

Graduate Program in Bioscience

The Rockefeller University is dedicated to improving human health through transformative discoveries and advanced education in the life sciences.

Our graduate program provides a select group of 200highly motivated students the opportunity to learn science in any of 81 laboratories working in 9 different research areas.

Our students and faculty, together with **325** postdocs and **1,325** research and support staff, make up a vibrant, collegial scientific community.

Rockefeller scientists have won a collective 2.4-Nobel Prizes, and 4.2 percent have been elected to the prestigious National Academy of Sciences.

Students and faculty live and work on our beautifully landscaped 14-acre campus on Manhattan's Upper East Side, where they have access to 8 modern research buildings containing over 4.81,000 square feet of lab space.

We are a modern, thriving institution: over the past 10 years, we have invested over 2 billion in new facilities, scientific equipment, faculty recruitment, and research support. Our River Campus expansion, to be completed in 2019, will add two acres and 160,000 square feet of lab space.

Our students pay $\mathbf{\$O}$ in tuition.





Vicky Moya, a fifth-year student in Nathaniel Heintz's laboratory, profiles specific populations of neurons in the brains of mice. Her work is part of a project to learn about molecular changes that occur in individual cells during the development of neurodegenerative disorders such as ALS.

"At Rockefeller it's all about supporting the science. That focus is what makes the work so much fun."

ROCKEFELLER'S SUPPORTIVE, flexible ACADEMIC PROGRAM IS DESIGNED TO ENCOURAGE exploration and independence.



To learn science, do science. It's the foundation of our educational program and the key to our students' success. The laboratory is the centerpiece of a Rockefeller education. With help from the Dean's Office and faculty, students choose a mentor and project, acquire relevant coursework, and plan and execute experiments designed to yield new knowledge.



With no departments and a unique, collaborative culture, Rockefeller's structure is designed to stimulate interaction between researchers from different disciplines. Students are an essential part of the 2,000-member community and play a leading role in much of its ongoing research. Many thesis projects lead to first-author publications in top-tier journals. 11.11

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work together as equals.

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Agata Smogorzewska is both a Rockefeller alumnus and a faculty member. Her lab studies DNA repair processes, which help cells prevent their genetic information from becoming corrupted. As a mentor, she encourages vigorous scientific debate, and prods students to be open to new ideas no matter where they originate. 0

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"Rockefeller encourages people to become better than they think they can be."

OUR bright, creative faculty ARE AMONG THE BEST IN THEIR FIELDS AND INCLUDE

AND INCLUDE INTERNATIONAL prizewinners and pioneers.

> Rockefeller faculty members are passionate, curious, and energetic. They are also highly decorated: Rockefeller has been home to 24 scientific Nobel Prize winners over the years. Faculty recruitment is an ongoing process designed to identify and attract the best bioscientists in the world, regardless of what they study.







WE INVEST HEAVILY IN OUR PEOPLE, PROVIDING **TESOURCES** and technology THEY NEED TO experiment and explore.



Great people need great tools. Rockefeller's modern culture is backed by a 115-year practice of supporting projects that others have neglected and funding the technology that makes high-risk, high-reward science possible.



ROCKEFELLER STUDENTS LEARN shoulder-to-shoulder

WITH DEDICATED, WORLD-RENOWNED MENTORS.



The world's brightest students should learn science alongside the best professors in the world. With 81 choices, there's a laboratory—and an advisor—for any interest. And since faculty administrative responsibilities are minimal, students and mentors have time for one-onone interactions and impromptu learning.



Frank Tejera, a second-year student in Albert J. Libchaber's laboratory—and the university's first Cuban student—investigates how subsurface ecosystems called microbial mats react to a changing environment. By studying the carbon, oxygen, and sulfur cycles of the Earth, the lab aims to understand the past and predict the future of the planet.

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"Rockefeller's unique program encourages scientific questions that lie at the interface between fields in my case, physics and biology."



THE DAVID ROCKEFELLER GRADUATE PROGRAM

professional and personal support

THAT ALLOWS OUR STUDENTS TO TAKE ON learning, not debt.

Cells and genes, not dollars and bills, are the focus of a Rockefeller education. We take care of the finances, including a stipend, health insurance for the whole family, and an annual research budget. Our on-campus Child and Family Center provides affordable group childcare for the entire community. THE PROGRAM LEADERS GET TO KNOW EVERY STUDENT ONE-ON-ONE, HELPING EACH

plan and execute

AN INDIVIDUALIZED COURSE OF STUDY.



In addition to mentorship from faculty advisors, students receive careful, thoughtful guidance from deans Sid Strickland and Emily Harms. Their job is to listen to what each student needs, and help create a strategy to achieve it.



CAREER DEVELOPMENT STAFF HELP STUDENTS explore options AND clarify goals.

A clearinghouse of opportunities, as well as a resource for one-on-one counseling, Rockefeller's Office of Career and Professional Development is a springboard to a rewarding career in science. From traditional academic appointments to jobs in biotech, pharma, business, and policy, students can use the office to weigh options, explore possibilities, and make connections.





Jingyi Chi, a third-year student in Paul Cohen's laboratory, uses molecular and genetic techniques to investigate the difference between white, beige, and brown fat cells, and to probe their ability to burn fat and dissipate heat. One of the Cohen lab's first students, Jingyi worked with Paul to select equipment, establish protocols, and help get the nascent laboratory up and running.

"Rockefeller's unique strength is its emphasis on bringing multiple perspectives to bear on a single biological problem."

age: John Abbot

ROCKEFELLER STUDENTS EFELLER STUDENTS ARE PART OF A tight-knit 24-hour community THAT'S SUPPORTIVE, RESPECTFUL,

DIVERSE, AND FUN.





The vast majority of students, postdocs, and faculty live on or near campus. There are barbecues, concerts, lectures, and film screenings, not to mention opportunities for informal gatherings in the Faculty and Students Club.



convenient, affordable, and guaranteed.

All Rockefeller students receive subsidized housing, on or near campus, from arrival through graduation. Bring your own furniture or use ours—either way the apartments are clean, secure, and comfortable, and rents start at \$640. 30

STUDENT LIFE IS ALSO ABOUT THE **extracurriculars.**

OUR STUDENTS PERFORM IN ORCHESTRAS, PLAY LEAGUE SPORTS, AND VOLUNTEER IN THE COMMUNITY.

Both scientific and nonscientific speakers fill the university's lecture calendar, and many make time for informal luncheons with small groups of students. And there are numerous options for the athletically or musically inclined, including a Tri-Institutional orchestra composed entirely of medical and scientific professionals.

ROCKEFELLER'S New York City campus PUTS STUDENTS AT THE

global epicenter

OF CULTURE AND COMMERCE.



Rockefeller's leafy, serene campus belies its location at the heart of one of the world's truly great cities, where easy access to museums, concerts, and theater provides an artistic balance to scientific education. New York City is also a burgeoning hub of bioscience activity, with more than a dozen academic institutions and a growing biotech industrial sector.



As a student, Chad Euler '10 worked on viral enzymes with antibiotic properties in Vincent A. Fischetti's lab. Now an assistant professor at Hunter College, he teaches clinical microbiology and conducts research on bacterial pathogenicity, antimicrobials, and autoimmune disease.

"Rockefeller intensified my passion for science, then gave me the tools to become a successful scientist."

A ROCKEFELLER EDUCATION OPENS DOORS TO CAREERS IN ACADEMIC RESEARCH AND MANY OTHER DISCIPLINES.



Dirk Hockemeyer '07 and Helen Bateup '08, who met at Rockefeller, both accepted faculty positions at UC Berkeley. Dirk works on telomeres—repetitive DNA sequences that protect chromosome ends—and Helen is interested in mutations associated with neurodevelopmental disorders.



After graduating in 2010, Alexis Gambis '10 went on to film school. He is the writer and director of *The Fly Room*, a film that recounts the birth of modern genetics, and runs his own nonprofit devoted to promoting science in filmmaking.



Cameron Bess '09 spent his time at Rockefeller working on viruses that affect millions of people. Now a senior research advisor at USAID, he's working to connect researchers in developing countries with federally funded U.S. scientists studying issues such as food security, disaster mitigation, child health, and infectious disease.



Natalie de Souza '02, chief editor of *Nature Methods*, chose a career that combines her love of science and her love of writing. The best part for her: an early look at the nitty-gritty experimentation behind cutting-edge papers.

Whatever your path, the skills you'll gain in critical thinking, experimental rigor, and analytical reasoning—not to mention the friendships and collaborations you'll form—will last a lifetime. Thirty-one of our 1,200 graduates are members of the National Academy of Sciences, and two have won Nobel Prizes. Their success speaks for itself.

How to apply

The David Rockefeller Graduate Program is devoted to advanced education in the biomedical and physical sciences. It seeks to recruit the very best students from around the world, and it offers hands-on training in the laboratory as well as a roster of required and elective courses on general research topics and scientific specialties. There is no core curriculum for the Ph.D. In consultation with the dean of graduate studies, students choose a flexible combination of courses totaling seven academic units taken in the first and second years.

The program charges no tuition. Students receive a \$38,200 annual stipend, and are guaranteed housing on or near campus at rents ranging from \$640 to \$1,130 a month. They have the option to be covered by comprehensive health, dental, and vision plans at the university's expense. Students who obtain competitive fellowships from outside sources receive a stipend supplement from Rockefeller.

Applications are evaluated by faculty working in a wide range of fields, and they look for students who have demonstrated a commitment to scientific excellence and who they believe will thrive in a flexible, interdisciplinary program.

Prerequisites

Students who enter the Ph.D. program must have received a bachelor or master of arts or sciences, or doctor of medicine or equivalent international qualification. Applicants must demonstrate a high level of achievement in the biological, chemical, mathematical, or physical sciences.

Application Process

Applications must be submitted online at **graduateapplication**. rockefeller.edu. They must include:

- A **personal statement** describing your academic background, research experience, and career goals
- An official transcript from each college or university you have attended
- Letters of recommendation from three or four sponsors who
 can assess your potential for research
- Your General GRE (required) and Advanced Subject GRE (recommended) scores and your TOEFL score if applying from a non-English-speaking country
- An application fee of \$50

Applications must be received by December 1, 2016, for entrance during the first week of September 2017.

Selected candidates will be invited to interview for a position in the graduate program in March 2017. During these visits, candidates have formal and informal opportunities to meet faculty and students, to visit laboratories and residence halls, to explore the campus and neighborhood, and to experience cultural opportunities in New York City.



For further information:

Office of Graduate Studies

The Rockefeller University 1230 York Avenue, Box 177 New York, NY 10065 phd@rockefeller.edu Telephone: 212-327-8086 Fax: 212-327-8505

graduate.rockefeller.edu

For information on the Tri-Institutional M.D.-Ph.D. Program:

weill.cornell.edu/mdphd mdphd@med.cornell.edu 212-746-6023 Tri-Institutional Ph.D. Program in Chemical Biology:

chembio.triiprograms.org tpcb@triiprograms.org 212-746-5267 The Rockefeller University is accredited by the New York State Board of Regents and the Commissioner of Education, 89 Washington Avenue, Albany, NY 12234, 518-474-1551.

Program title: Biological Sciences Program codes: 22043 (M.S.), 09328 (Ph.D.) HEGIS code: 0401

Program title: Physics Program codes: 22044 (M.S.), 09332 (Ph.D.) HEGIS code: 1902

The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education. Please contact James Rogers in The Rockefeller University Office of Security at 212-327-7339 to request a copy of the report. The U.S. Department of Education's website for campus crime statistics is ope.ed.gov/security.

It is the policy of The Rockefeller University to support equality of educational and employment opportunity. No individual shall be denied admission to the graduate program of the university or otherwise be discriminated against with respect to any program or in the administration of any policy of the university because of race, color, religion, sex, age, national or ethnic origin, citizenship, sexual orientation, veteran status, or disability. The Rockefeller University is committed to the maintenance of affirmative action programs that will assure the continuation of such equality of opportunity.

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