

High-resolution insight into aquatic ecosystems

From detection to interpretation — powered by advanced molecular tools

Bigelow Laboratory offers advanced environmental DNA (eDNA), environmental RNA (eRNA), and molecular profiling services to detect, track, and understand biological activity in aquatic systems with high sensitivity and resolution.

Using molecular approaches, our scientists help clients assess biodiversity, track harmful or invasive species, and understand ecological function across freshwater and marine environments. These tools provide a multidimensional view of ecosystems, revealing the presence, abundance, and behavior of organisms ranging from cyanobacteria to whales.



WHAT WE OFFER

Our services help answer practical questions about aquatic ecosystems, for everything from detailed scientific research to community-driven monitoring efforts, including:

- Biodiversity assessments
- Species detection
- Early warning and monitoring
- Water quality applications
- Algae and toxin assessments

Our team supports projects at every stage, from experimental design and field sampling to bioinformatics, data interpretation, and communication of results.

GET STARTED

To discuss project design, sample submission, or collaboration opportunities, contact

Molecular services team
Email: services@bigelow.org
Phone: (207) 315-2567 x302

SCAN TO LEARN MORE



WHY WORK WITH BIGELOW LABORATORY

Collaborative expertise

We partner with clients to design or adapt molecular tools to meet project-specific goals, rather than relying on off-the-shelf approaches.

Strong data through smart design

Our scientists help develop effective sampling and experimental strategies to ensure results are reliable and interpretable.

Bioinformatics and ecological insight

We combine advanced bioinformatics with deep ecological expertise to turn complex molecular data into meaningful understanding.

Experience across systems

Our work spans lakes, rivers, coastal waters, the open ocean, deep sea, and polar environments.

Bigelow | **Laboratory for Ocean Sciences**

Bigelow Laboratory offers a wide range of cutting-edge scientific services that power discovery, innovation, and real-world solutions. To see what else we offer, **visit bigelow.org/services.**