Post-Doctoral, Department of Chemistry at Smith College

Description

Job Description - The Department of Chemistry at Smith College invites applications for a 2-year benefits-eligible Postdoctoral Fellow within the laboratory of Dr. Lesley-Ann Giddings. The Giddings lab studies microbial secondary metabolism in extreme environments and seeks a highly motivated Postdoctoral Fellow to perform directed evolution on enzymes involved in natural product biosynthesis. A Ph.D. in Chemistry, Biology, or related areas is expected by the time of appointment and the desired start date is Spring 2024. Women, historically underrepresented minorities, veterans, and individuals with disabilities are encouraged to apply.

Responsibilities - The goal of this National Science Foundation-funded 2-year fellowship is to characterize and evolve siderophore biosynthetic enzymes to accept unnatural substrates using a yeast-based assay. Specific experimental goals include optimizing a high throughput yeastbased screen for directed evolution, preparing mutant and DNA libraries, metagenomic sequencing, protein expression and purification, and enzyme kinetics. Relevant publications include PLOS ONE, PMID: 33784308 and PMID: 32785287. An ideal candidate will preferably have expertise in performing protein engineering in yeast, metagenomic sequencing, and bioinformatic analyses. Other responsibilities include co-writing peerreviewed articles, mentoring undergraduate researchers in the laboratory, and participating in weekly lab meetings. Participation in teaching undergraduate courses is possible although not required. Financial support for conferences/workshop travel and career development will also be provided. The Department of Chemistry has state-of-the-art facilities and instrumentation, and our faculty are lead active research programs with undergraduate students. The Smith College Clark Science Center houses several centers, including the Center for Mass Spectrometry, Center for Molecular Biology, Center for Microscopy and Imaging, and the Center for Aqueous Biogeochemical Research, which is staffed with experienced personnel who teach and work alongside researchers to help them meet their scientific goals. The Sherrerd Center for Teaching and Learning provides workshops and resources for those interested developing best practices for effective and inclusive teaching.

Qualifications - Ph.D. in chemistry, biology, engineering, or a related discipline.

Contact - Lesley-Ann Giddings, Lgiddings@smith.edu

Post End Date - 04/15/2024

Contacts

Organization - Smith College

Hiring organization

Smith College; https://smithcollege.wd5.myworkdayjobs.com/smithcollege/job/Smith-College/Postdoctoral-Fellow R-202300755

Date posted March 1, 2024

Location - Northampton, MA

Website

- https://smithcollege.wd5.myworkdayjobs.com/smithcollege/job/Smith-College/Postdoctoral-Fellow_R-202300755

Email - Lgiddings@smith.edu

Post End Date - 04/15/2024