SOPHIE DAVIS SCHOOL OF BIOMEDICAL EDUCATION

Shailen Banerjee (B): pharmacology of antipsychotic drugs
Patricia Broderick (B): neuropsychopharmacology
Christopher Chan (B): characterization of neuronal circuit connections
Eitan Friedman (B, BC): neuronal signal transduction in drugs of abuse and in affective disorders
Paul Gottlieb (BC): assembly, replication and structure of cytoviruses; viral etiology of systemic autoimmune disease
Sanna Goyert (B, BC): defense mechanisms against bacterial pathogens
Ira Josephson (BC): properties, pharmacology, and development of cardiac Na, Ca, and K ion channels
Khosrow Kashi (B): biology of colon and pancreatic cancers and chemoprevention; regulation of lipid metabolism
Itzhak Mano (B): biology of glutamate and neurodegenerative diseases
Carol Moore (B, BC): protective mechanisms against oxidative stress
Serafim Pintol-Roma (B, BC): RNA-binding proteins and complexes, defects in mitochondrial gene expression
Linda Spitz (BC): microbiology: regulation of autoreactive B cells
Hoau-Yan Wang (B): molecular mechanisms of neurodegenerative diseases

BIOMEDICAL AND CHEMICAL ENGINEERING

Maroralikson: neural engineering, functional electric stimulation, epilepsy
Alexander Couzis (B): surface engineering, templated crystallization, bioglass, surfactant-facilitated wetting of hydrophobic surfaces
Stephen Cowin (B): orthopedic biomechanics, soft tissue mechanics, developmental biology
Morton Denn (B): rheology, polymer science, polymer processing, non-Newtonian fluid mechanics
Ilona Kretzschmar (B, BC): molecular and nanoparticle self-assembly and surface chemistry for electronics applications
David Rumschitzki (B): signal analysis methods for sensory signals, real-time imaging of human brain activity
David Schmeltzer (B): novel hydrogels, soft biomaterials, polymer/surfactant interactions
Maribel Vasquez (BC): nano-microfluid applications in tissue engineering

EARTH AND ATMOSPHERIC SCIENCES

Pengfei Zhang (C): environmental chemistry

10 Reasons to do a CUNY Ph.D. in Science at CCNY
Exciting Research!

We pursue projects that range from condensed matter physics to neuroscience, ultrafast photonics to environmental chemistry, nanomaterials to cancer cells, ecology to molecular biology, biophysics in the lab and in silico. The Science Division at The City College of New York (CCNY) includes about 80 research-active faculty scientists, with three members of the National Academy of Sciences and six University Distinguished Professors. In excess of 230 full-time faculty, researchers, and students are engaged in research, bringing in more than $17 million annually in grant funding. We publish widely, present our findings at numerous conferences, and present on prestigious review panels and editorial boards.

Flagship Institution

Since its founding in 1847, The City College of New York has provided world-class higher education to an increasingly diverse student body — serving as one of the single most important forces for social mobility in the nation. Access to excellence remains the vision of the College today. CCNY is now a Ph.D.-granting institution in the fields of biochemistry, biology, chemistry, physics, and engineering; our Earth and Atmospheric Sciences and Mathematics programs are also on their way to attaining comparable status in the near future.

Research Institutes and Centers

CCNY’s Science Division is home to several Universities and College Centers that bridge disciplinary boundaries and build on the complementary strengths of individual research groups. The Institutes focus on ultrafast spectroscopy and lasers, physico-chemical hydrodynamics, and macromolecular assemblies. The Centers study the cellular and molecular basis of development, remote sensing, and cancer research, cancer research, and cancer research.

Collaborations

Researchers in CCNY’s Science Division cooperate closely with their counterparts at the CUNY Medical School, New York Center for Biomedical Engineering, and Research Coordination Network for Emerging Methodologies of Molecular Structure Determination of Biological Solids, all housed on our campus. We have easy access to 9 high-field NMR spectrometers operating at 500-900 MHz, 3 cryoelectron microscopes, and an X-ray beam line for crystallography through the New York Structural Biology Center, a world-class consortium of 10 NY research institutions. Our faculty and students also benefit from the CCNY-Memorial Sloan Kettering Cancer Research Partnership, and numerous individual collaborations at Columbia, NYU, and the Albert Einstein, Mt. Sinai, and Cornell medical schools.

Job Placement

CCNY’s Ph.D. students and postdoctorals have secured academic appointments including CUNY, Brown, U. of Houston, Amherst, Howard, Interamerican U. of Puerto Rico, and the Tata Institute (India); they also work at NIH, FDA, and Lawrence Livermore National Laboratories, and at industrial firms including IBM, Bristol-Myers Squibb, Intel, Boeing, Lockheed Martin, Con Edison, MTA and Raytheon.

Facilities

The 360,000 sq. ft. Marsha Science Building houses excellent core facilities for electron and confocal microscopy, cellular microsurgery, solution- and solid-state nuclear magnetic resonance, x-ray diffraction and fluorescence for materials science, mass spectrometry, computational physics and bio-physics, and atomic absorption spectrometry.

Renovation is underway for interdisciplinary neuroscience research, and a new vivarium adjacent to the building has recently been completed.

Housing & Food

Located in the up-and-coming Hamilton Heights section of Manhattan, CCNY is accessible by major subway and bus lines. Walk to the NY Structural Biology Center or Columbia University, hop a quick train to the CUNY Graduate Center, attend seminars at other CUNY campuses, explore New York City’s cultural and recreational treasures.

The Towers is a new campus residence hall located at St. Nicholas Terrace and West 130th Street, housing 600 students in furnished, air-conditioned, wireless Internet-equipped apartment-style units with private or shared bedrooms. CCNY also refers students to International House housing 600 students in furnished, air-conditioned, wireless Internet-equipped rooms. CCNY also refers students to International House.

In addition to student and staff cafeterias, the Marshak Science Building boasts its own café with delicious coffees, teas and snacks. West Harlem’s ever expanding eateries including the Dinosaur Bar-B-Que, Hudson River Café, Covo and Talay. Within a few blocks of campus you can also find Dominican, Mexican, Puerto Rican, and Ecuadorian delights, all reasonably priced!

Location

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Collaborations

Professionals in our Ph.D. students typically includes part-time teaching duties for undergraduate lab courses, problem-solving sessions, and/or exam grading. Additional opportunities to teach high school and college students include research mentoring, curriculum design for CUNY’s GK-12 and College Now, programs, and re- search-inspired lab workshops conducted with CCNY’s Pathways Bioinformatics and Biomolecular Center.

Camaraderie

The CCNY Science Division Forum (http://forum.sci.cuny.edu) maintains up-to-date information on seminars and symposia, faculty and staff, core facilities, building services, course schedules, research opportunities, and Division administration. All- division parties and Town Hall meetings are held several times a year.

We trade research tips at group meetings, share use of exotic equipment, read drafts of grant proposals, and rehearse each other for upcoming Qualifying Exam presentations. CCNY’s Institute for Macromolecular Assemblies hosts a ‘Science of Taste,’ a get-together for students and faculty every two weeks. Our community aims to pull together!