NanoBio Research and Education at the City University of New York

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What is CUNY?
The largest and most diverse urban public university system in the US; #1 in socio-economic upward mobility

**243,000**
Undergraduate & Graduate Students

**60%**
First Generation to go to College

**Diverse**
- 22% Asian/Pacific Islander
- 26% Black
- 31% Hispanic
- 21% White

**82%**
Alumni stay in New York City

**82%**
Freshmen are NYC Public High School Graduates
An Integrated System to grow and diversify STEM research
ASRC: NYC hub for interdisciplinary research

Environmental science
Neuroscience
Structural Biology
Photonics
Nanoscience
What is NanoBioNYC?

An NSF-funded Research Traineeship (NRT) program focused on developing groundbreaking bio-nanoscience solutions to address urgent human and planetary health issues and preparing students to become tomorrow’s leaders in diverse STEM careers.
We are a CUNY-wide community

NanoBioNYC Launch

NanoBioNYC Social
Bionano Research Foci

Personal care products  drug delivery  tissue scaffolds

energy harvesting  biodegradable plastics  emulsifiers

Batteries, displays, electronics, etc.
RESEARCH – Focus Areas
• Green Materials and Environmental Solutions
• Interfacing Nanotechnology and Biology
• Design of Functional Materials
• Cross-Cutting Computational Research

Hands-on practical laboratory training at CUNY ASRC core facilities in:
• Nanofabrication
• Nanoscale Imaging
• Surface Science
• and more!

PROFESSIONAL DEVELOPMENT - Supporting Diverse Career Tracks

• **Entrepreneurship course** for STEM graduate students developed with the business school (Baruch College).

• **Industry**: internships at partnering companies

• **Start-up/Entrepreneurship**: participation in NSF I-Corps

• **Academia or Government Labs**: internships at partnering institutions

Workshops:
• Citation Manager
• Discover Your Career Strengths
• Presenting Your Science
• IMMERSE – The Living Battery

Student Awards:
Monetary ($) awards to celebrate students who excel in their research!
Recruiting a student body as diverse as NYC

Recruit from within the CUNYverse

Nanoscience REU program at Columbia University and CUNY ASRC

Number of Students by Gender

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2018</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2019</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
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URM Students (%)

- 2017: 100
- 2018: 80
- 2019: 70
“The environment here fosters a collaborative approach where I feel supported both by my professors and my peers. This is a great place to partake in exciting research in a variety of different subdisciplines.”

“The most exciting part about being in a new program is being able to chart a new course outside of the normal.”

“Being connected to talented scientists of differing expertise around central nanoscience topics is what excites me most about the program.”

“What excites me most about NanoBioNYC is the guidance to make informative decisions for the next step in your scientific career and the tools provided to navigate the job market.”

www.NanoBioNYC.com

Or reach out to Tasnim Jackson, Program Coordinator
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