

The [Strader Lab](#) studies how environmental changes affect marine invertebrates from the level of the epigenomic landscape to an evolutionary ecology viewpoint. The [Buckley Lab](#) studies immune system evolution from the perspective of echinoderms to uncover fundamental aspects of animal immune response and investigate the origins of vertebrate adaptive immunity. Together, these two labs within the Department of Biological Sciences at Auburn University have recently embarked on an NSF-funded, interdisciplinary project to identify linkages between environmentally-induced epigenetic changes and immune response phenotypes. This research employs the larval stage of the purple sea urchin (*Strongylocentrotus purpuratus*), an experimentally tractable model system with extensive genomic resources that plays a key role in the marine ecology.

We are currently recruiting a **Postdoctoral Researcher** to work primarily in the Strader lab in close collaboration with the Buckley Lab. The proposed research integrates aspects of global change biology, whole genome multi-omics analyses (e.g., DNA methylation, transcriptomics, Chip-Seq), ecological immunology, experimental marine biology and functional genetics. We expect candidates to have strengths in any one of those subfields and interests in developing skills in any of the others.

Ideal candidates will have:

- A Ph.D. in biology, bioinformatics, or related field and publication record appropriate for career level
- Experience with analyzing and interpreting high throughput sequencing data in non-model systems with a preference for knowledge of marine invertebrate genomics
- Experience profiling microbial community compositions using sequencing data
- Strong skills in bioinformatics and data management
- Strong background in biostatistics, particularly genomic and ecological data
- Excellent written and oral communication skills
- Interest in understanding epigenetics mechanisms regulating gene expression in non-model invertebrates
- Experience mentoring and managing diverse groups of students of various levels
- Dedication to outreach and science communication, especially in promoting BIPOC in STEM.

This position is fully-funded for two years through the National Science Foundation. Applications by members of all underrepresented groups are strongly encouraged. In fact, we would like candidates to address their approach to mentoring and promoting diversity in STEM in their cover letter. To apply or for additional enquiries, please email a cover letter and CV to Drs. Strader and Buckley ([mes0192@auburn.edu](mailto:mes0192@auburn.edu); [kmb0163@auburn.edu](mailto:kmb0163@auburn.edu)) by **November 15, 2021**. Position will remain open until filled.

Successful applicants will join the [Department of Biological Sciences at Auburn University](#), a welcoming, inclusive environment of 39 research faculty (45% female), and over 100 graduate students. Auburn University is an R1 University and one of the nation's premier land, sea and space grant institutions. Auburn residents enjoy a thriving community that is recognized as one of the "best small towns in America," with moderate climate and easy access to major cities or to beach and mountain recreational facilities.