Postdoctoral Research Position in Nanomedicine / Cancer Immunotherapy
Werfel Lab (iNBS Lab), University of Mississippi, Oxford, MS

The Interdisciplinary NanoBioSciences (iNBS) Lab at the University of Mississippi (inbslab.olemiss.edu) invites applications for a postdoctoral research position to work on a project funded by the NIH. The project will involve controlled radical polymerization of glycopolymers with complex architecture, physicochemical optimization and characterization of nanoparticles, in vitro evaluation of cell targeting, and in vivo evaluation of immunogenicity and immunotherapy efficacy. In addition, time will be given for the pursuit of the researcher’s independent research ideas, grantsmanship, time management, and training in teaching and mentorship.

Candidate Qualifications:

The preferred candidate will have a Ph.D. in Biomedical Engineering, Chemical Engineering, Polymer Science, or a related field. The candidate should have expertise in controlled radical polymerization such as RAFT, ATRP, or related techniques. Candidates with experience in any of the following areas, in addition to polymer chemistry expertise, will be given preference: nanoparticle fabrication and characterization, drug delivery principles (e.g. drug loading, controlled release, pharmacokinetics / biodistribution, and drug targeting), cell culture models and experimental techniques (e.g. western blot, PCR, flow cytometry, fluorescent microscopy), and murine models of breast cancer. Candidates should have a strong desire to increase their exposure to the fields of drug delivery and cancer immunology through this position.

Required Tasks of the Job:

- Perform chemical synthesis including small molecule synthesis, bioconjugation, and polymer synthesis
- Formulate and characterize the physicochemical and biological properties of nanoparticles
- Evaluate the in vitro and in vivo drug delivery properties of targeted nanomedicines
- Perform independent research and contribute new research ideas
- Use organizational skills and multitasking to accomplish multifaceted goals
- Develop oral and written communications skills, contributing to grant reports and new grants, patent applications, manuscripts, and conference presentations

To Apply:

Interested candidates should apply at careers.olemiss.edu by submitting a combined PDF of the following: cover letter, curriculum vitae, two sample manuscripts, and contact information for three references. The cover letter should state clearly the candidate’s research experience, interests, and future career goals. Any inquiries related to the position can be sent to Dr. Thomas Werfel (tawerfel@olemiss.edu).