metabolomic Data Analysis/Informatics
Paul Riegelhaupt M.D., Ph.D. par9082@med.cornell.edu 212-746-7266	The Riegelhaupt lab studies the structure, function, and pharmacology of potassium channels responsible for maintaining cellular membrane potential.	● Cryo-Electron ● Microscopy ● Electrophysiology
Laura Santambrogio M.D. Ph.D las4011@med.cornell.edu 646-962-2160	The Santambrogio's lab is interested in MHC II-restricted antigen processing and presentation, the MHC II immunopeptidome and how MHC II peptide selection shapes adaptive immune responses.	● Mass Spectrometry ● Parallel Reaction Monitoring ● Proteogenomic
Simon Scheuring, Ph.D. sis2019@med.cornell.edu 646-962-2565	The Scheuring lab performs atomic force microscopy-based research of biological samples, with a particular interest in membrane phenomena.	● High-speed atomic force microscopy ● Cryo-electron microscopy ● Single-Molecule Spectroscopy

Robert E. Schwartz, M.D., Ph.D. res2025@med.cornell.edu 646-962-6197	The Schwartz lab is focused on developing and building models of human liver disease in vitro, leveraging these models and interdisciplinary tools to study mechanisms underlying infectious and metabolic disease and liver cancer.	● Stem cell biology ● Hepatocyte biology ● Engineering techniques ● Animal Models ● Genomic and cell biological techniques
Sohrab P. Shah, Ph.D. shahs3@mskcc.org 646-608-7558	The Shah lab's research focuses on developing and using computational methods to understand cancer evolution and treatment response.	● Machine learning, AI ● Bayesian statistics ● High-resolution single-cell genomics ● Transcriptomics
Derek M. Shore, Ph.D. des2037@med.cornell.edu 212-746-6386	The Shore lab develops novel machine learning methods to elucidate mechanistic details underlying protein function from molecular dynamics simulations.	● Deep learning (DNNs, LLMs, graph transformers) ● Molecular dynamics (MD) simulations ● Large-scale in silico virtual screening
Randi B. Silver, Ph.D. rbsilve@med.cornell.edu 212-746-6354	The Silver lab focuses on organ fibrosis and developing therapeutic interventions blocking collagen synthesis.	● Animal Models ● Primary cell culture ● Histopathology ● Organoids
Luce Skrabanek, Ph.D. las2017@med.cornell.edu 212-746-6363	The Skrabanek lab is interested in expanding data analysis education and the routine use of software tools that support data lifecycle management activities that emphasize rigor and reproducibility in experimental design, data collection, analysis and interpretation.	● Computational analysis ● Bioinformatics
Ruslan Soldatov, Ph.D. soldatr@mskcc.org 413-313-8308	The Soldatov lab focuses on developing a quantitative and predictive understanding of how cell fate decisions maintain tissue homeostasis and how disruptions in these processes shape cancer evolution.	● data analysis ● computational genomics ● machine learning ● probabilistic models
Heidi Stuhlmann, Ph.D. hes2011@med.cornell.edu 212-746-6156	The Stuhlmann lab focuses on understanding the molecular and genetic pathways that regulate the three principal processes of vascular development: endothelial cell lineage determination, vasculogenesis, and angiogenesis.	● Mouse model ● Embryonic stem cell in vitro differentiation system
Wesley Tansey, Ph.D. tanseyw@mskcc.org	The Tansey lab develops machine learning methods for cancer with a scientific focus on spatial biology, combination therapies, and pediatric solid tumors	● Machine Learning ● Spatial Omics ● Drug Screens

Mary Teruel, Ph.D. mnt4002@med.cornell.edu;	The Teruel Lab seeks to dissect the molecular mechanisms by which circadian rhythms and the cell cycle govern metabolic health and disease progression in the context of diabetes and obesity.	● Live, single-cell imaging in cultured cells ● In Vivo Mouse Models
Hagen Tilgner, Ph.D. hut2006@med.cornell.edu 646-962-7581	The Tilgner lab is interested in how the same, within an individual mostly invariant genome, can give rise to functionally extremely diverse cell types – such as the ones that are the building blocks of the human brain.	● Omics ● Bioinformatics
Jessica Tyler, Ph.D. jet2021@med.cornell.edu 212-746-4092	The Tyler laboratory is interested in discovering and understanding the mechanistic basis of epigenetic regulation of aging, genomic integrity and gene expression.	● Epigenetics ● Molecular genetics ● Mammalian tissue culture
Jonathan D. Victor, M.D., Ph.D. jdvicto@med.cornell.edu 212-746-2343	The Victor lab is interested in the design principles of sensory processing, both in the sensory periphery and in the brain, and how these design principles are implemented in biological hardware.	● Mathematical and computational modeling ● Visual psychophysics
Fei Wang, Ph.D. few2001@med.cornell.edu 646-962-9405	The Wang laboratory focuses on data mining algorithms development and their applications in various health informatics problems.	● Machine learning ● Data mining ● Computer modeling
Yi Wang, Ph.D. yiwang@med.cornell.edu 212-746-2526	The Wang lab's research interest is to develop imaging methods using mathematics, physics, electronic engineering, and computer science tools.	● Magnetic resonance imaging ● High-performance computation ● Quantitative susceptibility mapping (QSM) ● Quantitative transport mapping (QTM)
Harel Weinstein, D.Sc. haw2002@med.cornell.edu 212-746-6358	The Weinstein lab studies the interdependence of structure, dynamics, and function in macromolecular assemblies involved in physiological and disease processes, with a specific focus on receptors, transporters, scramblases.	● Quantitative allosteric models ● Molecular Dynamics Simulations ● Mathematical modeling and Bioinformatics
Joao Xavier, Ph.D. xavierj@mskcc.org 646-888-3195	The Xavier lab's goal is to identify the underlying physical, biological, and evolutionary principles that are common among, and confer robustness to, multicellular systems.	● Computational models ● Quantitative experiments

Xiaolan Zhao, PhD zhaox1@mskcc.org 212-639--5582	The Zhao lab investigates chromosome structures, replication, repair, and damage response, and their connections to many types of human diseases.	● Genetics & Biochemistry ● Cryo-EM, Single Molecule ● Genomics ● Chemical Biology.
Chenxu Zhu, PhD chz4007@med.cornell.edu 646-977-7020	The Zhu Lab develops multimodal single-cell genomics tools to study the combined effects of multiple regulatory layers in cell fate specification and maintenance.	● Genomics ● Bioinformatics ● Chemical Biology

Adjunct, Affiliate, or Emeritus Faculty

Name	Research Interests	Methods
Francisco Altamirano faltamirano@houstonmethodist.org 713-441-5981	The Altamirano lab aims to uncover the molecular mechanisms that drive arrhythmias and heart failure	● Optical mapping ● Electrophysiology ● cardiomyocyte isolation ● engineered heart tissues
Cesar A. Arias, MD MSc, PhD caarias@houstonmethodist.org 346- 238- 4870	The Arias' lab investigates the molecular basis of antibiotic resistance by organisms infecting and colonizing critically ill patients.	● Molecular genetics ● Mutagenesis ● Molecular Biochemistry and Structural Biology ● Protein-Protein Interactions ● Multiomics Approaches
Olaf S. Andersen, M.D. sparre@med.cornell.edu 212-746-6350	The Andersen lab's research is focused on the molecular mechanisms governing the function of membrane-spanning ion permeable channels.	● Spectroscopy ● Conformational energy calculations ● Electrophysiological (single-channel) measurements
Scott Blanchard, Ph.D. Scott.Blanchard@stjude.org 901-595-1927	The Blanchard lab's mission is to develop novel approaches to examine conformational and compositional processes critical to the functions of biological systems.	● Single-molecule imaging ● Single-molecule Fluorescence Resonance Energy Transfer ● Computational modeling and molecular dynamics simulations
Shu-Hsia Chen, Ph.D. schen3@houstonmethodist.org 713-441-6623	The Chen lab is focused on gene therapies and cancer immunotherapies, and, to a large extent, elucidating the mechanisms underlying the establishment of immune suppressive tumor microenvironments.	● Transgenic humanized mice models ● Spatial single cells ● Immunological assays
John Cooke, M.D., Ph.D. jpcooke@houstonmethodist.org 713-441-8322	The Cooke Laboratory is focused on vascular regeneration, vascular cell identity, and cell fate, particularly focusing on the mechanisms of epigenetic plasticity in cell fate and the role of aging in vascular dysfunction.	● Western Blot ● Immunofluorescent Staining ● Flow Cytometry ● Mice Models (Lineage tracing, Heart Failure, PAD)

Vittorio Cristini, Ph.D. vcristini@houstonmethodist.org 505-934-1813	The Cristini lab uses mechanistic mathematical and biophysical models to study the spatiotemporal evolution of diseases and drug transport for cancer, infectious diseases, Alzheimer's disease, and cardiovascular diseases in an effort to develop novel clinically translatable tools for personalized medicine.	● Mathematical modeling ● Pharmacokinetic and pharmacodynamic modeling ● Multiscale computational modeling
Philip Horner, PhD pjhorner@houstonmethodist.org 713-363-9046	The Horner lab studies the role of glia and activity in the rejuvenation of the injured or aged central nervous system.	● Neurophysiology ● Systems Neuroscience ● Neuroanatomy ● Cell Transplantation
Khaled Machaca, Ph.D. khm2002@qatar-med.cornell.edu 974 4492 8423	The Machaca lab is interested in the regulation of intracellular signaling pathways under both physiological and pathological conditions in the context of the regulation of oocyte maturation, meiotic arrest, cell cycle progression and secretion.	● Cell signaling ● Integrative cell and systems physiology ● Membranes and membrane proteins
Jason A. Koutcher, M.D., Ph.D. koutchej@mskcc.org	The Koutcher lab's research program includes investigation of radiation sensitizers, antiangiogenesis agents, hypoxia, and molecular and cellular imaging.	● Magnetic resonance imaging ● Magnetic resonance spectroscopy
Henry J. Pownall, PhD hjpownall@houstonmethodist.org 713-449-4537	Atherogenesis, lipid nanoparticles, diabetes, obesity, and fertility.	● Site-directed mutagenesis ● Cryo EM, calorimetry ● biochemical kinetics ● lipid analysis ● pharmaco-kinetic.
Glen Prusky, M.Sc., Ph.D. glp2004@med.cornell.edu 914-597-2500	The Prusky lab focuses on understanding the nature of adaptive change in the nervous system.	● Animal models ● Cellular, electrophysiological, and theoretical methodologies
B. Franklin Pugh Ph.D. fp265@cornell.edu	The Pugh lab deciphers molecular mechanisms of eukaryotic gene regulation, focusing on enhancer, promoter and chromatin interactions.	● Genome-wide assays ● Biochemical reconstitution ● CRISPR-directed mutagenesis ● Machine learning, AI, bioinformatics
Peter Torzilli, Ph.D. torzillip@hss.edu 212-606-1087	The Torzilli lab's research focuses on the study of cell and tissue biology of articular cartilage in health and disease; the enzyme mechanokinetics of collagen catalysis; and the design of novel approaches at the molecular level to enhance soft tissue repair and function.	● Tissue, cellular and molecular engineering ● Gene therapy

Guangyu Wang Gwang2@houstonmethodist.org 832-329-8316	The Wang lab is interested in developing AI and deep learning methods to understand cell fate transition and regulation, patient diagnosis and prognosis, and drug response prediction.	● large language models and foundation models ● singe cell and spatial transcriptomics ● pathology and clinical images ● multi-modality learning

PBSB CURRICULUM AND POLICIES

Requirements

Prior to the taking the Admission to Candidacy Exam (ACE exam), a student must take three Core courses, 10 credits of electives (generally three elective courses, can be chosen from any of the Tri-Institutional offerings, see Director for options or special cases), and three seminar course series. Students will also complete at least 3 research rotations.

Students start their thesis research before completing their formal coursework, but they are not admitted to Ph.D. candidacy until passing their Admission to Candidacy Exam (ACE) at the end of the second year.

Timeline	Year 1	Year 2	Year 3	Year 4	Year 5 …
Core curriculum courses	●				
Graduate research seminar	●				
Lab rotations	●				
Select research focus and Special Committee	●				
Complete elective requirement (10 credits)		●			
Admission to Doctoral Candidacy Examination (ACE) test (research proposal and oral examination)		●			
Submit PhD thesis description		●			
Lab research		●	●	●	●
Meetings with Special Committee		●	●	●	●
Present at PBSB Program Retreat and du Vigneaud Symposium		●	●	●	●
Present at local and national meetings			●	●	●
Develop PhD thesis			●	●	
Continue research and defend PhD thesis					●

Calendar

First year, September – December

- Biophysical Principles of Molecular and Cellular Systems: Modules 1-3 *or* Quantitative Information in Biological Systems: Modules 1-3 (*core course 1*)
- Quantitative Understanding in Biology I and II *(core course 2)*
- PBSB Seminar Series *(seminar course 1)*
- Faculty Research Presentations *(seminar course 2)*
- Tri-Institutional Responsible Conduct of Research (RCR) (*mandatory*)
- Begin Rotation #1 *(by mid-September):*
  - Register online at LEARN - https://learn.weill.cornell.edu/ics
  - Complete online Laboratory Rotation Agreement Form with Rotation Preceptor
- Meeting with Program Director *(October)*
- End Rotation #1 *(by late-December):*
  - Complete online Laboratory Rotation Evaluation Form with Rotation Preceptor

First year, January – March

- Biophysical Principles of Molecular and Cellular Systems: Modules 4-6 *or* Quantitative Information in Biological Systems: Modules 4-6 (*core course 3*)
- Elective
- Critical Dissection of Scientific Data (CDSD) *(seminar course 3)*
- PBSB Seminar Series *(seminar course 1 - continued)*
- Begin Rotation #2 *(by early-January):*
  - Register online at LEARN - https://learn.weill.cornell.edu/ics
  - Complete online Laboratory Rotation Agreement Form with Rotation Preceptor
- Meeting with Program Director *(February)*
- End Rotation #2 *(by late-March):*
  - Complete online Laboratory Rotation Evaluation Form with Rotation Preceptor

First year, April - June

- Continue courses
- Begin Rotation #3 *(by early-April):*
  - Register online at LEARN - https://learn.weill.cornell.edu/ics
  - Complete online Laboratory Rotation Agreement Form with Rotation Preceptor
- Meeting with Program Director *(June)*
- End Rotation #3 *(by late-June):*
  - Complete online Laboratory Rotation Evaluation Form with Rotation Preceptor

First year, summer

- Students join their thesis laboratory by July 1st and begin research
  - or, if necessary (see "Laboratory Rotations" section below), may be permitted to -

- Complete a fourth rotation and decide on a thesis lab (*by early September*)

Second year

- Continue research in thesis lab
- Present thesis ideas and early data at Program Retreat (*October*)
- Complete elective requirements
- PBSB Seminar Series *(seminar course 1 - continued)*
- ACE Tutorial (November)
- Form and meet with your special committee to discuss thesis and ACE goals (*by December: Submit committee meeting report to Program Coordinator*)
- Critical Dissection of Scientific Data (CDSD) (*February-June*)
- ACE exam (*begin preparation in January, complete by June 30th*)

Third year +

- Continue research in thesis lab
- Present at Program Retreat
- Annual special committee meetings
- Present at du Vigneaud Symposium
- Present at national research meetings
- Publish!

Formal Courses Offered By PBSB

The course of study in the PBSB Program is organized into modular courses and seminars offering education at the conceptual level, as well as in the experimental and computational tools of the component disciplines (Physiology, Biophysics, & Systems Biology), and offers immersion in specific research topics.

Course updates can be found on the PBSB website at:
https://gradschool.weill.cornell.edu/programs/physiology-biophysics-systems-biology-1

Quantitative Understanding in Biology I-II, Quarters I-II (required):

This course will prepare students to apply quantitative techniques to the analysis of experimental data. To emphasize both practical and theoretical skills, the course will involve several hands-on workshops, and the completion of several projects will be required. Students will be well positioned to meet the emerging requirements of funding agencies for formally planned experiments and fully reproducible and documented data analysis methods.

Specific topics in Quantitative Understanding in Biology (qBio) I include: practical aspects of data formatting and management; graphical, mathematical and verbal communication of quantitative concepts; a review of statistics, with emphasis on the selection of appropriate statistical tests, the use of modern software packages, the interpretation of results, and the design of experiments; the formulation, evaluation, and analysis of mathematical models of biological function, with an emphasis

on linear and non-linear regression, determination of model parameters, and the critical comparison of alternative models with regard to over-parameterization.

Qbio II further prepares students to apply quantitative techniques to the analysis of experimental data and the modeling of dynamic biological systems. In the two modules of this class, we explore dynamic biological systems. Both continuous- and discrete-time systems are treated, as are both linear and non-linear systems. Examples are taken from a spectrum of biologically relevant domains including population biology, genetic evolution, auditory processing, enzyme kinetics, and the dynamics of ion channels. To emphasize both practical and theoretical skills, the course will involve hands-on work-shops, and the completion of two projects by the students will be required.

Course Directors: Jason R. Banfelder, MCh.E., Dr. Luce Skrabanek, and Dr. Derek Shore

Biophysical Principles of Molecular and Cellular Systems (required for Biophysics concentration, elective for Bioinformatics concentration):

This core course aims to build a deep quantitative understanding of the biophysical basis of cellular processes. The course is articulated in 6 modules, 3 in each semester. Each module is centered around a specific biological question and will provide students with the conceptual (i.e., theoretical basis, mathematical approaches) and practical (i.e., experimental techniques, computational approaches, analysis strategies) tools to approach them. Modules will consist of lectures, journal clubs, and Problem Based Learning classes where students present their homework solutions to the class. The course includes a grant-writing component that both cements students' understanding of course content and teaches skills in scientific writing.

Module 1 – Thinking on the nanoscale level: Proteins, Membranes, and Electricity

This module introduces foundational concepts in molecular biophysics, from the basic principles of membrane and protein structure to the experimental and mathematical approaches used to quantitatively describe their function.

Module 2 – Thermodynamic principles of molecular interactions

This module describes the thermodynamic basis of protein-protein and protein-ligand interactions with a focus on the approaches used to quantify the molecular forces that underlie them.

Module 3 –Basis of kinetics and signaling in cellular processes

This module focuses on the principles of cellular signaling, focusing on the quantitative approaches used to describe them, from diffusion of molecules to the description of basic cellular pathways that control signaling mechanisms and membrane fusion processes.

Module 4 – Introduction to Signal Transmission

This module analyzes the basis of signal transmission, from the generation and propagation of the action potential in the brain and heart, to the molecular basis of sensory transduction.

Module 5 – Metabolism and Signaling Associated with Decisions on Cell State

In this module we will discuss fundamental cellular signaling pathways, from transmembrane signaling, to DNA damage response and ubiquitin signaling.

Module 6 – Integration of Signaling for Information Transmission

This module analyzes fast signaling mechanisms such as sensory transduction and synaptic transmission.

Course Directors: Dr. Alessio Accardi and Dr. George Khelashvili

Quantitative Information in Biological Systems (required for Bioinformatics concentration, elective for Biophysics concentration):
This core course is a year-long modular course which will integrate statistics, experimental data, quantitative methods, and interpretation of results, each within the context of a single topic or idea. Emphasis will be placed on depth of quantitative understanding. Each module, anchored on one or a few papers from the primary literature, will explore a topic in-depth, providing students with the theoretical and biological background necessary to understand the topic, the experimental techniques of data acquisition, as well as the practical aspects of approaching and analyzing the data.

Module 1: Introduction to Next-Gen Sequencing includes an introduction to the theory, the biological background, the different short- and long-read sequencing technologies, and library preps, as well as the diverse applications of NGS. Emphasizing the importance of quality control at each step, details the lifecycle of analyzing a typical RNA-seq dataset. Introduces students broadly to the topics that will be covered in more detail in each module.
Module 2: DNA Sequencing looks at point mutation and indel detection, identification of structural variants, copy number detection, functional interpretation, meta-genomics analysis, and the application of variant calling in population genetics and GWAS.
Module 3: Transcriptional Regulation and Epigenetics will cover the use of techniques such as ATAC-seq, ChIP-seq, RNA-seq, PRO-seq, methylation assays, and perturbation analysis to study DNA structure and chromatin accessibility, 3D nuclear architecture, transcriptional and post-transcriptional regulation, and genetic and epigenetic perturbations.
Module 4: Metabolomics and Proteomics explores how assaying the metabolome and proteome differ from NGS, and how this information differs from, and complements, the quantification of nucleic acid-based technologies. Includes the use of Gaussian Graphical Models to infer metabolomic and proteomic networks and pathways.
Module 5: Image Analysis is an introduction to image acquisition modalities and noise sources, classic computer vision strategies for cell tracking, particle tracking and correlation spectroscopy, active contouring, source separation and image registration, thinking in k-space, deep learning approaches for pathology images, and spatial transcriptomics image analysis with machine learning.
Module 6: Single Cell Technologies looks at the extra information that measurements from single cells afford over bulk measurements, sample and library preps, what are the advantages and disadvantages of single cell sequencing, analysis techniques including normalization, dataset integration, clustering, trajectory inference, lineage tracing, how we can identify even rare cell types, and how that has transformed the way we look at the cells and how we explore diseases and develop therapies. Advanced techniques such as CITE-seq, scATAC-seq, Perturb-Seq, single cell multi-omics approaches.

Course Director: Dr. Luce Skrabanek

Physiology, Biophysics and Systems Biology Research Seminar Series, Quarters I-IV (required):
This required course exposes students to recent research developments in PBSB faculty focus areas including:

- Biophysical and Physiological Mechanisms of Membrane and Membrane Protein Function
- Quantitative and Integrative Biology
- Organogenesis and Physiological Genomics
- Biological and Biomedical Imaging

Course Director: Dr. Alessio Accardi

Physiology, Biophysics and Systems Biology Faculty Research Presentations - Quarters I-II (required):
This course is required for all 1st year PBSB graduate students. Program faculty will introduce the research in their laboratories and discuss potential rotation and thesis projects.

Course Director: Dr. Emre Aksay

Physiology Biophysics and Systems Biology Student Work-in-Progress, Quarters I-IV (required):
In this required course, each PBSB student in the third year and beyond will give a presentation on their ongoing thesis work to their student colleagues and small group of faculty. The purpose of this presentation is for the students 1) to receive critical feedback on their results and plans, and 2) to share with the PBSB community important results and techniques that could benefit the others' work. A rotating group of 4 faculty will be participating for each session. Each session consists of 2 presentations of 30 minutes each (including 10 minutes for questions and discussion).

Course Director: Dr. Emre Aksay

Critical Dissection of Scientific Data, Quarters III-IV (Required):
This course is required for all 1st and 2nd year PBSB graduate students but is open to all WGSMS students. It is designed to train students in scientific presentation and critique. The structure is a formalized, in depth "journal club". Each 1st year student will choose a paper from a list provided by the Course Directors. Each 2nd year student will select a paper in their thesis field, subject to approval of the Course Directors. Each session will consist of a student formally presenting their selected paper to the class, which is expected to serve as a critical audience. The presentation should consist of an introduction of the relevant background literature, an objective presentation of the study, a subjective analysis/critique of the work, and suggestions for future work. Presentations by 2nd year students will be scheduled first, giving the 1st year students the opportunity to learn from their more senior colleagues. Grading will be based on presentation quality and contribution to constructive feedback.

Course Directors: Dr. Christopher Mason, Carl Blobel, Laura Donlin, Dr. Ed Reznik and Dr. Robert Schwartz,

Principles of Medical Imaging, Quarters I-II:
This survey course will cover the basic physical, biochemical, computational, and engineering principles underlying current medical imaging techniques including: magnetic resonance imaging, positron emission tomography, radionuclide production and radiochemistry, optical imaging, X-ray computed tomography, and ultrasound. The goal of the course will be to provide students with a broad knowledge of the concepts and implementation strategies of various imaging methods relevant in current research and clinical practice. Practical applications will be used to illustrate the main themes of the course. Tours of the Biomedical Imaging Core Facility and other imaging laboratories will augment the formal course material. At the end of the course students will be able to identify appropriate imaging strategies for clinical research and have a working knowledge of the major techniques available to the investigator.

Course Director: Dr. Yi Wang
Prerequisite: Calculus based physics is required.
NOTE: *This course is video conferenced from Ithaca most of the time.*

Computational Statistics and Machine Learning in Biology, Quarter III-IV:
This course will provide a rigorous treatment of computational statistics and machine learning methods now regularly used to analyze big biological data types. Inference and learning methods covered will include the basics of frequentist statistics, Bayesian statistics, and machine learning, where specific techniques covered will include generalized linear models, support vector machines, basics of neural networks and deep learning. While the course will be focused on methods, applications making use of specific big biological data types will be covered, with a special but nonexclusive focus on the analysis of genomic data. An understanding of method limitations will be prioritized, as well as how to critically assess when a desired conclusion can be justified. Methods discussed in class will be implemented in the computer lab, where previous exposure and some familiarity with R and / or Python will be assumed.

Course Director: Dr. Jason Mezey
NOTE: *Taught on both the Ithaca and Weill campus by video-conference*

Mathematical Structures in Neuroscience, Quarters III-IV:
The course will present a range of mathematical approaches that play a central role in systems neuroscience, both for model-driven and data-driven investigations. We will take an approach beginning with the mathematical fundamentals, and emphasize concepts rather than theorems.

Typical topics include time series analysis, linear and nonlinear systems theory, point processes, dimension reduction techniques, and information theory; these can be tuned to the needs of the group. For topics, notes, and homework problems from previous years, please see:

- http://www-users.med.cornell.edu/~jdvicto/mathcourse1011.html
- http://www-users.med.cornell.edu/~jdvicto/mathcourse0809.html

Course Director: Dr. Jonathan Victor
Prerequisite: Familiarity with matrices and basic linear algebra, complex numbers, and calculus, preferably multivariate.
NOTE: Offered alternating years.

Foundations of Data Science, Quarters III-IV:
This course will cover the foundations of modern data science from a probabilistic modeling perspective. We will cover the basics of statistical modeling: likelihoods, priors, and posteriors. We will compare and contrast different ways to fit these models, focusing on the trade-offs made between computation and objectives like uncertainty quantification or accuracy.

Course Director: Dr. Wesley Tansey

Single Molecule Sequencing, Quarter IV:
Sequencing-based research has become the dominant investigative practice within the biological sciences. Single-molecule sequencing: training, methods, and applications, responds to this development by providing a hands-on and in-depth introduction to sequencing for first year PhD and MD-PhD students, from Sanger to third-generation technologies. Utilizing an alternating lecture-lab schedule, students are introduced to fundamental basic principles of DNA & RNA science, progressing to cutting-edge library preparation and sequencing analysis techniques with Illumina and Nanopore technologies. Students will have the opportunity to perform direct-RNA sequencing samples on research samples, and experience first-hand the ethical implications of this data. Relevant concepts in

biology and computer science will be addressed.

Course Director: Christopher Mason

Electives of Interest in Related Programs:

- Analysis of Next-Generation Sequencing Data
- Applied Machine Learning
- Data Structures and Algorithms for Computational Biology
- Dynamical Models in Biology
- Functional Interpretation of High-Throughput Data
- Deep Learning in Biology and Medicine

Laboratory Rotations

Laboratory rotations are an important part of the graduate program at Cornell. Rotations give students the opportunity to substantively explore different labs they might want to join for thesis work and begin to define the research project(s) they might pursue. Rotations also allow the faculty to assess the interests and aptitude of the students.

Each student is required to rotate through three PBSB laboratories; each rotation lasts approximately 12 weeks. A fourth rotation is possible but requires approval from the Program Director. Extra rotations are only permitted when 1) there is no viable option among the first three rotations, or 2) it is needed to establish a collaboration with a mentor chosen from the first three.

During the rotation, students will be able to carefully evaluate the mentorship environment, a critical element to success in graduate studies. To ensure optimal mentorship for each PBSB student, except in circumstances approved by the Program Chair, any given PBSB laboratory may only take in one new PBSB thesis student from each class and may only host three PBSB thesis students at a given time. To encourage and foster a highly collaborative environment within the PBSB and WCM at large, exceptions are automatically permitted for co-mentored PBSB students: labs additionally may take in one co-mentored PBSB thesis student per year, and co-mentored students are registered as half a count when considering the lab's PBSB thesis student total.

To facilitate and optimize the rotation experience for both the student and faculty, it is important that they meet prior to the start of the rotations to discuss expectations, goals, requirements, and laboratory guidelines. It is expected that once a commitment to a rotation is made by both parties, that each party will strive to meet agreed upon expectations and goals.

Laboratory rotations are graded on a Pass/Fail basis.

Grading

Individual course syllabi should be consulted for the level of performance required for successful completion of that course. Successful completion of a course includes but is not limited to course work, maintaining professionalism, attendance, punctuality and other criteria as stated in each course syllabus.

For most courses, the grade of Honors, High Pass, Low Pass or Fail will be recorded on the student's final transcript. The grade system of a Satisfactory(SX) or Unsatisfactory(UX) is used for specific courses as identified by the course syllabus. Some non-PBSB elective courses use letter grades (A-F).

Unless otherwise stated, the grading system is as follows:

Grade	Criteria
Honors (H)	Generally greater than Mean +2 standard deviation
High Pass (HP)	Generally between Mean +2/-1 standard deviation
Low Pass (LP)	Generally less than Mean -1 standard deviation
Fail (F)	Generally less than Mean -2 standard deviations
Incomplete (I)	See below
Withdrawal (W)	Student withdraws from the course
Audit (AU)	Student attends classes but does not do assignments and is not graded

The interim grade "Incomplete" may be assigned to any course in which the performance is otherwise satisfactory but the student has not completed a component or activity that the course director has agreed that the student may complete at a subsequent agreed upon date. If the student does not complete the activities by the specified date, the grade of "Incomplete" will become a "Fail" and the policies for failed courses will apply.

In the event that a student does not satisfactorily complete the requirements of a course, that student will receive a grade of Unsatisfactory(UX).

Students may seek clarification about a grade for an examination, performance based assessment, or a final course grade that does not seem consistent with the student's view of his or her performance. If the student believes that there is a credible basis to assert that the grade received does not reflect their objective course performance, the student should seek the guidance of the course director. The student may appeal the decision to the Associate Dean of Academic Affairs.

Unsatisfactory Academic Performance

Academic progress is reviewed after the end of every semester. A student must pass all courses and laboratory rotations to be in good standing. If a student receives a "Low Pass" grade (or a C- in a letter-graded course) or below, the student will be issued a warning. If a student receives two "Low Pass" grades (or C-'s) or lower (in the same or different semesters), they will be placed on academic probation. If a student Fails any course they will be placed on academic probation.

Course Materials

Most course materials are available on the Learning Management System website (currently Canvas, available at https://login.weill.cornell.edu/ds/canvas/), although other platforms may be used to communicate with students. Materials can be downloaded for viewing and annotation for personal use only. Hardcopies of some student handouts may be provided in class at the discretion of the lecturer.

Communications to Students

To keep apprised of schedule changes, room assignments, exam information, and other course announcements, is very important that students check the Canvas course website and their Cornell e-mail daily. Students may also be contacted by telephone as necessary, particularly for late changes to courses or weather-related emergencies.

Assessment

In the PBSB Program's continuing efforts to maintain quality education, our program utilizes many assessment tools. Course/Instructor Evaluations: Students are required to complete an online evaluation of the course and instructors at the conclusion of each course.

Attendance Policies

Students are expected to attend all classes and be present in the laboratory during typical working hours. Any absences from class need be arranged in advance and approved by the course instructor or course director. Likewise, absences from the laboratory need to be arranged in advance and approved by the lab's Principal Investigator, including for summer vacation. Students who have yet to join a thesis lab need to also obtain approval for their planned absence from the Program Director. These policies also apply to all workdays not deemed official holidays by the Weill Graduate School.

It is understood that there may be sudden health concerns or emergencies that necessitate missing time in class or the lab without first obtaining approval. In such cases, students should communicate within 24 hours of the beginning of the absence with the appropriate party or parties (see above) regarding the nature of the absence for retro-active approval.

Students must handle absences from class and laboratory in a manner that reflects a high standard of professional responsibility. Any absence considered unexcused may be reported to the Associate Dean for Academic Affairs for disciplinary measures.

Student Guidance

The graduate school experience is only as good as the guidance offered. The PBSB faculty take advising very seriously and dedicate a great deal of time to the mentoring effort. The guidance students receive happens in many settings, from informal discussions at the laboratory bench to formal evaluations during periodic reviews.

During the first year, a Program Director serves as the primary mentor. Students will meet with a Program Director a minimum of two times to discuss progress in courses, research rotations, and thesis decisions. During the first year, students also obtain guidance and direction from three rotation faculty. At the end of the first year, students identify their thesis advisor, who then becomes the primary mentor.

During the second year, students form their Special Committee, which consists of the thesis advisor and at least two other faculty of the Weill Cornell Graduate School of Medical Sciences (WCGS). This committee is the primary guidance body that monitors student progress until graduation.

In advance of the ACE and Thesis examination, additional faculty are added to the student's Special Committee to form an examination body that both help prepare the student as well as test them.

Critique and evaluation of research progress by the PBSB Faculty is offered when, beginning in the 2nd year, students present at the Program retreat and du Vigneaud graduate school symposium.

Student progress is formally tracked by the PBSB program Academic Standards Committee, which is composed of the Program Directors and two Monitors. The committee monitors student progress and works to identify appropriate routes for guidance and remediation of students as needed.

When a student is having academic difficulty with a course(s) (or their overall academic performance), it is the responsibility of the student to seek advice from the Program Director. Early intervention with academic difficulties may provide a wider range of solutions and is in the student's best interest.

Academic Counseling and Tutoring

The PBSB Program provides academic counseling and/or tutoring or supplemental support to students who have academic difficulty. Some students need to enhance their study skills in general; others benefit from one-on-one tutoring sessions on specific course material and others need targeted knowledge enhancement. These services may be a part of the individualized plan outlined by the Academic Advisor for students with unsatisfactory performance. Alternatively, students may request these services by contacting their Program Director or the Associate Dean of Academic Affairs.

Remediation

Remedial work, re-examination or repetition of a course are not to be regarded as a right for a student who has an unsatisfactory record in a course but are options which may be offered to individual students, in the judgment of the PBSB Program faculty, based on the student's academic record and consideration of circumstances related to the completion of the course.

Appeals Process for Academic and Conduct Decisions

A student can appeal a decision of the Committee on Promotion and Graduation. During the appeals process, the student's status as determined by the Committee on Promotion and Graduation will remain in effect until finalization of the appeals process. This appeal must be made in writing by the student within ten (10) working days of the Program Director's written notification to the student of the decision of the Committee on Promotion and Graduation. The Program Director will then appoint an ad hoc committee to consider the appeal ("Appeal Committee") whose membership will not include any member of the Committee on Promotion and Graduation. The members of this committee will be made up of faculty from the Weill Cornell Medical College and Graduate School of Medical Sciences, including at least one core PBSB Program faculty member. The student shall receive at least seven (7) days advance written notice of the date, time and place of the appeal meeting with the Appeal Committee. Prior to the meeting, the student may submit a written response to the Appeal Committee regarding his/her performance. The student shall have access to his/her educational file and may appear before the Appeal Committee with an advisor or legal counsel if he/she so wishes. Any such advisor or counsel shall be an observer of the proceeding but may not participate in or speak at the Committee meeting. After the Appeal Committee has rendered a final decision, it will notify the Program Director who will notify the

Program Chair and Associate Dean of the Graduate School of Medical Sciences. Prompt written notification to the student by the Program Director will follow.

Communications

It is the student's responsibility to keep contact information current in the **Graduate School** files. This includes: name changes, address, all telephone numbers, emergency contacts, etc.

Students will be issued a Weill Cornell e-mail account. This is the only acceptable format for exchange of electronic information between the student and the Program.

Publications

When you are listed as an author on a publication or abstract, please be sure to acknowledge your WCGS Program.

For example: "<student name> is a member of the Physiology, Biophysics and Systems Biology (PBSB) Graduate Program, Weill Cornell Graduate School, New York, NY."

Of course, acknowledging membership in your mentor's department/center/institute is also appropriate. Also, if you have received T32, F31, NSF, or other individual funding that should also be acknowledged.

LIBRARIES

Samuel J. Wood Medical Library

The Samuel J. Wood Medical Library (located just inside the 1300 York Avenue lobby) is the principal information resource of the Weill Cornell Medical College and Graduate School of Medical Sciences of Cornell University and the NewYork-Presbyterian Hospital/Weill Cornell Medical Center.

Composed of the Samuel J. Wood Library and the C.V. Starr Biomedical Information Center, the library is committed to ensuring effective retrieval and use of information to create new knowledge and improve health.

Basics and SMARTDesk

SMARTDesk – Staff can help you with the following:

- Register for Library borrowing privileges- please bring your I.D. card
- Check out a wireless laptop
- Learn how to use ITS-provided software like Microsoft Office
- Get your mobile device tagged
- **Appointments are required** and can be booked online (see https://its.weill.cornell.edu/get-help for details).

SMARTDesk is open during the following hours: (check **https://library.weill.cornell.edu/** for details and hours of operation)

- Monday - Friday 9 am - 5 pm

Helpdesk – **Open Monday-Sunday 24/7. Phone number:** (212) 746-4878
Helpdesk is a self-service web portal that allows you to submit any issue or request online. Access to myHelpdesk requires a valid WCM, NYP, or WCM-Q CWID and password.

Interlibrary Loan and TripSaver – If we do not own an item, we will get that item free of charge for you from another library. Requests usually arrive within a week. With our TripSaver service, we will pull items in our collection and scan them for $5.

Tri-Cat Catalog – The shared online catalog of WCM's Samuel J. Wood Medical Library, Rockefeller University, and Memorial Sloan Kettering Cancer Center. It lists not only the print holdings but also has direct links to electronic books and journals. You can limit your searching to "Weill Cornell Medical College (E-Resources only)."

Regular Library Hours: (You must present a valid ID when entering the library.)

- Monday - Thursday: 8 am - 12 am
- Friday: 8 am - 8 pm
- Saturday: 10 am - 8 pm
- Sunday: 12 pm - 12 am

See website (https://library.weill.cornell.edu/) for holiday schedules, summer, and exam hours.

The 24/7 Study Room is only available to WCMC medical, graduate and PA students, clinical fellows, and NYP residents.

Computers and Wireless

1. *Desktops* – All computers are fully networked and have Microsoft Word, PowerPoint, and Excel. Computers located downstairs in the Computer Room also have EndNote & SAS.
2. *Wireless networks* – ITS tagged laptops use WMC Secure. For guest access, use WMC Guest Services.
3. *Laptop checkout* – Check out a wireless laptop from the Circulation Desk for use while in the Library.

Library Etiquette

Cell phone conversations limited to the Commons (main room just inside Library entrance).

Food and drinks limited to the Commons. Drinks in spill-proof mugs are allowed throughout the Library. You can purchase a Library spill-proof mug at the Cornell Store or SmartDesk.

Services

Classes – Free classes are offered each semester, such as Unleash the Power of Google and EndNote Basics.

Request a consultation – Our Education & Outreach department provides customized orientations, library tours, help with literature searching and clinical & community outreach services.

SCISSORS (Scholarly Communication Information Services in Support of Research) – A suite of services for researchers: get help with formulating questions, setting up search alerts, literature reviews, planning for meeting presentations or grant proposals, complying with NIH Public Access Policy, manuscript preparation, and journal selection.

Electronic Resources

The Library offers access to a wide variety of databases for your research and clinical information needs. Connect to PubMed and other frequently used tools under the Top Databases label on the left side of the Library's website. Access other databases through E-Resources. Most databases, unless labeled "Free," must be accessed from within WCMC or via EZproxy (see Remote Access section below).

E-books
Over 12,000 titles, including the *Current Protocols* series, *Current Medical Diagnosis and Treatment* and *Harrison's*. Search for e-books by limiting to e-books in the search toolbar.

E-Journals
Over 9,500 titles. Link to these journals from Tri-Cat or the e-Journals link from our website.

Popular databases
PubMed – premier clinical literature database; links to a host of biomolecular resources from NCBI.

Remote Library Access

EZproxy is a service that allows Weill Cornell's current faculty, students, staff and NewYork-Presbyterian/Weill Cornell's residents and fellows to remotely access the library's subscribed (paid) electronic content such as e-journals, e-books, and other e-resources while off-campus.
For more information, visit
https://library.weill.cornell.edu/about-us/remote-access-to-library-resources

GET IT button

Click on the GET IT button in many of our databases to connect to full text, see our print holdings, or request an interlibrary-loan.

Bibliographic management tools

EndNote Web and RefWorks, both web-based products, are free of charge for all members of the WCMC community; users must be inside the network to activate their account. EndNote is a client-based application and must be purchased by the individual user.

Neighboring Libraries

As registered users of Weill Cornell Medical Library, you also have courtesy privileges at the Hospital for Special Surgery (HSS), Memorial Sloan Kettering Cancer Center (MSKCC), and Rockefeller University (RU) libraries. Information about hours and access is available at the Weill Cornell Medical College Library Circulation Desk. You can also call or visit each library for further information.

Hospital for Special Surgery Library
541 East 70th St 8th Floor Main Building
http://www.hss.edu/Professionals/Academic-Training/The-Kim-Barrett-Memorial-Library/
Information: 212- 606-1210 or via email at medlib@hss.edu

Memorial Sloan Kettering Cancer Center Library
430 East 67th St
http://library.mskcc.org
Information: 212-639-7443

Rockefeller University Library
1230 York Avenue
Welch Hall, 1st floor
Information: 212-327-8904

STUDENT LIFE

Life in New York City

New York is one of the world's great cities. The Upper East Side of Manhattan is a comfortable, convenient and generally safe residential neighborhood. Students have easy access to an unparalleled range of cultural and recreational activities including art, music, theater, cinema, sports, and dining. Most of these activities are within walking distance or easily reached by public transportation. As a result, few students require an automobile. All students are to assume full responsibility for housing, meals, telephone service, transportation, parking facilities, books, equipment, and other living expenses.

Housing Policy

For a complete list of the housing guidelines please visit the Weill Cornell Housing Office website: https://housing.weill.cornell.edu/

1. All Program Housing applications for doctoral students must be submitted to the Housing Office.
2. The priority list for students is determined by the Housing office.
3. After any initial housing placements have been completed, applications will be prioritized based upon the order in which they are received.
4. Any student initially refusing housing will be given lowest priority should they request housing at a later time, irrespective of their start date, anticipated date of completion, or any other factor.
5. These policies apply to both single and family housing.
6. Once accepted into any of Weill Cornell's housing facilities the Housing Office of Weill Cornell determines the regulations for occupants.

Weill Cornell Medicine Directory

Students may search for faculty and staff contact information via the Weill Cornell Medicine directory, which is accessible online at https://directory.weill.cornell.edu/. If any difficulty is encountered in locating this information, students should contact the WCGS or PBSB Program for assistance.

Office of Access, Belonging and Student Success

The WCGS Office of Access, Belonging and Student Success was established in 2017 to maintain student retention and provide support to students from underrepresented groups. The goals of the office are to: (1) promote the recruitment and retention of a talented and diverse medical and graduate student body, particularly from populations underrepresented in science and medicine; (2) ensure that all students inclusive of gender, sexual, racial, ethnic, cultural, political, and religious identity and background, have a genuine sense of belonging in the WCM community; (3) help students achieve their highest potential for scholarly excellence and career advancement; and (4) engage and support community service and outreach both in medicine and science to underserved communities. WCGS and the Office of Access, Belonging and Student Success work to ensure that students from underrepresented groups feel welcome and comfortable on campus.

For support students can contact:

Yazmin Carrasco, PhD
Assistant Dean, Access, Belonging and Student Success
Weill Cornell Graduate School
ypc4001@med.cornell.edu

Roxana Mesías, PhD
Assistant Director of Access, Belonging and Student Success
Weill Cornell Graduate School
rem4008@med.cornell.edu

ADMINISTRATIVE POLICIES

Student Identification Cards

During orientation, the PBSB Program Office will facilitate the issuing of identification (ID) cards for the Weill Cornell Medicine campus. The Security Department for Weill Cornell Medicine is located opposite the Starr Building entrance. Student must have this ID Card with them at all times.

Lost cards must immediately be reported to the Security Department on the main campus at (212) 746-0911.

Use of Personal Laptop Computers

Should a student also wish to use their own laptop computer for any purpose requiring regular access to the Weill Cornell Medicine network, the device must be compliant with published minimum requirements and must be "tagged" by the Office of Information Technologies and Services (ITS), which will also perform mandatory encryption on the laptop. These steps will permit students to securely and wirelessly connect to the Weill Cornell Medical College (WCMC) Network.

For policies regarding supported computers and other devices, visit the ITS website at: https://its.weill.cornell.edu/policies/1110-device-minimum-security-requirements

For additional information on networking policies for computers, please visit here: https://its.weill.cornell.edu/policies/network-policy

Once enrolled, students are eligible for software discounts including Microsoft products (such as Microsoft Office) at: https://its.weill.cornell.edu/guides/how-to-download-personal-software-from-onthehub

Good financial standing

Any individual who owes money to the University and/or has not returned any of the following items: IDs, program equipment, library books, education center access card; will not be allowed to register or re-register in the University, have his or her academic credits certified, be granted a leave of absence, apply for or retain student housing, receive their certificate of completion or degree.

Four weeks prior to graduation:

1) All outstanding fees owed to the University must be paid by cashier's check.
2) All requests for reimbursement must be submitted.

All students must make appropriate arrangements for settlement of all financial obligations to Weill Cornell.

Withdrawal Policy

Any student who chooses to withdraw from the PBSB Program must meet with the Associate Dean for Academic Affairs and submit a program withdrawal form to the Program Director and to the Associate Dean for Academic Affairs (https://gradschool.weill.cornell.edu/student-experience/student-forms).

Holiday/Vacation Time off

The following holidays are recognized by Weill Cornell Medicine: New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Thanksgiving Holiday (Thanksgiving Day and the following day), and Christmas Day.

Jury Duty

New York State has rigorous regulations regarding service on juries and does not allow students to be excused from jury duty.

A student who receives a jury duty notice from New York County and cannot make the dates assigned because he or she is scheduled for a class, rotations, or elective, should call the number provided on the jury notice, explain that you are a student, and offer another two-week period during which you would be able to serve. The student may be asked to go to the court clerk to discuss your situation in person. There is no guarantee that students will be allowed to postpone jury service, but one's willingness to make oneself available during the next break or vacation may aid the request. Students who repeatedly postpone jury service, eventually will be required to serve, regardless of their academic schedule.

Religious Observances

Weill Cornell recognizes that the members of its community, including students, observe a variety of religious faiths and practices. Few of the various religious days of observance are part of Weill Cornell's holiday calendar. However, the PBSB Program recognizes and respects the religious beliefs and practices of its students and seeks to accommodate them reasonably within the requirements of the academic schedule. As a result, Weill Cornell will not penalize a student who must be absent from a class, examination, study or work requirement for religious observance. Students who anticipate being absent because of religious observance must request permission for the absence from the Program or their Principal Investigator. These requests should be made as early as possible in advance of an anticipated absence of a day, days or portion of a day. In all cases, students should make arrangements to make up all missed days and assignments.

Whenever feasible, PBSB Program faculty will avoid scheduling examinations and assignment deadlines on religious holidays. A student absent from a class because of religious observance shall not be penalized for any class, examination, or assignment deadline missed on that day or days.

In the event an examination or assignment deadline is scheduled on a day of religious observance, a student unable to attend class shall be permitted the opportunity to make up an examination or to extend any assignment deadline missed.

No adverse or prejudicial effect shall result to any student who takes advantage of the provisions of this policy. If a student believes that they are not being granted the full benefits of the policy, the student may confer with the Program Director. In the event a student continues to believe that they are not receiving the benefits of this policy, the student may file an appeal under the appeal provision of the grievance policy (https://gradschool.weill.cornell.edu/sites/default/files/wcgsms_grievance_procedure_3-11-2020_final.pdf).

Finals Week – in the event that a religious holiday falls during finals week, students are advised to speak with the Course Director as soon as possible to make alternative arrangements. All final examinations must be completed prior to the start of subsequent semester.

Leave Of Absence Policy

A Leave of Absence (LOA) is an approved specified period of time in which a student is excused from rotations, didactics, or thesis research, and may return without reapplication to the PBSB Program. A student may request and be granted a LOA from the Associate Dean of Academic Affairs. The LOA form, must be approved by the program and Associate Dean prior to granting the LOA. The form can be found at https://gradschool.weill.cornell.edu/student-experience/student-forms.

Students who do not return to full-time status at the end of an approved leave, and who have not applied for and been approved for extension of their leave of absence status, will be considered to have withdrawn from the PBSB Program.

Medical Leave of Absence

A medical leave of absence is granted by the Program Director upon the recommendation of the student's treating physician and/or an administrative physician consultant appointed by the PBSB Program. The purpose of the medical leave is to enable students to seek treatment for a health-related condition that interferes with the student's ability to undertake the curriculum or that poses a threat to the health and safety of the student or others. The term of the leave is for a period of time based upon the recommendation of the treating physician and/or administrative physician consultant. The leave may be extended based upon the recommendation of the treating physician and/or an administrative physician consultant. To apply for a medical leave, a student must meet with the Associate Dean who can provide the student with the name of an administrative physician consultant as needed.

Personal Leave of Absence

The Associate Dean of Academic Affairs can grant a personal leave of absence. A personal leave enables a student to take time off, in extenuating circumstances, to address issues of a personal nature, including those related to the health and well-being of a family member or partner.

Return to Studies from Leaves of Absence

At the time a leave of absence is granted, the Associate Dean of Academic Affairs determines the length of the leave and the conditions, if any, for a return from the leave of absence. All conditions for return must be complied with. Extensions of a leave of absence are not automatic, even if within the time frame permitted for the category of leave.

A student who determines that they will not be returning at the time scheduled for a leave to end should consult with the Associate Dean of Academic Affairs as early as possible before the scheduled return date. This will enable a student to learn whether or not an extension of the leave of absence can be granted, or if the student needs to make other arrangements.

If a student does not return from a leave at the conclusion of the set time period, and has not received an extension in writing, the individual will be deemed to have withdrawn from the Program. Similarly, if a student has not satisfied the criteria to return, if any, and has not received

an extension in writing, they will be deemed to have withdrawn. No further action will be necessary to finalize the withdrawal.

Student Records

It is the policy of the Medical College to protect information contained in student records from unauthorized disclosure and to comply with the provisions of the Family Education Rights and Privacy Act of 1974 (FERPA) and regulations thereunder. The policy extends to students the right to inspect and review their education records and provides students the right to request that their record be amended if the student believes that the record contains inaccurate or misleading information or if it violates the student's privacy rights. If a student believes the Medical College has failed to comply with the requirements of FERPA, a student may file a complaint with the United States Department of Education. The full Cornell University Policy on Access to Student Information can be found at:
https://policy.cornell.edu/sites/default/files/vol4_5.pdf .

Releasing Education Records

Education records may be released in person or in writing to an inquirer, and only with the written and signed consent of the student, except when FERPA authorizes disclosure without consent as indicated below.

1. Directory Information

The following information about each student is considered public directory information and may be released or disclosed without a student's consent. Students may choose to prevent the release of their directory information by contacting the Office of the Registrar in person at 1300 York Avenue room C-114, via phone at (646) 962-3470, or via email at registrar@med.cornell.edu.

- name
- local and cell phone numbers
- email address
- photograph
- major field of study and college attended
- academic level
- dates of attendance
- enrollment status
- university assistantship status (e.g. teaching assistantship, graduate research assistantship, research assistantship, graduate assistantship)
- participation in officially recognized activities and sports
- any degrees earned and awards/fellowships/grants received
- date of birth and local address (for the sole purpose of federal census data responses).

Weill Cornell Medicine, including Weill Cornell Medical College, Weill Cornell Graduate School of Medical Sciences, and the MSHS Physician Assistant Program, reserves the right to release such directory information as evaluated on a case-by-case basis.

2. Personally Identifiable Information

The following information is considered personal information of each student and will not be released or disclosed except with a student's signed, written consent, or as provided herein:

Grades and academic standing
Evaluations
Financial aid information
Undergraduate record and scores on standardized tests (MCAT, GRE, others)
Social Security number

3. **Personally Identifiable information may be disclosed without consent:**
   - to students who request an opportunity to inspect their education records;
   - to members of the faculty and other Weill Cornell officials with legitimate need to know;
   - to institutions at which a student seeks to enroll;
   - to specific federal and state officials, as provided by law;
   - in connection with a student's application for, or receipt of financial aid;
   - to organizations conducting studies for, or on behalf of, educational institutions or agencies, for the purpose of developing, validating, or administering predictive tests, administering student aid programs and improving instruction, if such studies are conducted in a manner which will not permit personal identification of students or their parents by persons outside the organization doing the study and such information will be destroyed when no longer needed for the purpose for which it is conducted;
   - to courts, government agencies, and others in compliance with a judicial order or lawfully issued subpoena, provided than an effort is made to inform the student by telephone or mail before complying with the subpoena or order;
   - to accrediting organizations in order to carry out their accrediting function; and
   - to the parents of a dependent student as defined in the Internal Revenue Code.
   - to appropriate parties in a health or safety emergency if knowledge of this information is necessary to protect the health and safety of the student or other individuals.
4. Anyone who releases education records must maintain the name of the party making the request, any additional party to whom it may be re-released, and the legitimate interest the party had in requesting or obtaining the information. A student may inspect this record of requests.

Permitting Students to Inspect and Review Education Records

A student may inspect and review his or her education records after making a written request. The Medical College may refuse to permit a student to inspect the following education records:

- Records of instructional, supervisory, and administrative personnel which are the in the sole possession of the maker and are not accessible or revealed to any other person except a temporary substitute.
- Financial records of a student's parents
- Medical and counseling records available only to those participating in the student's treatment.
- Letters of recommendation placed in the student's education record prior to January 1, 1975 or with respect to which a student has waived right of access.
- Education Records connected with an application to attend the Medical School if that application was denied or the applicant never attended the Medical School.

Such privileged information will not be disclosed to students, except that with respect to medical records, a student may have a physician or other appropriate professional review the record.

Faculty and staff members are deemed to have a legitimate need for privileged information contained in a student's education record when such information is required: (1) for purposes of evaluations or recommendations; (2) for purposes of any internal or external action or proceedings affecting the student or the institution with respect to the student, including proceedings to amend or correct an education record. Custodians of the records and members of their immediate staffs have right of access at all times.

Faculty and staff members are defined as all members of the Medical College Faculty, the executive and administrative officers of the University and the Medical College, including from the Office of University Counsel, and members of their professional staffs, and outside professionals working on a matter with any of the named categories of Medical College employees.

Process for inspecting records and amendment of records

A request by a student to review and inspect the records and information relating directly to them shall be in writing, addressed to the custodian of records, signed by the student and thereafter retained in the record folder. Requests for inspection will be honored as soon as practicable, but in no event later than forty-five (45) days from the date of receipt of the request. A student may inspect records only in the presence of a designated administrator. Students may obtain copies of material in their education record, other than the transcript and permanent record card, by paying a per page fee. All such copies shall bear a conspicuous legend that the copy is not an official document. Transcripts and record cards may not be copied because of the possibility of misuse.

A student may request that his or her record be amended on the grounds that the information contained therein is inaccurate, misleading, inappropriate, or in violation of his or her right of privacy. Such custodian must decide whether to amend the record as required within a reasonable amount of time. If the custodian or maker of the record refuses to make the requested change, then, such custodian shall inform the student of the decision and of the student’s right to a hearing. Upon request of the student, the Program Director will promptly appoint a member of the faculty or administrative staff not having a direct interest in the matter to investigate the matter and hold a hearing. Any such hearing will be held upon five (5) days written notice to the student and those persons called to testify; and, will afford the student a full opportunity to present evidence relevant to the issues. A student, at his or her own expense, may be accompanied or represented by an attorney or an advisor.

After conclusion of the investigation and hearing, the faculty or staff member conducting the same shall submit a written report and recommendation to the Program Director, based solely on the evidence presented. The Program Director will thereafter notify the student in writing as to whether or not the record will be amended. If the record is not to be amended, the student shall have the opportunity to place in the record a written statement commenting on the information, which was sought to be corrected, and/or setting forth reasons for disagreeing with the decision not to correct the file. If the record is to be amended, the Program Director shall instruct that the record be amended accordingly and inform the student of the amendment in writing.

Custody and Location of Records

Student education records are maintained in the following offices and requests for inspection should be addressed to those offices:

General records - including disciplinary records, are maintained in the office of the Associate Dean of Academic Affairs or with the Registrar.

Departmental records - maintained in the Office of the Associate Dean (Weill Cornell Graduate School of Medical Science) or the Program Director.

Financial records - maintained in the Office of Student Accounting or the Program.

Request For Transcripts

Any student or graduate may request (in writing) that a transcript of his/her record be mailed to educational or other recognized institutions as credentials in support of an application for a position or promotion. All transcripts are marked "confidential" and carry the instruction that they are not to be turned over to the candidate. This rule exists to avoid possible loss and fraudulent use of an official document of Weill Cornell. Students or alumni may send their requests to Weill Cornell Graduate School of Medical Sciences, Office of the Registrar at: https://studentservices.weill.cornell.edu/credentialing-information.

STUDENT HEALTH

The Medical College is dedicated to providing the finest medical care to its students. The following summary highlights the Student Health Service (SHS) and the Student Insurance Plan (SHP).

All students must have comprehensive health care coverage and participate in SHS and SHP. **Fees for SHS and the SHP are fully covered for students in the doctoral programs.** The Medical College has designed a package, which should meet the needs of most students and their dependents. The program consists of 2 integrated components: the SHS and SHP underwritten by Cornell University and administered through Aetna Student Health. Enrollment and waiver services are managed through Gallagher Student Health & Special Risk. In brief, students who use the coordinated program will have their choice of participating physicians (many faculty members) with modest co-payments. In this program, students also have the option to go outside the Aetna network, but will be required to meet a deductible and higher out-of-pocket costs. Optional dental and vision care coverage is available through separate programs at additional cost.

If a student needs to purchase additional coverage for a spouse, the student should refer to the dependent health insurance rates section here: https://studentservices.weill.cornell.edu/student-accounting/insurance-information/health-plan-information

An enrollment waiver must be completed annually (deadline of June 30th) or within the first 30 days of your program start date.

Student Health Service

Dependents under the age of eighteen are not seen in the student health center. With the Medical College's plan for families, dependents under the age of eighteen are fully covered for all care if they are seen by participating pediatricians.

The SHS Medical Director is the primary care provider for all students and is not involved in the academic evaluation of students. In conjunction with the registered nurse, all non-emergency medical problems, occupational health and preventive care are managed at SHS. After hours and weekends there is limited telephone coverage available for emergencies. The SHS Medical Director determines the need and appropriateness of referrals to specialists/subspecialists and should be consulted for referrals.

Location:	230 E 69th St (between 2nd and 3rd Aves) New York, NY 10021
Telephone:	(646) 962-6942
Hours:	Currently: 8:00 am- 12 noon and 1:00 - 4:00 pm, Monday - Friday, by appointment
After Hours:	Urgent/Emergency Care - Physician-on-Call Service To reach the doctor on call after hours, dial the answering service at (646) 962-6942. If urgent medical care is needed, the physician will direct the student to NewYork-Presbyterian Hospital.

Services Available at SHS

Most services rendered within the confines of Weill Cornell Medicine Student Health Services are done at no additional charge beyond the annual SHS Fee. Services performed outside of SHS, including consultations, labs and imaging will be billed to insurance.

The Director of the Student Health Center is a family medicine trained physician with broad expertise, and together with his nurse provides care in many areas including:

- evaluation and management of common conditions in primary care, “sick visits”.
- chronic disease management
- contraceptive counseling and management
- cervical cancer screening
- routine physicals and other preventive services
- primary care mental health screening and treatment
- sports medicine care
- occupational health services (management of body fluid exposures, needle stick injuries)
- pre-travel consultations
- immunizations
- allergy shots (in consultation with an allergist)
- ancillary services, including phlebotomy; and a limited number of point-of-care testing, such as urine dipsticks and rapid strep throat tests; completion of elective rotation requests and other forms
- referrals to other specialists, including mental health services, laboratories and imaging centers as needed

Student Mental Health Support

Weill Cornell Medicine's Student Mental Health (SMH) Program offers students access to free, confidential mental health services by appointment. It is staffed by psychologists and psychiatrists from diverse cultural, national, and clinical backgrounds who are skilled in treating a wide range of issues. Appointments are scheduled promptly and in consideration of students' scheduling needs and preferences.

The Student Mental Health service offers a range of services from supportive psychotherapy focused on identifying and enhancing coping skills to consultation and assessment of all psychiatric conditions and treatments including psychotherapy, psychopharmacotherapy, and neuropsychological assessment. Family and marital counseling is also available.

This is not an emergency service and students should expect communication for an appointment during regular business hours Monday-Friday.

- A student must self-refer for the Student Mental Health program and request an appointment.
- Care is confidential and is not part of the student educational record.
- All visits with clinicians are covered under the Student Health Fee - there is no separate charge unless lab tests or image studies are ordered. This is analogous to the care students receive at the Student Health office.
- Clinicians have no student evaluation role within the Graduate School.

How to Access Student Mental Health Services

To request an appointment, please send an email including your name and contact information to studentmentalhealth@med.cornell.edu. Students do not need to disclose the details of their concerns when requesting an appointment. The SMH program assistant will respond during regular business hours to schedule your appointment.

If you are in urgent need of emergency assistance during our off hours, please call 911 or go to your nearest emergency room. Help is also available by contacting the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

Program Director
Lisa Sombrotto, MD
Vice Chair, Integrated and Collaborative Care
Department of Psychiatry
lsombrot@med.cornell.edu

For any personal or professional issues, students can contact:
Judith Cukor, Ph.D.
Assistant Dean of Student Affairs
Weill Cornell Medicine
(212) 821-0627
juc2010@med.cornell.edu

Dr. Cukor is a psychologist and will work confidentially with students to assess their needs and provide the appropriate referral or ongoing support. Dr. Cukor is not a member of the graduate school faculty and is not involved in training or progression to degree.

Students who are interested in faith-based counseling can find information about spiritual and religious care resources, for various faiths, at www.nyp.org/clinical-services/pastoral-care and/or www.mskcc.org/experience/patient-support/counseling/spiritual-religious-care. Both services are open to seeing WCGS students.

For all immediate medical-related issues students should contact or visit Student Health Services, 230 East 69th Street, 646-962-6942.

Student Health Services and Attendance

Student Health Services cannot excuse students for missed educational and rotation activities. It will, however, evaluate and treat students and provide documentation that a student was seen at SHS. Faculty will determine the need for making up missed work if appropriate. If a student has a condition that poses a risk to patients in the clinical setting, or others in the academic or research setting, Student Health Services will assist in determining appropriate restriction of duties.

***Students in the Medical College's plan*:** you do not need written referrals. However, we recommend that you obtain a recommendation from the Student Health Service as we have long standing relationships with many participating physicians in many specialties at the Medical Center and outside the medical center.

***Students with other health insurance*:** you do not need the SHS Director's approval or referral, but you are encouraged to obtain a recommendation from the SHS Director, as he may know "student friendly" physicians that may participate in your plan. Students are responsible for familiarizing themselves with their plan benefits, restrictions, and provider network and payment procedures.

Students are responsible for arranging their appointments and for handling billing and charges.

Medical Emergencies

Students experiencing life-threatening emergencies should proceed to the nearest emergency department for evaluation and treatment. Students with other urgent medical needs are advised to first call the Student Health Services after-hours number.

1. Call the physician on-call service: (646) 962-6942
2. Leave your name, contact information, and the nature of your problem.
3. If there is available coverage, the physician on-call will return your call. For a true medical emergency, proceed directly to the nearest emergency department.
4. If it is not necessary for you to have immediate medical care, the physician will recommend appropriate measures. If the physician determines that you need immediate attention, the physician may advise you proceed to the nearest emergency department.
5. If you visit the emergency department at NewYork-Presbyterian Hospital, bring your insurance cards and ID. Identify yourself as a Weill Medical College student at registration.
6. Students seen in the emergency department should contact Student Health Services the next business day.

Students are financially responsible for care provided outside of Student Health Services subject to insurance copays, coinsurance, and deductibles.

Immunizations and Other Health Requirements

COVID-19: New York State Department of Health requires all Weill Cornell Medicine faculty, staff, and students to have a COVID-19 vaccine and booster as part of comprehensive prevention against the COVID-19 virus. Students must provide documentation they have completed a primary vaccination (one or two dose product) and a subsequent booster vaccination of an FDA-approved or WHO-authorized vaccination.

Measles, mumps, and rubella: New York State Public Health Law requires you to be immune to measles, mumps and rubella. Our institution prefers demonstration of proof of immunity by serologic titer but will accept valid immunization records. Any student who is not immune by titer (e.g. negative, inconclusive or equivocal) will require boosters. There is no fee for *required* vaccines given at SHS. Titers may be drawn at Student Health Services for students who have not provided lab reports prior to matriculation. If you are allergic to any of the vaccines or vaccine components, you will need to provide documentation from a physician not related to you. There is no "moral objection" permissible for vaccination for health care workers. If you have had titers drawn previously, provide copies of the lab reports to the Student Health Service in addition to your immunization record. Neither documentation of being "immune" without actual lab reports nor clinical history of disease is sufficient proof of immunity. Laboratory reports must be in English. Noncompliance with MMR requirements within 30 days of the start of classes may result in the student's inability to attend classes per NYS Public Health Law Section 2165.

Hepatitis B: The hepatitis B vaccine will be offered to all students free of charge at Student Health Services. We recommend that 1st year medical and graduate students begin the three injection series upon arrival at the Medical College if they have not received the vaccine previously. We require proof of immunity by *serologic titer* if there is no prior lab report of immunity. Lab reports must be in English. Students who are not found to be immune may need to undergo additional testing to exclude chronic infection with Hepatitis B, and/or repeat two- or three-dose series.

Meningitis: New York State Public Health Law requires all college and university students to complete a meningitis information response form. It acknowledges that you have received information about meningococcal meningitis and the availability of a vaccination. You are not required to have the vaccination. Students may receive the vaccine from their own healthcare providers or health department. If you did not receive information on meningococcal meningitis or the response form in your SHS pre-matriculation information packet, please contact SHS. Noncompliance with the meningococcal response form within 30 days of the start of classes may result in the student's inability to attend classes per NYS Public Health Law Section 2167.

As per the Centers for Disease Control and Prevention's guideline for infection control in healthcare personnel, and working agreements with NewYork-Presbyterian Hospital, the following additional vaccines and screening are required:

Varicella: A positive *titer* indicating immunity or documentation of two doses of vaccine at least 30 days apart with a follow-up *titer*. Clinical history of disease is not sufficient proof of immunity for our campus. Titers will be checked at SHS if there is no lab report provided with registration materials.

Tetanus–diphtheria (Td) or tetanus–diphtheria–acellular pertussis (Tdap): Completion of the childhood series, and at least one dose of Tdap vaccine since 2005, with Td or Tdap every 10 years after.

Tuberculin screening: All students matriculating on/after 7/1/2020 are required to have an interferon gamma release assay (Quantiferon or T-spot) as a baseline screen for tuberculosis as part of their student health onboarding requirements. Students with a negative baseline will have annual screening and symptom evaluation in accordance with New York State tuberculosis screening guidelines.

Students who matriculated prior to 7/1/2020 have had 2-step annual tuberculosis skin testing performed but will be transitioned to interferon gamma release assays for yearly screens on subsequent annual health reviews.

Students with a positive interferon gamma release assay and no prior history of prior tuberculosis treatment (latent or active) will need a chest x-ray, symptom evaluation and should be offered treatment. Students with a prior history of tuberculosis treatment will need an updated x-ray, symptom review, and should be prepared to provide proof of prior treatment.

Laboratory and x-ray reports must be in English.

Periodic health assessments: A completed history and physical examination should have been performed prior to your matriculation. If it is incomplete, such students may be asked to be evaluated at SHS, or restricted from classroom activities, or both. Clinical students will undergo a

pre-rotation health assessment at the end of their pre-clinical years in preparation for rotations at NewYork-Presbyterian Hospital and its affiliates. This must be completed prior to starting the clinical rotations or students may be prevented from participating on the rotations. Students conducting research with animals may require periodic health screening by completion of an animal handler questionnaire.

Influenza: All students with patient contact are required to receive a flu vaccination when it is available and if there is no medical contraindication. All other students are strongly advised to be immunized against influenza. It is provided free of charge during the fall and early winter (assuming supplies are adequate).

SHS follows all applicable Medical College and NewYork-Presbyterian Hospital Policies and Procedures. We will notify you of any additional screenings, vaccinations, or policies that may be recommended after the printing of this edition. Other academic and clinical locations/affiliates may have additional requirements beyond our own that we will help students meet on a case-by-case basis.

Students with questions about medical or religious exemptions to certain vaccines should contact Student Health Services at shs@med.cornell.edu for guidance.

Medical Records

All medical information is documented in the campus enterprise electronic medical record and subject to all applicable local, state and federal laws with regards to medical records privacy and security. Records generated at SHS are not released to any other party without a signed, written release of confidential medical information. Immunization records are provided free to the student while they are still attending WCMC. A charge may be assessed on medical records and immunization records after a student has graduated.

Students with chronic medical conditions or complex medical backgrounds wishing to coordinate care at SHS should have medical records sent to the following mailing address:

Weill Cornell Medicine Student Health Services
1300 York Ave Box 258
New York, NY 10065

SHS does not pay for records requests.

E-Mail Communications

Student Health Services sends out monthly e-mails to all student listservs with important announcements, deadlines and updates. Students utilizing non-WCMC email clients are advised to set up filters to ensure delivery of these important messages. Blast emails will only be sent to official Weill Cornell Medicine e-mail addresses.

Limitations of E-mail

SHS is committed to the privacy of the people who rely on us for care and the confidentiality of their health information. State and federal laws also protect the confidentiality of this sensitive information.

Students need to be aware that:

- E-mail cannot be considered a confidential mode of communication.
- E-mail should not be considered a replacement for direct, face-to-face contact with a provider.

Guidelines for the Use of E-mail

To help ensure privacy, patients and clients are cautioned against sending sensitive, detailed personal information to SHS via e-mail.

SHS staff members limit the use of e-mail communication to:

- General questions
- Appointment reminders
- Routine follow-up

A health care provider may recommend that a student make an appointment for more complex concerns. Please be aware that copies of e-mail communication may be placed in your confidential medical record.

E-mail should *never* be used to convey information of an urgent nature to SHS. SHS cannot guarantee prompt responses to e-mail messages. Students who have an urgent physical or mental health concern (about yourself or someone else) can call SHS for a telephone consultation with a health care provider.

Privacy and Confidentiality

Weill Cornell Medicine Student Health Services staff follow the requirements of the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) to ensure the privacy and confidentiality of all student medical records. Personal information collected at SHS will be used solely for treatment, payment and operations and will not be disclosed to any outside parties unless legally obligated to do so.

Students are expected to activate their online patient portal to access all lab test results for tests performed at Student Health Services. Students who request laboratory results by telephone must speak to the Nurse Administrator giving their name, date of birth and identifying the specific laboratory test. Results will not be sent by e-mail.

Laboratory tests are usually performed by NewYork-Presbyterian Hospital laboratories and are entered into the computer system by name and medical record number. This system is able to track who has accessed results. Patients concerned about a breach in privacy may contact the Privacy Officer at NewYork-Presbyterian Hospital at privacy@nyp.org.

Requests for student medical information by any individual or organization outside of Weill Cornell Medicine will be directed to the Director of Student Health for review. Unless so required by law, no medical information will be released without the approval of the Director of Student Health, the student, and in rare cases the Office of Legal Affairs.

If a needle stick injury occurs, students are encouraged to follow the specific guidelines outlined by the policy in this Handbook. If the student wishes to preserve confidentiality, open discussions with other students, house staff and staff physicians are discouraged.

Initial Management of Needle Stick and Bodily Fluid Exposure

All puncture wounds and other exposures to blood and bodily fluids should be reported immediately to Weill Cornell Medicine Student Health Services or to the NYPH-Weill Cornell Center (NYPH WCC) Emergency Department.

This policy applies to all students at the Medical College and the Graduate School of Medical Sciences.

An exposure is defined as contact by: (1) needle stick or sharp puncture wound; (2) open cut, burn or abrasion contaminated by body fluids or tissues (blood, blood products, bloody fluids, semen, CSF, amniotic fluid, menstrual discharge, pleural, peritoneal, pericardial fluid, inflammatory exudates, any other body fluid or tissue contaminated with blood); or (3) splash to mucous membranes (e.g., eye or mouth) with such materials.

According to the CDC, you should be evaluated and treated within two hours for maximum benefit of therapy; therefore, this policy has been established.

Instructions for Students Exposed to Blood or Bodily Fluids

1. Wound care should be done immediately at site of accident, if possible.
   - Clean wound with soap and water.
   - Flush mucous membranes with water/saline.
   - Give other wound care as dictated by injury or accident.

2. If available, obtain:
   - patient's name and ID #;
   - HIV risks and hepatitis status, if known; and
   - names and pager numbers of the attending and/or supervising resident physicians.

3. Inform a colleague that you are returning to the Medical College or NYPH-WCC. Proceed directly to:

   Full time WCM students:
   Business days between 8:00a.m. and 4:00 p.m.:
   Weill Cornell Student Health Services: 230 East 69th Street; 646-962-6942

   Nights, weekends and holidays:
   NYPH Emergency Department: 68th Street between York Ave and the East River

   Taxi fares from a local affiliate for this purpose will be reimbursed by Student Health Services with submission of an original receipt.

   Visiting Students:
   Business days between 8:00a.m. and 4:00 p.m.:
   WHS (Workforce Health & Safety): 1315-1319 York Avenue, Basement of Payson House; 212-746-4370

   Nights, weekends and holidays:
   NYPH Emergency Department: 68th Street between York Ave and the East River

4. Students seen at SHS or NYPH will undergo a post-exposure evaluation. The post-exposure confidential medical evaluation and subsequent follow-up will document the

route(s) of exposure, and the circumstances under which the exposure incident occurred; identification and documentation of the source individual, post-exposure prophylaxis (when medically indicated), counseling; and evaluation of reported illnesses.

5. Students seen at NYPH must follow up with Student Health Services the next business day for reporting.

If a needle stick or exposure occurs while a student is on an away elective or rotation (non-local hospital, or hospital setting not affiliated with the Medical College), immediate evaluation and treatment will be available within the guidelines and policies of that institution or facility, according to the patient's wishes and within the confines of his/her insurance guidelines. Students may be referred to a local emergency department. Students must contact SHS for reporting and follow-up as soon as they are able to do so.

Needlestick and bodily fluid incident reports are sent to Environmental Health and Safety as part of the overall campus safety plan.

The Americans with Disabilities Act (ADA)

Students with disabilities who would like more information about the process for requesting disability services are encouraged to meet with their Program Director and Assistant Dean for Student Affairs.

The American with Disabilities Act (ADA) as amended in 2008 defines a disability as a physical or mental impairment that substantially limits one or more major life activities.

Any student with a documented disability who is requesting disability service must submit current and comprehensive documentation from a licensed professional to the Student Accommodations Coordinator, Devin Sullivan at des4014@med.cornell.edu for review. If documentation is insufficient to determine eligibility for disability services or appropriate reasonable accommodations, additional information may be requested. As many accommodations require advance notice to arrange, students must submit their requests well in advance of the accommodation. A minimum of two weeks is usually necessary. Questions regarding the accommodations process may be directed to the Student Accommodations Coordinator, or to the Assistant Dean of Student Affairs.

Childcare

Program Overview: Bright Horizons' back-up care programs provide a safety net for those days when regular dependent care arrangements fall through. The Back-Up Care Advantage Program supplements, rather than replaces, these arrangements and is a comforting emergency alternative when you need it the most. Costs are described below.

Bright Horizons' Center-Based Child Care Network: The *Back-Up Care Advantage Program* provides your child with access to high-quality back-up care programs at Bright Horizons child care centers located close to your home or work, when your child's regular care arrangements have fallen through. The age groups primarily served at our centers include infant -- Pre-K. Additional age groups including school age may be supported at various locations across the country.

Extended Network Center Based Child Care: You have the option to use one of our extended network child care locations close to your home or work in the event you are unable to identify a suitable Bright Horizons' Community Child Care Center to meet your child's needs. You can take comfort in knowing our network of child care centers meets established standards of quality for accreditation or state licensing, including developmentally appropriate curriculum, appropriate health and safety policies, teacher-to-child ratios, and teacher qualifications.

In-Home Care: You also have access to Bright Horizons' nationwide network of high-quality childcare providers qualified to provide your child with a safe and secure in-home care experience. Personal care assistants, home health aides, and nannies commonly provide care in a child's home.

In-Home Mildly Ill Care: Mildly ill in-home care is available when your child is injured or suffering from a common, short-term non-contagious illness or shows symptoms of an illness. It does not matter whether your child is an infant, toddler, preschool-aged, school-aged, or a teenager. Bright Horizons Family Solutions knows the concern you have about the quality of care your child needs to feel better and has built a nationwide network of home health care professionals to provide your family with confidence that your child's health care needs are being met while you are at work.

Adult/Elder Care: Back-up adult care is also available in your home or the home of your adult relative. Providers can assist in caring for your family member who requires homemaker or companion services (such as household tasks, cooking, shopping and laundry), personal care services (such as help with dressing, bathing and toileting), or even medical care (such as the administration of medication, dressing and wound care, and blood pressure and diabetes monitoring). Non-medical adult care is provided by sitter companions, personal care assistants, and home health aides. Medical care is provided by certified nursing assistants (CNAs), licensed practical nurses (LPNs), or registered nurses (RNs) depending on the medical skill level needed.

Self-Care: Self-care is available in the event an employee is in need of assistance. Restrictions on utilization are the same as for any other adult/elder care request and counts against the employees available usages for the contract period.

To sign up:
1) Go to http://www.backup.brighthorizons.com
2) Login with username: WeillCornell // password: 4backup
3) You will be asked to provide an 8 digit ID number when registering and requesting backup care.

Costs
Center-based child care @ $15/child or $25/family
In-home child and/or adult/elder care @ $6/hour (minimum 4 hours)
Up to 10 days of use per calendar year

EMERGENCIES, SAFETY, AND SECURITY

Reporting Crimes, Emergencies, and Suspicious Behavior

Incidents of crime and other serious emergencies which require immediate assistance and which occur on the Medical College campus should be reported to the New York City Police Department ("NYPD") by dialing 911 and New York-Presbyterian Hospital Security ("NYPH Security") at (212)-746-0911. Reports may be made on a confidential basis.

An operator will ask you some routine questions such as your name, address, call-back number, and the nature of the incident you are reporting. Do not hang up until the operator tells you he or she has all the essential information. Information you can provide may be crucial to the safety of everyone involved in the call. If you believe you are in a hazardous situation and cannot remain on the call long, tell the operator this at the beginning of your call. The operator can then request the minimum information needed to get you help, and you can get to a safe place. The operator will need to know where you are and what happened so the appropriate help can be sent quickly. As difficult as it can be in an emergency, try to remain calm. It can be difficult to understand what a caller is saying for a variety of reasons, including language barriers and bad telephone connections. Strong emotions make effective communication even harder.

Additionally, students should report any crimes or other security concerns involving the Medical College and its students that occur off campus to NYPH Security. Such information assists the Medical College with reporting and notification requirements that help ensure the safety of the Medical College community.

Additional Emergency Contacts

Medical College		
Engineering & Maintenance (facilities emergencies)	(1-212-74)6-2288	
Emergency repairs in campus housing	(1-212-74)6-1001	Monday-Friday, 9AM-5PM
	(1-212-74)6-1009	other times
Environmental Health & Safety (fire, chemical, biological, and radiological releases)	1-646-WMC-SAFE (962-7233)	any time
New York-Presbyterian Hospital-New York Weill Cornell Campus		
Security	(1-212-74)6-0911	any time
Fire	(1-212-74)6-FIRE (3473)	any time
Facilities Operations (facilities emergencies)	(1-212-74)6-1920	
Environmental Health & Safety	(646) 962-7233	
Rape crisis program (emergency department)	(1-212-74)6-5050	
Counseling (social work)	(1-212-74)6-4320	
Switchboard	(1-212-74)6-5454	any time
Administrator On Call	(1-212-74)6-5020	any time

WCGS Leadership and Administrators

Students may also contact these administrators to share any personal concerns:

Associate Dean (Academic Affairs) WCGS Randi B. Silver, Ph.D.	212-746-6340 rbsilve@med.cornell.edu
Associate Dean (Program Development) WCGS David Eliezer, Ph.D.	212-746-6557 dae2005@med.cornell.edu
Assistant Dean (Student Affairs), WCGS Judith Cukor Ph.D.	212-746-4492 juc2010@med.cornell.edu
Assistant Dean (Access, Belonging and Student Success) WCGS Yazmin Carrasco, Ph.D.	646-962-4937 ypc4001@med.cornell.edu
Director (Education Administration) WCGS Karla J Jacome, M.S.Ed.	212-746-4809 kjjacome@med.cornell.edu
Director (Enrollment & Educational Programs) WCGS Heather DiTullio, M.S.	212-746-6981 had4003@med.cornell.edu
Associate Director (Career and Professional Development) WCGS Aubrey DeCarlo, PhD	212-746-6502 aul4001@med.cornell.edu
Assistant Director (Grants & Finance) WCGS Tatiana Belinskaya	212-746-6737 tab2017@med.cornell.edu
Assistant Director (Access, Belonging and Student Success) WCGS Roxana Mesias, Ph.D.	212-746-1060 rem4008@med.cornell.edu
Senior Grants Administrator WCGS Anastasia Efthymiou, Ph.D.	212-746-6565 ane4008@med.cornell.edu
Student Services Administrator WCGS Clive Liew	212-746-6565 cll4002@med.cornell.edu

All students should be familiar with the web site: **https://emergency.weill.cornell.edu.** A link to this site is included as an app on all WCMC tagged phones, computers and iPads. It contains quick, easy-to-find, easy-to-read links to medical college policies and resources for mental health, medical health, sexual assault, weather emergencies, etc.

Emergency Alerting

Emergency alerts are posted to the emergency information web site at **https://emergency.weill.cornell.edu** , and may also be heard by calling 1-212-746-WCMC (9262).

Response guides for specific types of emergencies are available at the Emergency Information web site.

In an emergency, the Medical College will notify students using the Emergency Notification System (ENS). The ENS can send simultaneous notifications to all students or select groups via email, cell phone, and text messaging.

All students are responsible for ensuring their contact information is accurate in the ENS. Further information and instructions to update contact information are at:
https://emergency.weill.cornell.edu/UpdateWCA
Persons may also receive emergency alerts from New York City by registering for Notify NYC at:
https://a858-nycnotify.nyc.gov/notifynyc/

Suspicious Behavior

Students should report suspicious behavior to the NYPD and NYPH Security. It is important to remember that behavior, not a person, is suspicious. Signs of behavior that might be suspicious are:

- A person running and looking about furtively, as if he or she were being watched or chased.
- A stranger carrying property at an unusual hour or location, especially if the items are stereo equipment, office machinery, or a locked bicycle.
- A person going door-to-door in an office or residential building.
- Any person forcibly entering a locked vehicle or building.
- Transactions being conducted from vehicles, especially near schools or parks.
- A person or persons sitting in a parked car and closely scanning the area.
- A person exhibiting unusual mental or physical symptoms.
- Unusual noises, including gunshots, screaming, sounds of fighting, barking dogs, or anything suggesting danger or illegal activity.

Students should report suspicious persons without proper identification in Medical School facilities to NYPH Security.

Crime Prevention Tips

- Keep yourself, your residence, your office, and your car safe by incorporating safe behavior into your daily routine.
- When you leave your room or office, even for a moment, always keep your doors and windows locked.
- Never leave your purse, wallet, book bag, notebook computer, or other property unattended, even for a moment.
- Be careful when people stop you for directions or money. Always reply from a distance; never get too close to the car or the person. If you feel uncomfortable about someone near you, go somewhere with people around and call the police or NYPH Security.
- If you are out after dark, use only well-lit routes and travel in groups when possible. Avoid construction areas, particularly sidewalks shadowed by scaffolding.
- Walk with the appearance of confidence. Make eye contact with passersby, and keep a firm grip on your property.
- Have keys ready so you can quickly get into your car or home.
- Although it seems courteous to open doors for others, especially persons carrying groceries or packages, do not open doors for strangers.

Campus Security Report

In addition to the information contained above, The Medical College and Graduate School of Medical Sciences annually distribute a campus security report to all students and employees containing descriptions of policies and procedures for reporting crimes and emergencies and

campus crime data. The report lists telephone numbers and contact information for security in campus facilities and residences. Policies and procedures for handling sex offenses and programs for victims are also described. The 2020-2022 reports are available on the WCGS website: https://medicaleducation.weill.cornell.edu/student-resources/sexual-misconduct-campus-security

The report contains information about all Weill Cornell Medicine residential and non-residential building used by all students.

Campus crime statistics can be accessed at https://ope.ed.gov/campussafety. The Advisory Committee on Campus Security will also provide upon request all campus crime statistics as reported to the United States Department of Education.
The Advisory Committee on Campus Security may be reached by e-mail at CampusSecurity@med.cornell.edu.

Fire Safety

Fire safety includes fire alarm activation response, fire emergency response, emergency evacuation, and fire prevention. The Medical College develops guidelines and procedures addressing these topics, periodically reviews and updates procedures related to fire safety, develops training programs and exercises to increase awareness amongst faculty, students and staff, and collects data on the effectiveness of the various fire safety program components.

Most areas in Medical College buildings are monitored by an early warning fire detection system and protected by fire sprinklers. Upon the activation of any fire sprinkler or fire detection or alarm-initiating device, there is an audible and visual indication throughout the building that the fire alarm has activated, while simultaneously notifying the NYC Fire Department of the potential fire emergency. Students must respond to all fire alarm activations and assume that each activation is a real fire emergency. Ignoring a fire alarm activation is against Medical College and NYC guidelines governing fire alarm activation response.

Every student is responsible for following guidelines governing Fire Prevention including controlling the accumulation of trash and other combustibles, complying with the Medical College "No Smoking" policy; following guidelines prohibiting the use of unapproved open flames such as candles, canned cooking fuels, and propane gas; and using caution when heating and cooking food such as using microwaves and toasters.

Fire Safety Rules

Students must follow all Medical College requirements and guidelines related to fire safety and fire prevention. Students may access this information on the Environmental Health & Safety website at:
https://ehs.weill.cornell.edu/

Specific fire safety topics may be found in the Fire Safety Manual:
https://ehs.weill.cornell.edu/system/files/fire.pdf

During fire and other emergencies, fire alarm activations, and fire drills, all students must follow instructions of Medical College employees.

Residential Fire Safety Plans

Students should be familiar with their Residential Fire Safety Plan specific to their building. Residential Fire Safety Plans are distributed to all incoming students living in Medical College residential buildings. Plans are updated annually and re-distributed to residents during National Fire Prevention Week in November. Residential Fire Plans are also available on the EHS web site: https://ehs.weill.cornell.edu/forms-resources.

Tampering with Fire Alarms and Malicious Alarm Activations

Tampering with fire safety equipment such as fire extinguishers, or fire protection system devices including smoke detectors and sprinkler heads is unlawful and subject to disciplinary action by the Medical College.

Transmission of a false fire alarm is punishable as a Class A Misdemeanor under New York State Penal Law § 240.50. Violators of this law will also be subject to disciplinary action by the Medical College.

Fire Safety Procedure

If you discover fire or visible smoke, immediately:

- Follow R.A.C.E. procedure:
  R – Remove yourself from the affected area and provide assistance to others requiring it.
  A – Activate the fire alarm by pulling the red fire alarm manual pull station located next to each fire exit. Shout "Code Red" to alert other occupants.
  C – Confine/contain smoke by closing doors as you leave the area.
  E – Evacuate using the safest/shortest route of travel to the fire exit.
- All students should know the location of at least two fire exits on their floor and the shortest path of travel.
- Never use an elevator during a fire emergency.
- Once outside the building, move away from the building's entrance to allow Fire Department responders to enter.
- Follow instructions of Environmental Health & Safety, Security, and Housing personnel.

Questions

Direct questions concerning fire safety to Environmental Health & Safety.
https://ehs.weill.cornell.edu/

Substance Abuse Policy

The Medical College recognizes that its students are potentially vulnerable to the alarming personal and societal problems caused by alcohol and drugs. Therefore, the Medical College offers aid to students who seek help for a drug or alcohol problem. Illegal possession of, distribution of, or trafficking in any drugs, or the abuse of drugs or illicit use of mind-altering drugs, or the abuse of drugs or alcohol are violations of Medical College policies. Such violations are not in accord with the Medical College's requirements of fitness or suitability for medicine as stated above in the Standards of Conduct. Alleged violators of these policies will be reviewed according to the procedures employed to determine a student's fitness or suitability for medicine and research.

Statement on Illegal Drugs and Substances

State and Federal law prohibit the possession, use and distribution of illegal drugs and substances.

The unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance by any member of the Weill Medical College community, including employees, faculty members, students and visitors, is prohibited at all Cornell facilities including residences. Appropriate action including termination and/or dismissal will be taken for violations of the foregoing prohibition.

The University recognized the convincing medical evidence that the use of illegal drugs and substances poses a significant threat to health and condemns the use of such drugs and substances as harmful to the physical and psychological well-being of the user and the well-being of the Cornell community.

Notify the person's supervisor, department chairperson, or dean of any criminal drug statute conviction (including acceptance of a guilty plea by a judicial authority) for a violation occurring in the workplace no later than five (5) days after such conviction.

The University will not condone criminal activity on its property, or on property under its control, and will take appropriate action whenever such conduct is discovered to enforce the law and its own internal regulations.

Statement on Drug and Alcohol Abuse

Federal and New York laws and University regulations prohibit the illegal possession, use and distribution of illicit drugs and alcohol.

The unlawful manufacture, distribution, dispensation, possession, or use of an illicit drug or alcohol by any member of the Weill Medical College community, including employees, faculty members, students and visitors, is prohibited at all Cornell facilities (including residences) and activities. Appropriate action including termination and/or dismissal will be taken for violations of the foregoing prohibition.

The University will not condone criminal conduct on its property, or at Cornell or student sponsored activities, and will take appropriate action whenever such conduct is discovered to enforce the law and its own internal regulations. Violators of Federal and state laws may also be referred to appropriate civil and criminal authorities for prosecution.

Drug-Free Workplace Policy and Statement

The Drug-Free Workplace Act of 1988 requires Weill Medical College, as a Federal grant recipient and contractor, to certify that it will provide a drug-free workplace by, among other actions, requiring that each person engaged in a Federal grant or contract (including personnel and consultants) be given a copy of this Statement and notifying such person that as a condition of participation in such grant or contract, the person will:

- abide by the terms of this Statement; and
- notify the person’s supervisor, department chairperson, or dean of any criminal drug statute conviction (including acceptance of a guilty plea by a judicial authority) for a violation occurring in the workplace no later than five (5) days after such conviction.

Weill Medical College shall, within thirty (30) days after receipt of notice take appropriate action against such person up to and including termination or dismissal, and/or require such person to satisfactorily participate in a drug assistance or rehabilitation program.

Sanctions

Violations of University Policy can result in termination, suspension or expulsion from the university.

Faculty and non-academic staff can be subject to disciplinary action up to and including termination of employment.

Student violators can be subject to disciplinary action up to and including dismissal. Any drug or alcohol abuse violation may become part of a student's permanent record and may impact on a student's fitness or suitability for advancement.

Sanctions can include severe criminal penalties such as fines and/or imprisonment. The severity of the penalty depends upon the nature of the criminal act and the identity and amount of the drug involved. Examples of legal sanctions under Federal and New York laws:

- **LSD**: Possession with intent to sell can result in up to seven years in prison.
- **Marijuana**: Sale to a person under the age of 18 years can result in up to seven years in prison.
- **Cocaine**: The possession of four or more ounces, or the sale of two or more ounces, can result in a minimum of 15-25 years, and a maximum of life in prison.
- **Alcohol**: It is illegal in New York:
    - For anyone under the age of 21 to possess with the intent to consume alcohol. A violation can mean up to a $50 fine.
    - For anyone of any age to give or sell alcohol to anyone under the age of 21, to anyone who is already drunk, or to anyone who is habitually drunk. A violation can mean three months in jail and up to a $500 fine.

Drug Screening

Procedure

In the event a student is required to undergo drug screening to remain in school, the student will be required to obtain and complete a Drug Screen Consent and Release Form available from Workforce Health and Safety. Workforce Health and Safety is open between 8 a.m. and 4 p.m. on business days, and is located in the Payson House basement at 1315 York Avenue.

The drug screening provided by the vendor shall include testing for *at least* the following substances:

- Amphetamines
- Barbiturates
- Benzodiazepines
- Cocaine Metabolite
- Marijuana (THC) Metabolite
- Methadone
- Methaqualone

- Opiates
- Phencyclidine (PCP)
- Propoxyphene (Darvon)

Students with a positive drug screen will have an opportunity to consult with a Medical Review Officer (MRO) to verify whether there is a valid medical explanation for the screening results. If after review by the MRO, there is a valid medical explanation for the screening result. If, after review by the MRO there is not a valid medical explanation for the positive screen, then the test results will stand and will be treated as a positive result as outlined below.

Handling or Results
All results from drug testing will be forwarded to the student's designated health care professional.

Positive results will be forwarded to the Associate Dean of Academic Affairs, Dr. Randi Silver <rbsilve@med.cornell.edu>, or designee.

Health Risks

The university recognizes the convincing medical evidence that alcohol abuse and the use of illegal drugs and substances pose a significant threat to health and considers alcohol abuse and the use of such drugs and substances as harmful to the physical and psychological well-being of the user and the well-being of the Cornell community.

The following list by category is only a short sampling of some risks involved:

Narcotics: Slow and shallow respiration, clammy skin, convulsions, coma, and death.
Stimulants: Increased pulse rate, blood pressure and body temperature; insomnia, agitation, convulsions, possible death.
Hallucinogens: Illusions and hallucinations, distorted perception of time and distance, psychosis, possible death.
Cannabis: Disoriented behavior, fatigue, paranoia, and possible psychosis.
Alcohol: Drowsiness, impairment of judgment and coordination, liver and heart damage, respiratory depression and death. Mothers who drink during pregnancy risk giving birth to infants with fetal alcohol syndrome, which can include irreversible physical abnormalities and mental retardation.

Counseling and Treatment

Cornell provides various awareness and education programs for faculty, staff and students about the dangers of illegal drugs and the abuse of alcohol. Confidential support services are available for those with abuse problems who individually pursue treatment and counseling.

A Drug-Free and Alcohol Abuse Awareness Program has been established at Cornell to inform members, staff and students about the dangers of drug and alcohol abuse in the workplace, the University's policy of maintaining a drug-free workplace, available drug and alcohol abuse counseling, rehabilitation and employee assistance programs, and the potential penalties for drug and alcohol abuse violations. Further information is available from the Human Resources Department, supervisors, department chairpersons or deans.

The Employee Assistance Program (EAP) is a short-term counseling and referral service for drug and alcohol abuse as well as other employee concerns. Through the EAP, eligible employees and

their dependents may obtain free counseling for substance and alcohol abuse issues which affect them and their families. EAP counselors will assess each case and may make a referral to an appropriate internal program or outside agency best suited to address the rehabilitation needs. EAP counselors will also assist in determining how Cornell health insurance will be helpful in covering costs. The Academic Staff Handbook and Employee Handbook contain further information about the Employee Assistance Program. An EAP counselor can be contacted by calling (212) 461-1769 or emailing EAPC@med.cornell.edu .

Students are reminded to review the Substance Abuse Policy (which covers illicit drug and alcohol abuse) set forth in the Student Handbook and that any drug or alcohol abuse violation may impact a student's fitness or suitability for advancement. Professional staff and advisors are available to assist and direct students to internal and outside programs. Students may also obtain assistance by contacting the:

Weill Medical College Student Health Service at:
(1 646) 962-6942
https://medicaleducation.weill.cornell.edu/student-resources/student-health-services; or

The Student Mental Health Service at:
(1 914) 997 8691
Student Health Services
Student Mental Health

Institutional Review

Weill Cornell Medical College will conduct a biennial review of its drug and alcohol abuse policies and programs to determine the effectiveness of such policies and programs, implement any necessary changes, and endure consistent enforcement of required sanctions.

No Smoking

Smoking is prohibited on the Weill Cornell Medical College campus, including buildings, courtyards, entrances, garages, plazas, sidewalks, and all facilities controlled by Weill Cornell Medical College.

Students who observe anyone smoking on campus should courteously notify the person smoking that smoking is prohibited or alert security officers or Environmental Health & Safety to the infraction.

Students seeking to quit smoking may contact the Student Health Service to receive information about and referrals to smoking cessation programs.

STANDARDS OF CONDUCT

WCGS and the PBSB Program require that faculty, students, and staff abide by fundamental standards of conduct expected of the members of the WCGS community in their interactions with each other. Membership in the WCGS community for students is more than an academic commitment; it connotes a willingness by the student to act as a responsible biomedical professional. Participation in the PBSB Program community by faculty is more than instructing the next generation of biomedical professionals; it is a commitment to serve as mentor and role model of the standards of the profession. Inherent in the concept of a professional is an underlying integrity and ethical foundation that defines the tone and culture of the trainer-learner environment at the PBSB Program.

The Program's standards of conduct also enable students to begin to encounter and wrestle with the difficult moral and ethical questions that arise continuously throughout one's career as a biomedical professional. In this capacity the standards of conduct promote and define expected behaviors, challenge unprofessional behaviors, and educate students, as well as faculty, to confront these challenges.

It shall be the responsibility of the students and faculty of the Program to uphold the integrity and ethical standards of the community to the fullest extent possible. The standards of conduct listed below set forth general responsibilities of students and faculty in a trainer-learner environment. The full range of responsible conduct cannot be set forth in any policy document. Accordingly, students and faculty should view these enumerated responsibilities as an illustration and should strive to comply with both the letter and the spirit of these standards of conduct.

This section also describes the guidelines and policies that will apply when there has been a failure to comply with the standards.

Student Responsibilities/Honor Code

In order for students to be permitted to continue their studies at the PBSB Program, students must demonstrate a range of skills and abilities, such as, maturity, good judgment, a sense of responsibility and professionalism, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming biomedical scientists. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations and reports.

The following are examples of conduct that is not suitable for students at the PBSB Program and is subject to disciplinary action (including but not limited to verbal warning, written warning, probation, suspension or dismissal):

- knowingly or carelessly representing the work of others as one's own;
- lying, cheating, or falsification of records whether personal or patient-related;
- using or giving unauthorized assistance in any academic work;
- restricting the use of material used to study in a manner prejudicial to the interest of other students;
- purposely misleading or giving false information to another student;
- posting of confidential, inappropriate, unauthorized or copyrighted information (including, but not limited to, photos, images, text, audio, video, or lecture materials) on

the Internet (including but not limited to: StudyBlue or similar crowdsourced learning platforms, LinkedIn, Facebook, Snapchat, Instagram or similar social media, web logs ("blogs"), and others);

- otherwise committing a breach of academic and/or professional integrity;
- repetitively or egregiously failing to fulfill the professional requirements and responsibilities of a clinical or laboratory rotation;
- committing an act of physical abuse or violence of any kind;
- disorderly and/or obscene conduct on campus or in the hospital facility or its affiliates;
- bullying (including but not limited to verbal, physical force or the use of electronic technology) which deliberately seeks to harm or humiliate another student, faculty, lecturer, administrative staff or patient;
- obstructing, harassing or interfering with teaching, Program administration or patient care; including the use of information and communication technologies as a means of intimidation, harassment or unwarranted interruption;
- having repeated unexcused absences, late arrivals or early departures from a required course, rotation or end of rotation activities;
- failing to respond in a timely way to communications (phone calls, emails or other correspondence) from the administration, faculty, course leadership or their representatives;
- failing to comply with directive given by supervision authority;
- unauthorized entry to or use of Weill Cornell or hospital facilities or its affiliates;
- theft of or negligent damage to Weill Cornell or hospital property or its affiliates;
- use, possession or distribution of controlled substances on campus or in the hospital facilities or its affiliates;
- unauthorized use and/or possession of alcoholic beverages in the hospital or Weill Cornell facilities or its affiliates;
- inappropriate use of the Weill Cornell seal, logo, name, symbol or facsimile.

A student, or group of students, knowing of any situation in which a violation of any of the standards of conduct set forth above may have occurred is responsible for providing any such information in writing to the PBSB Program Director. Faculty is similarly required to report a violation to the PBSB Program Director. Each student matriculated at the PBSB Program shall be bound by standards of conduct described above and shall be presumed to be familiar with the above provisions.

When a student's conduct while matriculated at the PBSB Program is in violation of the Student Responsibilities/Honor Code or raises a question about his or her suitability to practice medicine or biomedical research, the matter will be directed to the Associate Dean of Academic Affairs for consideration and recommendation of corrective disciplinary action. The Associate Dean of Academic Affairs may request that the PBSB Program Director or his or her designee appoint an ad hoc committee of faculty to review the matter. The student involved shall receive notice from the Associate Dean of Academic Affairs for the appointment of the ad hoc committee, the membership of the ad hoc committee once assembled, and the details of the concerns under consideration by the ad hoc committee regarding the student's suitability for completion of the doctoral or master's degree.

The ad hoc committee will determine the scope, manner and extent of its review, consistent with the information provided by the Associate Dean of Academic Affairs. The student shall have the right to appear before the ad hoc committee in order to present his or her position on the claims raised and his or her continued suitability. The student may be accompanied by an advisor (such as a family member, faculty member and/or counsel) who may assist the student but will not be a participant in the proceeding before the ad hoc committee; the student will remain responsible for acting on his or her behalf in the process. The ad hoc committee will forward its determination as to the student's suitability to the Associate Dean of Academic Affairs.

When the recommendation of the ad hoc committee is to permit a student to continue with his or her studies based on a finding that the student continues to meet the standards of suitability for completion of the doctorate, the Associate Dean of Academic Affairs may accept the recommendation and conclude the process or confer with the Dean.

When the recommendation of the ad hoc committee is that the student does not satisfy the PBSB Program's standards of suitability for doctoral studies and should not be permitted to continue studies at the PBSB Program, then the recommendation, together with the academic records, factual determination, including any recommendations for sanctions (which shall include a brief statement explaining the sanctions), as well as any other materials the ad hoc committee deems appropriate, shall be forwarded to the Dean. The Dean shall then review the recommendation and formulate her/his own position on the matter. The Dean has the discretion to rely on the record created by the ad hoc committee or to reopen the process to gather additional information. The student shall have an opportunity to submit whatever information he or she believes is relevant to the consideration. The recommendations of the ad hoc committee, shall be forwarded to the Program Director, Program Chair and Dean for final action.

A student can appeal a decision of the ad hoc Committee per the policy outlined below and in the Code of Legislation.

Trainer and Learner Environment

The Graduate School is committed to providing an environment that fosters mutual respect and the values of professionalism, ethics, and humanism in the practice of biomedical research and its application to medicine. The Graduate School has a policy of zero tolerance for mistreatment of its students, faculty, staff and guests. An environment conducive to learning requires that faculty, students and all administrative and support staff treat each other with civility, respecting each individual's views and background. Faculty, other trainees, administrators and staff must treat students fairly and respectfully in all settings where students are educated and are expected to create and maintain an academic environment conducive to the pursuit of free inquiry, academic integrity, and the respectful interchange of diverse ideas and differing viewpoints. These standards of conduct are intended to prohibit teaching and training behaviors and other practices that are discriminatory or that may undermine professionalism. The body charged with monitoring, reviewing, investigating and aiding in the resolution of mistreatment issues is the Trainer-Learner Committee (TLC). The Graduate School has a TLC:
https://gradschool.weill.cornell.edu/WCGSTLC.

Students wishing to report a violation, ask a question, or seek advice may contact the TLC by emailing (WCGSTLC@med.cornell.edu). When emailing the TLC, students may, if desired, request follow-up from a specific member of the TLC. Students need not provide extensive detail

regarding mistreatment or potential mistreatment in the initial contact. A member of the TLC will reach out to set up a meeting, phone call or continue the conversation via email. More information on the TLC can be found online at: https://gradschool.weill.cornell.edu/WCGSTLC

Examples of conduct that is *not* appropriate include:

- verbally abusing a student, including belittling and/or humiliating a student, or speaking disparagingly about a student's economic or cultural background, gender, sexual orientation or preference, race or religion;
- exploiting students in any manner, including requesting that students perform personal errands where performing the procedures interferes with a student's attendance at educational activities or performing research;
- intentionally singling out a student for arbitrary or selective treatment;
- pressuring a student to perform laboratory procedures for which they are insufficiently trained;
- interfering with a student's need to attend properly to a potentially serious health problem, including to seek attention for a needle stick injury; or attend a doctor's appointment;
- committing an act of physical abuse or violence of any kind.

Faculty shall educate and advise students about the specific standards that govern professional conduct in a rotation, a course or in a laboratory setting, and, by his or her own conduct, set an example of the standards expected of the student.

If a student believes that a faculty member has violated the standards of conduct, the student may file a request for an investigation with the TLC. Faculty members are also required to inform the Program Director and Associate Dean, in writing, of any alleged violation by a faculty member of the standards of conduct outlined above. Faculty members, upon appointment to the Faculty, shall be bound by the standards of conduct set forth in this section and shall be presumed to be familiar with its provisions.

Student Ombudsperson

The Student Ombudsperson Office offers a safe place where all students at Weill Cornell Medical College and Graduate School of Medical Sciences may discuss problems or issues. Concerns about situations that interfere with work, study or student life may involve a classmate, advisor, or instructor. Issues may be academic related, interpersonal conflicts, and harassment. The Ombudsperson does not take a side in disputes. The Ombudsperson treats all inquiries as confidential, as described in our Ethical Principles below. We assist students in several ways:

- Listening and discussing concerns, questions, and complaints
- Provide information on Weill Cornell Medical College policies and practices
- Provide information on how to make Weill Cornell aware of a particular problem
- Discuss and assist the student in evaluating available options
- Refer the student to the proper authority to resolve the situation
- Assist students to devise ways in which they might resolve problems with others on their own.
- While maintaining confidentiality, provide feedback to the administration (or others in authority) when a systemic issue or trend occurs

The Ombudsperson assists students in a variety of ways consistent with the WCM mission. Overall, the Ombudsperson is an advocate for fairness and equity.

The Student Ombudsperson, Dr. Henry Murray, can be reached at 212-746-6330 and hwmurray@med.cornell.edu. For more information about the Student Ombudsperson's role visit http://studentservices.weill.cornell.edu/student-life/student-ombudsperson.

Institutional Guidelines for Use of Computers, Network Systems and Electronic Communications

The Medical College's computers, network systems equipment, data, and software are a critical portion of the Medical College's infrastructure and are to be treated accordingly.

Students and faculty are responsible for their actions when using the Medical College's computers, electronic communications and network systems, whether or not their transgressions are intentional, accidental and/or can be corrected.

Users of Weill Cornell Medicine computers, tablets, and network systems shall respect:

- the privacy of other users' information, whether or not the information is securely protected;
- the ownership and intellectual property rights of proprietary and commercial software, including not using unauthorized copies of software even where the software may not be copy protected;
- the finite capacity of a computer system and limitations of use so as not to interfere unreasonably with the activity of other users;
- procedures (posted in computer facilities and/or online) established to manage use of the computer system;
- the rights of others not to be harassed, intimidated, or otherwise receive intrusive or inflammatory information through the computer system; and
- the Medical College's policies regarding the use of computers as specified by the Information Technologies and Services (ITS) at https://its.weill.cornell.edu/policies.

Copyright Infringement

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority, including unauthorized peer-to-peer file sharing, constitutes an infringement, and may subject students to civil and criminal penalties.

In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than $750 and not more than $30,000 per work infringed. For "willful" infringement, a court may award up to $150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United

States Code, Sections 504 and 505. Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $250,000 per offense.

At Weill Cornell Medicine, the unauthorized distribution of copyrighted materials is also a violation of the standards of conduct, and may result in disciplinary action up to and including expulsion. Students are advised that this restriction pertains to any and all lecture materials including printed handouts, electronic media such as PowerPoint presentations, and any audio/video recordings of lectures or laboratories. These are the intellectual property of the author and/or Weill Cornell Medicine and shall not be distributed in any form to any other recipients. Failure to respect intellectual property rights as defined herein may jeopardize a student's good academic standing in the Program and may result in disciplinary action.

For additional information on the Copyright Infringement Policy, please visit https://its.weill.cornell.edu/policies/1107-copyright-infringement-policy.

Sexual Harassment

The Human Resources Department and the Office of Institutional Equity (OIE): **https://equity.weill.cornell.edu** are available to assist all members of the Medical College community with sexual harassment problems or questions. All discussions are confidential. In addition the Medical College will provide, on request, training and consultation on the prevention of sexual harassment.

What is Sexual Harassment?

Sexual harassment in the academic environment or in the workplace can threaten a person's academic performance or economic livelihood. The Medical College defines sexual harassment as:

- Unwelcome sexual advances, requests for sexual favors, and other verbal and physical conduct of a sexual nature constitute sexual harassment if:
    - submission to such conduct is made either explicitly or implicitly a term or condition of employment or academic status;
    - submission to, or rejection of, such conduct by a person is used as the basis for an employment decision or an academic decision affecting that person; or
    - such conduct has the purpose or effect of substantially interfering with a person's work or academic performance or of creating an intimidating, hostile, or offensive working or learning environment.

Sexual harassment is sex discrimination and is therefore illegal.

Dealing with Sexual Harassment: Preliminary Action

You can sometimes stop someone from harassing you by taking direct action.

- **Say no** to the harasser. Ignoring the situation seldom will make it go away. If you have difficulty speaking about the situation, write the harasser a note describing the incident that you found offensive and request that it not happen again. Keep a dated copy of the message.
- **Keep a record of what happened and when it took place**. If others were present, include their names in the record. Keep a log of any conversations or actions pertaining to the incident(s).

- **Find out whether other students or co-workers have been harassed**. Together complaints are in a stronger position to deal with the situation and the offender.
- **Seek support from a close friend or trusted associate.** Sharing your feelings and experiences can help you cope with that often is a very difficult, frustrating situation.

If the harassment does not stop, consider discussing the matter with the harasser's supervisor or department chairperson, or with staff members in the Human Resources Department or the Office of Institutional Equity.

Complaint Procedures

If a supervisor, administrator, faculty member or counselor receives a complaint or inquiry about sexual harassment, it is imperative that the Human Resources Department or Office of Institutional Equity be contacted (**https://equity.weill.cornell.edu)** to provide advice on procedures for sexual harassment cases. Discussions with staff members of that office will help ensure the effective handling of the complaint and reestablish a working or learning environment free of harassment by taking immediate and appropriate action.

Any student or employee of the Medical College who suspects that he or she has experienced sexual harassment, as defined herein, should report the incident. If the reporting person wants to discuss the incident, consider ways in which to deal personally with the situation, or seek a formal remedy for an instance of sexual harassment, the Human Resources Department and the Office of Institutional Equity will provide assistance.

Grievance procedures exist to protect all students and academic and non-academic staff members.

Title IX Regulations

The Department of Education has recently promulgated regulations implementing the provisions of Title IX of the Education Amendments of 1972, prohibiting discrimination on the basis of sex in education programs and activities. The Medical College is subject to and in compliance with the statute and regulations. The regulations nevertheless require that you be informed of their provisions and these are summarized below:

For students, the regulations prohibit any act or policy which discriminates on the basis of sex or which has the effect of causing such discrimination. Specifically, the regulations prohibit discrimination in admissions, quality of housing, overall administration of financial aid, and access to curricular and extra-curricular activities. A student or applicant may not be discriminated against because of pregnancy, childbirth, or other conditions relating to pregnancy. Childbirth and other conditions relating to pregnancy must be treated as any other disability for purposes of leaves of absence.

For employees, the regulations likewise prohibit any act or policy that has the effect of treating members of one sex differently from the other. Specifically, the regulations prohibit discrimination in recruiting and hiring, promotion, job classification and assignment, wage and salary rates, fringe benefits, and granting leaves of absence. Pregnancy, childbirth, or conditions relating to pregnancy must be treated as temporary disability for purposes of sick leave or other leave of absence plans. An individual may not be denied employment or otherwise discriminated against because of pregnancy or conditions related thereto.

The Office of Civil Rights and Investigations has been designated to investigate and seek resolution of complaints of all Weill Cornell medical and graduate students, regarding prohibited acts. Students should contact: **https://civilrights.weill.cornell.edu/about-us/staff-directory**

Brittney Blakeney, JD
Title IX Coordinator/Office of Civil Rights and Investigations
575 Lexington Avenue, Suite 670
New York, NY 10022
T 718 619 5527
bsb4002@med.cornell.edu

Shaunesha Crawford, JD
Title IX Coordinator/Office of Civil Rights and Investigations
575 Lexington Avenue, Suite 670
New York, NY 10022
T 646 962 9247
shc4038@med.cornell.edu

For urgent matters, contact:

- Campus Security: (212) 746-0911
- The Title IX Coordinator Answering Service: (212) 746-9915

Further information on Weill Cornell Medicine's Title IX resources and student procedures may be viewed here: https://diversity.weill.cornell.edu/policies/title-ix

Bias and Hate Related Crimes

Hate/Bias-Related Crime Prevention Statement for Weill Cornell Medical College

New York State law requires Weill Cornell Medical College to inform students about the Hate Crimes Prevention Act of 2000 and how hate crimes (also known as bias-related crimes) can be prevented on campus.

Hate/bias crimes have received renewed attention in recent years, particularly since the passage of the federal Hate/Bias Crime Reporting Act of 1990 and the New York State Hate Crimes Act of 2000 (Penal Law Article 485).

Hate crimes are criminal activity motivated by the perpetrator's bias or attitude against an individual victim or group based on perceived or actual personal characteristics, such as their race, religion, ethnicity, gender, sexual orientation, or disability.

Bias-related behavior includes any action that discriminates against, ridicules, humiliates, or otherwise creates a hostile environment for an individual (female or male) or group protected under this law.

Penalties for Hate/Bias-Related Crime

Penalties for bias-related crimes are very serious and range from fines to imprisonment for lengthy periods, depending on the nature of the underlying criminal offense, the use of violence or previous

convictions of the offender. Hate/bias crime incidents that rise to a felony level are reported to the district attorney. Non-felony hate/bias crime incidents may be adjudicated through the *Standards of Conduct* as stated above. Sanctions imposed by the College may include suspension, expulsion or other measures depending on the severity of the crime.

Reporting a Hate/Bias-Related Crime Incident

An individual who believes that she or he has been a target of a bias-related crime is encouraged to immediately report an incident to NYPH Security, the Dean, and the Affirmative Action Officer (in Weill Cornell Graduate School's case this is Dr. Judith Cukor, the Assistant Dean of Student Affairs). The incident will be reviewed and investigated, and a determination will be made as to how the allegation will be handled.

Ethical Conduct and Compliance Hotline

Faculty, staff and students - as well as those outside Weill Cornell Medicine - may confidentially report activities or conduct that are believed to violate a state or federal law or Cornell University policy at: www.hotline.cornell.edu or 1-866-293-3077. This includes violations of Cornell's Standards of Ethical Conduct Policy, life safety concerns, non-compliance with grants and contract requirements, financial irregularities or misreporting, violations of applicable state or federal laws and regulations, conflicts of interest, and other related concerns. Reports may be submitted anonymously, are administered by an independent company, and will be handled promptly and discreetly. No retaliatory action will be taken against anyone for reporting or inquiring in good faith about potential violations of Cornell University's policies or for seeking guidance on how to handle suspected violations.

Sexual Misconduct and Campus Security: Weill Cornell Medical College is committed to providing an employment, education and living environment free from all acts of sexual misconduct, and will not tolerate sexual misconduct by or against students, staff, faculty, alumni or visitors. We will respond promptly and appropriately to all reports of sexual misconduct. Sexual misconduct includes, but is not limited to: sexual assault, sexual violence, sexual abuse, sexual exploitation, rape, domestic violence, sexual coercion and stalking. Sexual misconduct also covers sexual discrimination and sexual harassment. For more information, visit: https://medicaleducation.weill.cornell.edu/student-resources/sexual-misconduct-campus-security

The NYP Weill Cornell Victim Intervention Program is an on-site organization that provides crisis intervention and support for survivors of sexual assault, relationship violence, family violence, and physical assault. For more information regarding support and campus security please go to: http://medicaleducation.weill.cornell.edu/student-resources/sexual-misconduct-campus-security.

Members of the Medical College Community Who Potentially Represent a Hazard to the Public and to the Medical College

Two broad considerations underlay the preparation of these guidelines:

1. An awareness that the Medical College, so far as possible, should try to protect patients, students, and employees, and to protect its mission in education and research, from any harm that may come to them because of any action or condition of a student or employee.
2. An awareness that the identification of a person as a potential hazard to other people or to the institution may seriously jeopardize his career and his relation to other people, and

that, therefore, every effort must be taken to protect the rights of this person, and to ensure that any findings, and any actions based upon these findings, are grounded on demonstrable evidence.

The Nature of "Potential Hazards"

"Potential hazards" arising from the actions or conditions of employees or students might fall into three general categories:

1. Hazards arising from the impaired ability of a person to perform his medical, educational, or other professional activities, including hazards arising from (a) neurological disease or degeneration, (b) emotional or psychological disorders, (c) the use of drugs or medications, and (d) the presence of physical handicaps resulting from illness or injury.
2. Hazards arising from a person's carrying a contagious disease.
3. Hazards arising from the behavior of a person, including a) behavior regarded by patients and by the public as alarming, threatening, bizarre, hostile, or otherwise inconsistent with the duties and responsibilities of the person, and b) behavior that is disruptive for working groups, medical treatment, or educational processes.

Potential hazards to other people or to the Medical College that occur in the context of a person's performance of his professional, medical, or academic duties, or as a part of his employment by, or studies in, the Medical College are a legitimate concern of the Medical College.

Private acts or conditions of students or employees outside of this context, although they are not the responsibility of the Medical College, may, nevertheless, be of legitimate concern to the Medical College in so far as they may imply the existence of a potential hazard, if this person continues his role as an employee or student.

For example, if a person is convicted of the possession of drugs or assaultive behavior, or is admitted to another institution for the treatment of alcoholism, he might well have a condition that represents a potential hazard to the public or to other employees if he continues in his usual activities at the Medical College. Under these circumstances, even though the act in question has occurred outside of the Medical College and was not, therefore, the responsibility of the Medical College, the College might, nevertheless, legitimately wish to investigate whether or not this person represented a potential hazard within the context of the concerns outlined above.

Identification and Reporting of Potential Hazards

Every student, staff member, or other employee who is aware that he has a condition that creates a potential hazard as described above, has a primary responsibility and duty to report this, either to his immediate supervisor or to the Program Director. In situations in which a student, employee or staff member is not sure whether he has a potentially hazardous condition, he is encouraged to seek appropriate counseling and advice. Such counseling and advice is available to all Medical College employees from the Employee Assistance Program Consortium and to students from the physicians or psychiatrists designated by the Office of Student Affairs.

Every student, staff member, or employee, who has good reason to believe that another student, staff member, or employee presents a potential hazard, has a responsibility and a duty to report this to the appropriate supervisor or to the Program Director.

Regardless of the responsibilities of the individual affected, and of other students, staff members, and employees, the immediate supervisor, who observes the presence of a potential hazard, has a specific responsibility to report this to his superior, and through him to the Department Chair or other appropriate administrator at that level, and to the Dean's Office.

Initiation Of Action

If it appears that a hazard is immediate and acute, the responsible supervisor, with the concurrence of his superiors (if this can be obtained in time), must take whatever measures appear to him to be necessary and prudent to prevent the person who represents the hazard from harming himself or any other person; and he will report the incident fully and promptly to his supervisor, and through him to the Program Director, Department Chair or other administrator at that level.

If the hazard is chronic, or only potential or suspect, and if the danger to others is not immediate, the supervisor should report his evidence through his superior to the Program Director, Department Chairman or other appropriate administrator at that level, who will be responsible for initiating any immediate action that he may deem to be necessary or appropriate.

Informing the Person Involved

When the Program Director, Department Chair or other administrator at that level receives a report that a person may represent a potential hazard, he will inform this person promptly and fully of the report that has been made concerning him, of the immediate actions that have taken, and of the investigations that are anticipated. He will give the person an opportunity to respond, will assure him of his right to introduce evidence, and will make an effort to enlist his cooperation.

Informing the Administration of the Medical College

After considering the information available in the case, the Program Director, Department Chairman or other administrator at that level will report this information along with any comments that he believes to be appropriate to the Dean (if a member of the academic staff is involved); to the Associate Dean (if a student is involved); or to the Senior Director, Human Resources (if any non-academic Cornell employee is involved).

In each case a copy of the report will be sent also to the Office of the Dean and to the Office of Legal Affairs, which will review the information available and advise the appropriate administrator, in order to ensure compliance with the necessary procedures, fulfillment of the responsibilities of the Medical College, and protection of the rights of the individual concerned.

Investigation of Potential Hazards

The underlying principles governing the reporting, investigation, and actions taken with respect to potential hazards should be the same for all people, whether they are students, academic staff members, or other employees.

Members of the Medical College community fall into three groups: the academic staff (including all individuals with academic appointments at the Medical College whether salaried or not), the students, and other employees. The actual administrative procedures for the investigation of potential hazards within these groups are carried out by somewhat different procedures. However, it should be understood that there will be no discrimination between academic staff members, students, and employees with regard to the level of proof required, the concern for the rights of the person, and the general nature of the corrective procedures, that are carried out. The Office of

Legal Affairs and the Dean's Office will monitor the procedures in every case, to ensure that this is true.

In the case of students, investigations will be carried out through the Office of the Senior Associate Dean, utilizing, when necessary, a special ad hoc committee of faculty members, who will call upon medical and other consultants and examiners, if necessary, in order to determine the facts in each case, and will recommend to the Dean what action should be taken.

In the case of academic staff members, the Dean, after consulting with the Department Chair, will, when necessary, appoint an *ad hoc* committee of faculty members, who will then call upon medical and other consultants and examiners, if necessary, in order to determine the facts of each case and to recommend to the Dean what action should be taken.

In the case of other employees, the Associate Dean or Senior Director, Human Resources, after informing the Dean's Office and the Office of Legal Affairs, will ask the Department of Occupational Health to carry out any necessary medical investigations by using its own staff and calling upon outside consultants when necessary.

Decision as to Whether a Potential Hazard Exists

The decision as to whether or not a potential hazard exists is an administrative responsibility. When it is brought to the attention of the senior responsible administrator that there is sufficient reason to believe that a potential hazard exists, based on the occurrence of acts, behavior or conditions outlined in this policy, it is the responsibility of this administrator to initiate the effort to determine whether or not the hazard actually does exist, and to take whatever long-range action is necessary to protect patients, students, or employees of the Medical College.

As a part of the effort to determine whether or not a potential hazard does exist, and to initiate the proper action, it can be expected that the administrator will call upon the opinions and the experience of appropriate members of the professional staff, of the Department of Occupational Health, and of the Personal Department, as well as other medical or legal consultants; and the information and opinions provided by these consultants may be critical in determining the decision that is made by the administrator. Nevertheless, the decision as to whether or not there is a potential hazard and what action is to be taken must be an administrative decision.

The responsibility for initiating and carrying out the actions described in this section rests with the Dean (in the case of members of the academic staff), with the Associate Dean (in the case of students), and with the Senior Director, Human Resources (in the case of non-academic employees); the responsibility for the ultimate decision rests with the Dean.

Confidentiality

Because of the potential harm to the reputation, associations, and career of a person who is suspected of being a source of hazard, every effort should be made to protect the confidentiality of the information concerning him, and the actions taken in his case. However, in view of the responsibility of the Medical College and of its staff for the protection of patients, students, employees, and other people from harmful acts or conditions of its staff or employees, there cannot be a guarantee of complete confidentiality when this runs counter to other legal and ethical responsibilities.

Protection of the Rights of the Individual

To identify an employee as a "hazard" to other employees or to the public could have a severely adverse effect upon his career, his employment, and his standing in the eyes of other people. On the other hand, to fail to identify and deal properly with employees who are potential hazards might do severe damage to the institution, to its other employees and students, and to the patients and other members of the public whom the institution wishes to protect. These two considerations may be complicated by the fact that in many cases, a decision as to whether a hazard does or does not exist must be based upon the informed judgment of experienced people, and that there may be legitimate differences of opinion about the conclusions reached.

For these reasons, when a person is reported to be a potential hazard, this report and the investigation stemming from it shall be held in strict confidence by those individuals with whom the information is shared until all of the facts have been ascertained; if the findings indicate that a potential hazard does exist, the actions undertaken shall be carried out as discreetly and confidentially as possible, with as little harm to the person, his career, and his standing in the community as is possible, and as much effort to be helpful and rehabilitative as possible.

It is extremely important to ensure that the medical and administrative investigations of reports be carried out in a fully competent manner, and that the actual presence or absence of a hazard be ascertained as concretely and definitively as possible.

It is also important that the person about whom the report has been made be fully informed of the nature of the report; that every effort be made to get him to cooperate with and understand that both medical and administrative investigations are necessary; and that he be given an opportunity to object to any procedures that he thinks are inadequate or inappropriate, and to ask for additional procedures or confirmatory opinions, if he wants these.

When reports of potential hazards are received in the Dean's Office, the staff and the Medical College legal advisor will ensure that these are directed to whichever of the three channels of investigation are appropriate, and ensure that the employee agrees to this. If the employee contends that no potential hazard exists and refuses to agree to an investigation by the usual procedure, the Dean may, at his discretion, convene an ad hoc committee of not more than three faculty members, who will consider the report and the evidence and will advise the Dean on whether or not an investigation should be carried out by the Medical College regardless of the wishes of the employee, and how this might be carried out.

Actions to Be Taken

The administrative actions to be taken in any case must be based upon all the facts that are pertinent to that case. Whatever the actions, they should be taken as discreetly as possible with an effort to protect the privacy of the individuals concerned. Where there is the reasonable possibility of medical treatment or other rehabilitation, an effort should be made to extend this to the person who has been deemed a hazard, and to restore this person to his full ability and capabilities if this is a reasonable thing to do.

Student Grievance Policy

It is a principle of the PBSB Program that the standards outlined above will be maintained within the Program in order to foster academic excellence and professional integrity. To achieve this, the

students must know the expectations and standards of the PBSB Program, understand how these will be applied and be familiar with the grievance process.

The grievance process should be applied as follows:

Informal Procedure:

1. Any individual student may approach any member of the Program administration for individual guidance or for a personal concern. To encourage timely and confidential resolution of issues, email is not recommended. Face-to-face or phone communication is preferred.
2. Students may seek advice from the Program Director about unresolved matters or responses that the student considers unsatisfactory.

Formal Procedure:

The Program will invoke formal procedures to address unresolved matters and, in those circumstances where an informal process is not realistic. The formal process is as follows:

1. The student should draft a letter describing in detail the student's grievance addressed to the Program Director. The student should explain what occurred, when it occurred, and how it affected him/her. In the letter the student must provide as much information as possible with supporting documentation. Students should be sure to indicate what resolution he/she may be seeking as a remedy.
2. In consultation with the faculty involved, the Program Director has discretion to request documents and relevant information that would be needed to conduct a full and fair assessment of the situation.
3. After investigating the complaint, the Program Director will respond to this letter with a formal written resolution in a timely manner.
4. Should the situation go unresolved, further advice may be sought by the student from the Associate Dean of Academic Affairs or the Dean of the Graduate School of Medical Sciences.

No set policies or procedures can anticipate every issue or situation and circumstances at times require alternations and/or adaptations. While maintaining a program commitment to these policies and applying them fairly, the Weill Cornell Graduate School for Medical Sciences, PBSB Program does, however, reserve the right to modify policies and/or procedures at times as it may deem necessary.

Reserved Rights/Changes to Policy

The PBSB Program, Graduate School and Medical College reserve the right to determine whether existing policies and procedures address a particular situation, or whether circumstances are of such magnitude to require additional actions. It is recognized that the Faculty at large reserves the authority to intervene in the application of these standards and procedures, although it is not anticipated that the Faculty will exercise this inherent authority unless the Faculty determines that existing policies and procedures do not address the situation.