Research Assistant -School of Engineering
Tufts University

Job Title	Research Assistant -School of Engineering
Department	
Institution	Tufts University Medford, Massachusetts
Date Posted	Nov. 17, 2023
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Professional Staff
Academic Field(s)	Research/Technical/Laboratory
Job Website	https://jobs.tufts.edu/jobs/19784?lang=en-us&iis=Job+Board&iisn=AcademicKeys
Apply By Email	
Job Description	

Overview

Biomedical engineering is a discipline of growing importance in society and is a vital and growing part not only of the Boston area but also of the whole US territory infrastructure – industry, academics, and hospitals. Established at Tufts University in September 2002, the Biomedical Engineering Department is located in the Science and Technology Center (4 Colby Street, Medford, MA), a state-of-the-art research and teaching facility, which also houses the cutting-edge interdisciplinary research activities of the Tissue Engineering Resource Center. The job is specifically in the integrated biofunctional and imaging laboratory (iBIT Lab - https://sites.tufts.edu/mallidi/) within the BME Department

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What You'll Do

Under the close supervision of the Principal Investigator, the Research Assistant will work on projects involving fabrication of nanoparticles for cancer diagnosis and therapy in the iBIT Lab. This position is part of an interdisciplinary team with expertise in tumor biology, biophysics, imaging, nanotechnology and cancer therapeutics.

- Set-up, develop and prepare routine and specialized theranostic nanoparticles for in-vitro and in-vivo experiments
- Perform relevant in-vitro and in-vivo work to evaluate efficacy of therapeutic nanoparticles
- Perform advanced procedures such as immunohistochemistry assay, apoptosis studies, flow cytometry, genotyping, qPCR, RTpCR, Western Blots, ELISA as required to evaluate nanoparticle efficacy
- Develop research study design and techniques in collaboration with the Principal investigator
- Assist with establishing lab protocols, write-up, and updates of general lab activities
- Analyzes and interprets data, drawing conclusions which are subsequently depicted graphically using tables, graphs, and charts
- Writes the research summaries and material for presentations and publications
- Maintaining any relevant or appropriate databases
- Specific experimental assistance as needed

What We're Looking For

Basic Requirements:

• Masters degree in chemical engineering, biomedical engineering, chemistry, biology, cell and molecular biology, pharmaceutics or related field with greater than 2 years of related laboratory experience and scientific publications.
• Research experience in an academic lab conducting innovative nanosynthesis approaches, particularly, liposomes, gold nanoparticles, iron nanoparticles or perfluorocarbon nanodroplets.
• Experience with cell culture techniques, molecular biology techniques (western blots, ELISA etc) and fluorescence imaging is a must
• Excellent verbal and written communication skills; highly self-motivated; ability to work in a team or individually; excellent attention to detail. Flexibility to work on various projects.
• Must be able to prioritize urgent tasks while ensuring established deadlines are met.

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- Experience with handling lab animals is a plus.

Preferred Qualifications:

- Experience with Adobe Illustrator, MATLAB, GraphPAD Prism is a plus
- Highly motivated and enthusiastic about research in the cancer theranostics field.

Pay Range

Minimum $47,800.00, Midpoint $59,850.00, Maximum $71,900.00

Salary is based on related experience, expertise, and internal equity; generally, new hires can expect pay between the minimum and midpoint of the range.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

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