

Postdoctoral Research Scientist - Biochemistry

Overview

Bigelow Laboratory for Ocean Sciences invites applications for a Postdoctoral Research Scientist to complement the mission of our non-profit research institution. The Laboratory was established in 1974 and is located on the coast of East Boothbay, Maine, USA, in a modern, LEED-certified research and education campus. Bigelow Laboratory is a leading oceanographic institution with the mission to investigate the microbial drivers of global ocean processes through basic and applied research, education, and enterprise. For additional details see <https://www.bigelow.org/about/>.

This position will apply research on enzyme-based halogenation processes in macro- or microalgae to a globally significant environmental issue. You will isolate an ideal algal enzyme, from a suite of potential candidates that can be used along with associated substrates, in an industrial application to inhibit a key microbial process. We consider this research to be commercially valuable and so it will combine applied 'non-disclosure' aspects with pure, publishable research investigations. You will need to be familiar with aspects of enzymology including extraction and purification, reaction kinetics, and linking enzyme activity to functional control through genomic and transcriptomic approaches. The position may be responsible for supervising a technician and undergraduate research students.

Minimum qualifications:

- Ph.D. degree in Biochemistry, Chemistry, Molecular Biology or Microbiology.
- Research experience in the biochemistry of enzyme processes, ideally of halogenation mechanisms.
- Experience with heterologous gene expression.
- Strong oral and written skills as demonstrated by a record of publication including a Ph.D. dissertation.

Responsibilities:

- Conduct independent laboratory experiments to examine microbial processes in coordination with funded research under the supervision of Drs. Steve Archer and José A. Fernández Robledo. This research includes enzyme purification and characterizations; application of enzymatic reactions to address an industrial process; mining microbial and eukaryotic genomes and RNA-Seq; cloning and expression of genes using heterologous expression systems.
- Analyze and synthesize data and write manuscripts for publication on these experiments.
- Other: participate in fieldwork, professional development activities, laboratory meetings, conferences, and mentoring students and technical staff.

Apply

Applicants should submit the following to our [online application portal](#):

- A one-page cover letter describing interest in the position
- A detailed curriculum vitae
- Contact information for three references

For full consideration, the application should be submitted by February 4, 2019; applications will be reviewed upon receipt. All applications will be acknowledged upon receipt. Questions can be sent to jobs@bigelow.org.

Bigelow Laboratory is an Equal Opportunity/Affirmative Action Employer.