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## Use and optimization of molecular tools for assessing marine systems



Marine environments are changing and sea surface temperatures are increasing. We have detected these changes with a variety of technological advances, from autonomously collected satellite data to *in situ* measurements. Here, I will discuss the impact these changes have on marine organisms from tropical coral reefs of the Caribbean to the temperate California Coast. Using molecular technologies, we measure transcriptomic responses as well as the impact changing marine environments have on the associated marine biodiversity. I will discuss the importance of biological observations in assessing the health of marine environments as well as benefits of molecular-level observations that would otherwise not be detected by traditional assessments. Molecular-based approaches are allowing us to examine natural systems using novel methods that enhance the ways we observe ecosystems and gain new insights into how organisms respond to changing environments.

**Colin Closek, PhD**  
**Friday, January 25, 2019**

3:00 – 4:00 PM

Science 2, room 109

For further information: [www.csufresno.edu/biology](http://www.csufresno.edu/biology)

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**Bio:** Collin Closek is an Early Career Science Fellow at the Stanford Center for Ocean Solutions and a Postdoctoral Scholar in the School of Engineering at Stanford University. He works with NOAA and other academic partners to assess marine biodiversity through environmental DNA (eDNA).

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If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner at the Department of Biology at 278-2001 or e-mail [lgarner@csufresno.edu](mailto:lgarner@csufresno.edu) (at least one week prior to event).