# BCMB ALLIED PROGRAM

#### **PROGRAM OVERVIEW**

The BCMB Allied Program operates as an alliance between three affiliates:

#### **Biochemistry & Structural Biology**

The Biochemistry & Structural Biology program offers opportunities for advanced training in the application of biochemical, structural, biophysical, and imaging methods to address questions relating to biological processes and mechanisms. Program members pursue vigorous research in the areas of membrane-protein structure and function, membrane trafficking and synaptic transmission, protein folding, intracellular and cell-surface signaling pathways, protein modification, membrane biochemistry and biophysics, DNA replication and repair, and RNA silencing and processing.

#### **Cell & Developmental Biology**

The Cell & Developmental Biology program is comprised of over 75 faculty members whose research focuses on a wide range of topics related to the control of normal and malignant cell growth, differentiation, and tissue development. Purified proteins, isolated cells and tissues, and whole organisms are all being exploited as model systems, assisted by computational methods, genomics, and RNA profiling. Common themes throughout many of the research activities include the control of gene expression, signal transduction, cell growth and apoptosis, cell polarity and migration, stem cell biology, and cell-cell interactions.

#### **Molecular Biology**

The Molecular Biology program provides unique research training to students in the molecular pathways involved in control of cell growth. Regulation of cell growth is remarkably intricate, tying together nearly all the fundamental processes of cellular metabolism. For example, the products of oncogenes and tumor-suppressing and tumor-enhancing genes have been discovered to participate in pathways as seemingly diverse as signal transduction, repair of damaged DNA, regulation of gene expression, and control of the cell cycle.



### Application

All applications and materials can be submitted online at http://bit.ly/WCGS-Apply

## Weill Cornell Medicine Graduate School of Medical Sciences



#### WCGS Overview

- Collaboration of two leading research institutions – Weill Cornell Medical College (WCMC) and Sloan-Kettering Institute (SKI)
- Over 285 research faculty members, selected for their research excellence and academic mentorship

#### Why WCGS?

- Location: New York City's Scientific Corridor on the Upper East Side
- Research: Drug Discovery, Cancer Research, Stem Cell Research and Translational Medicine
- **Stipend:** \$41,000 per academic year, full tuition scholarship and subsidized housing

gradschool.weill.cornell.edu

# BCMB ALLIED PROGRAM

Timeline	Year <b>01</b>	Year <b>02</b>	Year <b>03</b>	Year <b>04</b>	Year <b>05</b>
Core curriculum courses	•				
Lab rotations	•				
Select research focus and Special Committee (thesis mentor plus two other faculty member experts in relevant research field)		•			
Admission to Doctoral Candidacy Examination (ACE) test (research proposal and oral examination)		•			
Submit PhD thesis description		•			
Lab research		•		•	
One elective course (two quarters)				•	
Develop PhD thesis			•		
Continue thesis research				•	
Meetings with Special Committee					•
Continue research and defend thesis					•

#### Links

For More Information:

- http://bit.ly/WCAllied
- http://bit.ly/WCBiochem
- http://bit.ly/WCDevBio
- http://bit.ly/WCMolBio



1300 YORK AVENUE, NEW YORK, NY 10065

To Apply: http://bit.ly/WCGS-Apply

Questions? WCGS-Admissions@med.cornell.edu

#### Faculty

The BCMB Allied Program has over 140 faculty members, with with research labs at Weill Cornell Medical College, Sloan-Kettering Institute and the Hospital for Special Surgery.

#### **Required Courses**

- Biochemistry and Structural Biology
- Logic and Critical Analysis
- Molecular Genetics
- From Genes to Cells
- From Cells to Organisms and Disease
- Quantitative Understanding
  in Biology
- Responsible Conduct of Research

#### Careers

WCGS is greatly focused on student outcomes and postgraduate career opportunities. We regularly host visits and talks by alumni, recruiters and career advisors, to discuss career opportunities and to help you develop the skills you need to succeed when looking towards your next steps. In addition, WCGS sponsors a Career Pathways Seminar series and is a sponsor of the Tri-Institutional Career Symposium and the What Can You Be with a PhD? Career Symposium. Graduates typically go on to postdoctoral and research associate positions at toptier laboratories before embarking on careers in fields such as academia, pharma, biotechnology, consulting, government work, and patent law.

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