

Research Matters: Coral reef restoration, biodiversity breakthroughs

University of Guam ORSP
For Pacific Daily News

A \$20 million cooperative agreement with the National Science Foundation has allowed the University of Guam to conduct research to restore Guam's coral reef ecosystems and establish coral nurseries to replenish corals damaged by rising sea temperatures, sedimentation and pollution.

The funding, known as EPSCoR—the Established Program to Stimulate Competitive Research—began in 2020.

For Guam, protection of coral reefs is directly tied to the economy and well-being of the island. A 2023 federal government report placed the value of Guam's coral reef ecosystem at between \$63.4 million and \$73.6 million annually. Reefs contribute to recreation and tourism, commercial fishing and cultural heritage.

Healthy reefs also serve to physically protect the island by reducing wave energy and coastal flooding.

Bastian Bentlage, PhD, associate professor of bioinformatics, heads the research teams that have collected and analyzed genetic, genomic, oceanographic, and ecological data in Guam and the region. The results of these studies are a deeper understanding of reef ecosystems, including the cellular processes of corals under environmental stress such as rising sea surface temperatures and coastal runoff.

Research publications

This expansion of scientific knowledge in the region has led to several publications and breakthroughs by UOG Marine Lab researchers.

Genomic research conducted by David Combosch, PhD, professor of population genetics, his students, and post-doctoral researchers resulted in the first whole-genome-scale survey of Guam's staghorn coral,



COURTESY OF THE UNIVERSITY OF GUAM

Robert Lasley, PhD, assistant professor and curator, inspects shell samples donated to the collections of the University of Guam Biorepository.

supports us.

In addition to specimens collected by EPSCoR-funded researchers, donations of specimens have led to the significant growth of the biorepository collections. For example, a private collector recently donated 4,000 shells from the region with many species collected from Guam waters in the 1960s.

The biorepository is partnering with the National Museum of Natural History,

Smithsonian Institution, Washington, D.C., for DNA sequencing of marine organisms. This partnership will be mutually beneficial as the Smithsonian is working on DNA barcoding of marine invertebrates in U.S. waters, which will include marine invertebrate species from Guam waters.

The University of Guam's Office of Research and Sponsored Programs, ORSP, oversees grant acquisition and research initiatives across UOG's nine research centers.

which is commonly used in coral reef restoration.

Their work resulted in the most detailed genetic baseline for any Micronesian coral to date, and is among the first genomic studies designed to guide restoration projects.

Marine Lab faculty supported by the project also conducted studies on the effects of transplantation of corals to new sites.

In coral restoration, coral fragments are often transplanted from a donor site or coral nursery to a reef that has been damaged by bleaching events or disease outbreaks.

This process can be stressful for corals, and the team investigated the effects of transplantation on the beneficial organisms that live in corals. Taking advantage of our ready access to near-shore coral reefs in Guam and state-of-the-art molecular lab facilities at UOG Marine Lab, the team tracked the corals over time to get deeper insights into the cellular-level processes affecting the success of coral restoration.

Biorepository

The grant has also funded the Guam NSF EPSCoR GECCO Biorepository, which consolidates and expands natural history collections of Guam by providing state-of-the-art digitization, imaging, and mapping of local and regional marine plants and animals.

The biorepository serves the community as a library

of marine specimens that scientists and the public can use to learn about the marine species in our waters. Without this baseline, we can miss important information about the health and wellbeing of the ocean that



GUAM BOARD OF MEDICAL EXAMINERS REGULAR BOARD MEETING

Physical/Mailing Address:
194 Hernan Cortez Ave. Terlaje Professional Bldg. Suite 209
Hagåtña, Guam 96910

Wednesday, September 10, 2025 at 4:00 pm

Join Zoom Meeting
<https://us06web.zoom.us/j/81319368481?pwd=aWsf2PxWfHv84lbo6mTIRbHmkuU0b.1>

Meeting ID: 813 1936 8481
Passcode: 503890

MEETING AGENDA

- I. Call to order:
(a) Roll Call
(b) Confirmation of Public Notice
- II. Adoption of Agenda:
- III. Review and Approval of Minutes: Minutes of July 09, 2025 & August 06, 2025
- IV. Treasurer's Report:
- V. HPLD Administrator's Report:
- VI. Chairperson's Report:
- VII. Old Business:
(a) Complaint(s):
(1) GBME-CO-20-005
(2) GBME-CO-2022-010
(3) GBME-CO-2025-003
(4) GBME-CO-2025-004
(b) Hearing: GBME-DPA-2025-01 (Kenneth Carr)
- VIII. New Business:
(a) Application(s) for Full Licensure:
(b) 2025 Renewals
(c) Next Board Meeting:
(a) Next meeting is tentatively scheduled for Wednesday, October 08, 2025 at 4:00 pm.
- X. Adjournment:

To view the names of the applicants being considered go to

<https://guamhpld.org/gbme>
LIVE Streaming link
https://go.opengovguam.com/meetings_list/gbme

This advertisement was paid for by DPHSS/Health Professional Licensing Office-Local Funds.

For more information or to request for special accommodations, please contact the Board Office at (671) 735-7404-07-12 or email hpld@dphss.guam.gov.

GUAM BOARD OF BARBERING AND COSMETOLOGY REGULAR BOARD MEETING

Physical/Mailing Address: 194 Hernan Cortez Ave. Terlaje Professional Bldg. Suite 213 Hagåtña, Guam 96910

Monday, September 15, 2025 at 9:00 A.M. (Guam ChST)

Join Zoom Meeting
<https://us06web.zoom.us/j/89252041047?pwd=aixnns16Qd1assVT1JqCDX3UQbdQG.1>

Meeting ID: 892 5204 1047
Passcode: 964822

AGENDA

- I. CALL TO ORDER
(a) Roll Call
(b) Proof of Publications
- II. APPROVAL OF AGENDA
- III. APPROVAL OF MINUTES
- IV. HPLD ADMINISTRATOR'S REPORT
- V. TREASURER'S REPORT
- VI. OLD BUSINESS
(a) Rules and Regulations - On-Going (b) Complaints 1. GBBC-CO-2024-0002 - Date received: 4/22/24 2. GBBC-CO-2024-0003 - Date received: 6/25/24 3. GBBC-CO-2025-01 - Date received: 1/24/25 4. GBBC-CO-2025-01 - Date received: 1/24/25 5. GBBC-CO-2025-002 - Date received: 3/26/25 6. GBBC-CO-2025-003 - Date received: 4/11/25 (c) Application for Examinations, (d) Application for Apprentices, (e) Application for Establishments
- VI. NEW BUSINESS
(a) Application for Examinations, (b) Application for Apprentices, (c) Application for Re-Examination, (d) Application for Special Japanese License, (e) Application for Reciprocity, (f) Application for Establishments
- VIII. NEXT BOARD MEETING
- IX. ADJOURNMENT

To view the names of the applicants being considered go to

<https://guamhpld.org/gbbc>
LIVE Streaming link
https://govguam.tv/video_details/gbed/gbed-live-stream

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For more information, please contact the Board Office at 735-7404/10 thru 12. Persons needing a telecommunication device for the Hearing/Speech Impaired (TDD) may contact 475-8339.

LAW OFFICES OF HEATHER MARTINEZ QUITUGUA PC

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Attorney for Petitioner
Rochelle J. Bareno
aka Rochelle Juliann Bareno Pina

IN THE SUPERIOR COURT OF GUAM

IN THE MATTER OF THE ESTATE OF:

CESAR ARTURO PINA RIVERA
aka **CESAR ARTURO PINARIVERA**
aka **CESAR ARTURO PINA**
DOB: 07/18/1978

Deceased.

Probate Case No.: PR0119-25

NOTICE OF HEARING ON PETITION FOR PROBATE AND LETTERS OF ADMINISTRATION

You may appear in person at the Courtroom of the Honorable Dana A. Gutierrez, 120 West O'Brien Drive, Hagåtña, Guam or you may participate via Zoom by logging onto <https://guamcourts-org.zoom.us> and enter the **Meeting ID: 839 7874 0380** and **Passcode: 189701**. For technical assistance, please call (671) 475-3207 five (5) minutes prior to the designated hearing time.

NOTICE IS HEREBY GIVEN that Rochelle J. Bareno aka Rochelle Juliann Bareno Pina has filed a Petition for Probate and a prayer for relief praying for Letters of Administration upon the Estate of Cesar Arturo Pina Rivera, aka Cesar Arturo Pinarivera, aka Cesar Arturo Pina, Decedent herein, and that on September 17, 2025 at 9:00 a.m. before the Honorable Dana A. Gutierrez, Judge, in the courtroom of the Superior Court of Guam, Judiciary Building, 120 West O'Brien Drive, Hagåtña, GU, a hearing on said Petition shall be held and all persons interested are hereby notified to appear at the time and place set for said hearing and show cause, if any they have, why the petition should not be granted.

Reference is hereby made to the Petition for further particulars.

Dated: August 13, 2025.

JANICE M. CAMACHO-PEREZ
CLERK OF COURT,
SUPERIOR COURT OF GUAM

By: /s/Pauline I. Untalan
Chamber/Courtroom Clerk