

# Undergraduate Summer Research Program in Single-Cell Genomics

The [Center for Integrated Cellular Analysis](#) invites undergraduate students interested in biology, computational biology, and genomics to participate in our [2022](#) Undergraduate Summer Research Program. Our center develops DNA sequencing technologies to analyze single cells, a field known as single cell genomics, and applies them to better understand development, cancer, and neurodegenerative disease. Our laboratories are based at multiple institutions across [New York City](#), including the New York Genome Center (NYGC).

## Research areas

### Satija lab

New York Genome Center/  
New York University

Computational analysis for  
single-cell genomics

### Landau lab

New York Genome Center/  
Weill Cornell School of Medicine

Cancer genomics &  
evolutionary dynamics

### Phatnani lab

New York Genome Center/  
Columbia University

Genomics of neurodegenerative  
diseases

### Shah lab

Memorial Sloan Kettering  
Cancer Center

Cancer evolution, single-cell  
genomics and transcriptomics

### Tosches lab

Columbia University

Developmental &  
evolutionary neurobiology

### Cao lab

The Rockefeller University

Technology development for  
single-cell genomics

### Rabadan lab

Columbia University

Mathematical genomics

### Olah lab

Columbia University

Translational & computational  
neuroimmunology

- **Learn to design and perform single-cell sequencing experiments**
- **Receive introductory training in R and python programming languages**
- **Discover new imaging and sequencing-based technologies**
- **Perform data analysis and interpretation**

## Program highlights

- 8-week hands-on research
- Work with a mentor to develop a research project
- Attend lab meetings & journal clubs
- Career counseling & mentoring
- Highly competitive stipend

## Who are we looking for?

- Students with strong interest in Biology, Genomics or Computational Biology.
- Students from groups traditionally underrepresented in STEM fields
- Students interested in entering an MS or PhD program in Biology, Genomics or Computational Biology.

Application website:  
[www.multimodalintegration.org/usrp](http://www.multimodalintegration.org/usrp)

Program dates: June 6 - July 29, 2022  
Application deadline: February 1, 2022  
Questions? Contact us: [cegs.ica.internship@gmail.com](mailto:cegs.ica.internship@gmail.com)