



TEXAS TECH
UNIVERSITY



The Srivastava Lab

Bioinspired Nanotechnology for Improving Healthcare

Undergraduate Researcher Positions in Nanotechnology for Disease Diagnostics and Image-Guided Interventions

Position Description: The Srivastava Lab in the Department of Mechanical Engineering at Texas Tech University (TTU) is seeking highly motivated undergraduate students interested in gaining research experience in Nanotechnology for Disease Diagnostics and Image-Guided Interventions. The undergraduate students can be supported through the TTU Honors College. At The Srivastava Lab, we combine the unique characteristics of natural biomaterials with nanoengineering design principles to make biomimetic nanoparticles for early diagnosis and image-guided surgical/therapeutic interventions of diseases including cancer, cardiovascular diseases, and bacterial pathogenesis. The starting date is **Fall 2023**. The candidate will assist in setting up the lab and be involved in developing novel nanotechnologies for the delivery of nanotherapeutics and disease diagnosis. They must be self-motivated and capable of working as part of a team. The Srivastava Lab is committed to hiring diversely and inclusively.

Required Qualifications and Skills:

- We encourage applicants to be currently undergoing an undergraduate degree in Mechanical Engineering, Bioengineering, Chemical Engineering, or a related field at TTU.
- Undergraduates who join our lab gain research experience in one or all the following areas: **nanoparticle synthesis, nanoparticle characterization, and mammalian cell culture**.
- We seek individuals that are self-motivated with the ability to work on scientific projects as part of a team under the supervision of a graduate student mentor.
- Strong writing and verbal communication skills are necessary.
- The Srivastava Lab expects the hired students to be respectful and committed to building an inclusive and welcoming laboratory environment.

Application Instructions: If you are interested in this position, please contact Prof. Indrajit Srivastava at [indrajit.srivastava at ttu dot edu](mailto:indrajit.srivastava@ttu.edu). The subject heading of your email should be "The Srivastava Lab Undergraduate Researcher Position in Nano-Enabled Technologies: [Your Name]". Please include (i) a cover letter (no more than one page), and (ii) your CV. We encourage you to tell us using your cover letter why you are a good fit for the position. Please use it to tell us a little as to why you're interested in conducting biomedical research, and how the research experience in The Srivastava Lab will help you achieve your immediate and long-term career goals. *Applications that do not adhere to these instructions will be considered incomplete and not receive any response.*

About Prof. Indrajit Srivastava: Prof. Srivastava is an Assistant Professor of Mechanical Engineering at Texas Tech University. He obtained his B.E. degree in Metallurgical Engineering and Materials Science from the Indian Institute of Engineering Science & Technology, Shibpur, India, and his M.S. and Ph.D. degrees in Bioengineering from University of Illinois at Urbana-Champaign (UIUC). He subsequently worked as a postdoctoral research associate at the departments of Bioengineering & Electrical & Computer Engineering at UIUC. He has published over 25+ research articles in peer-reviewed, high-impact scientific journals including *Advanced Functional Materials*, *ACS Nano*, *PNAS*, and *Nature Communications*. His scientific and outreach works have been recognized with several awards and honors, including multiple Baxter Young Investigator Awards, American Chemical Society Future Faculty Scholar, and BMES Career Development Award. Through his mentoring and outreach activities at UIUC, he has shown his commitment to enhancing diversity, equity, and inclusion in STEM.