

Adam Hallaj

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Education

December 2019 B.S. in Biology, *College of Science and Mathematics*, Temple University, Philadelphia PA

Relevant Professional Experience

- March 2020 - Present **Lab Technician** with the Bernal Laboratory, Auburn University.
- Successful routine execution of DNA/RNA isolation and qPCR amplification SOPs.
 - Compilation of monthly spending statement reports.
 - Supervisor of chemical inventory and hazardous waste disposal using Chematix, Auburn University's chemical inventory application.
 - Oversight and administration of biological, chemical, and lab safety training for all lab personnel.
 - Submit work orders for essential routine lab equipment maintenance.
 - Maintain consistent stock of consumables, reagents, and PPE.
 - Shipment and reception of sensitive samples and hazardous materials in compliance with university and shipping partner protocols.
 - Assembly of *Lutjanus synagris* transcriptome using the Alabama Supercomputer.
- June 2017 - January 2020 **Undergraduate Researcher** with the Cordes Laboratory, Temple University.
- Assist in designing, setting up, and conducting ecological experiments in aquaria.
 - Successful routine RNA isolation and quality analysis for lab-wide transcriptome projects.
 - Routine autoclave sterilization of equipment and glassware.
 - Filtration of eDNA from water samples for aquatic diversity surveys.
 - Water chemistry analysis with a Mettler Toledo DL15 to assess total alkalinity of water samples acquired from fieldwork and in-lab experiments.

Field Work

- October 2018 **Costa Rica Margin Expedition (ROCHITS)** aboard the *R/V Atlantis* with *HOV Alvin*. 10 days at sea. Chief Scientist: Erik Cordes.
- Identified and processed deep-sea biological samples collected during submarine dives.
 - Assisted in the deployment and retrieval of CTD rosettes, analyzed accompanying data, and preserved water samples for further lab analysis.
 - Set up and managed portable water filtration system to provide fresh seawater for live samples.

Experimental Experience

Published, *Scientific Reports*

Cold water coral response to multiple stressors: High temperature affects recovery from short term pollution exposure

Weinnig A.M., **Hallaj A.**, Gomez C.E., Cordes E.E.

- Aquarium maintenance.
- Perform RNA extractions for transcriptomic analysis.

Manuscript Submitted, *Coral Reefs*

Effects of temperature increase on the metabolic performance of the cold-water coral *Lophelia pertusa*

Gomez C.E., Gori A., Winnig A.M., **Hallaj A.**, Keller A., Cordes E.E.

- Perform incubations with live coral to assess changes in excretion, respiration, and feeding rates.
- Aquarium maintenance.
- Statistical analysis of resulting data using excel and R.

Presentations

April 2019

Physiological Response of the Cold-Water Coral *Lophelia pertusa* to short term temperature changes at the Symposium for Undergraduate Research and Creativity

References

Erik E. Cordes, Ph.D.

Biology Professor, Temple University

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Moisés A. Bernal, Ph.D.

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