

## Job Posting: 40032 - Position: Research Assistant

<b>Co-op Work Term Posted:</b>	2023-2024
<b>Application Deadline</b>	01/30/2023 11:59 PM
<b>Application Method:</b>	Online via system
<b>Posting Goes Live:</b>	01/16/2023 3:54 PM
<b>Job Posting Status:</b>	Approved

### ORGANIZATION INFORMATION

<b>Organization</b>	Brigham & Women's Hospital, Harvard Medical School
<b>Division</b>	Brigham and Women's Hospital
<b>Website</b>	<a href="https://www.thejoshilab.com">https://www.thejoshilab.com</a>

### JOB POSTING INFORMATION

<b>Position Type</b>	Professional Experience Year Co-op (PEY Co-op: 12-16 months)
<b>Job Title</b>	Research Assistant
<b>Job Location</b>	Boston, MA
<b>Job Location Type</b>	On-Site
<b>If working on site, can you provide a copy of your COVID-19 safety protocols?</b>	Yes
<b>Number of Positions</b>	6
<b>Start Date</b>	May 01, 2022 12:00 AM
<b>End Date</b>	April 30, 2023 12:00 AM
<b>Job Function</b>	Research
<b>Job Description</b>	

Note: This is a stipendary position. The lab will support you in obtaining a work visa.

Research Assistant

The Joshi Lab – Brigham and Women's Hospital, Harvard Medical School

<https://www.thejoshilab.com>

Biomaterials and Drug Delivery

Project Title: Next generation biomaterials for therapeutic applications

Project Scope: The student will develop next generation biomaterials; including hydrogels, microparticles and nanoparticles for multiple therapeutic applications, through a highly multidisciplinary approach. These biomaterials and their therapeutic formulations will be characterized using dynamic light scattering (DLS), chromatography, FTIR, transmission electron microscopy and other characterization techniques. Additionally, the student will also evaluate the therapeutic effects of these formulations in vitro using cell culture assays.

The Joshi Lab is a part of the Department of Anesthesiology, Perioperative and Pain Medicine and the Center for Nanomedicine at the Brigham and Women's Hospital. Our goal is to develop translatable drug delivery technologies to address unmet clinical needs. Working at the interface of chemistry, material science, biology, and medicine, our highly interdisciplinary and collaborative research focuses on solving medical problems across a wide range of diseases, including arthritis, HIV, lung inflammation, and brain related disorders.

In addition to the rich research environment among top institutions in Boston such as Harvard and MIT, the student will gain exposure to other translational projects in the lab. The research assistant is expected to be enthusiastic, sincere and most importantly — a team player. The student will have opportunity to master his/her skills in research planning, scientific presentation and writing, and appreciate unique challenges in academia versus industry.

### **Job Requirements**

Prerequisites:

- Enthusiasm and willingness to accept challenges to perform high impact research.
- It's preferred but not necessary that the student should have some knowledge of drug delivery or formulations and/or taken courses on Biology, Biomaterials, Organic Chemistry, Analytical Chemistry, Nanotechnology, Bio nanotechnology etc.
- Experience in academic or industrial research, or team-based projects will be an extra asset.

### **Preferred Disciplines**

Chemical Engineering  
Engineering Science (Biomedical)  
Engineering Science (Nanoengineering)  
Engineering Science (Physics)  
Engineering Science (Robotics)  
Materials Engineering  
Mechanical Engineering  
Biochemistry  
Biological Chemistry  
Chemistry  
Molecular Biology & Biotechnology  
Neuroscience  
Pharmaceutical Chemistry  
Pharmacology & Toxicology

## **APPLICATION INFORMATION**

**Application Receipt Procedure** Online via system

### **Additional Application Information**

Please apply online with cover letter, resume & unofficial transcript to the attention of: Prof. Nitin Joshi.

**Why should you apply?**

We care deeply about mentoring and our unique style allows undergrads to have a lot of independence to think creatively in their research. Our goal for undergrads is not just to implement the tasks given by senior members of the lab, but to build your creative, analytical and communication skills. Previous research experience is not required. If you are hardworking, motivated and self-driven we encourage you to apply. Previous students from U of T that have worked at the Joshi Lab have been named on patents, lead authorships on publications and have gone on to do an MD or PhD in top schools.

**ADDITIONAL INFORMATION**

**Length of Workterm**                      FLEXIBLE PEY Co-op: 12-16 months (range)