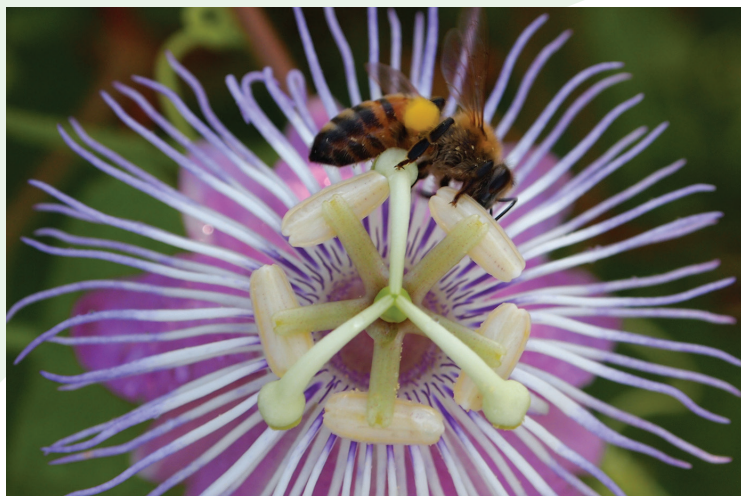




RESEARCH CORPORATION
OF THE UNIVERSITY OF GUAM



ANNUAL REPORT 2024



ABOUT THE COVER PHOTO | A honey bee forages for pollen, which she stores in the “pollen basket” on her hind legs. Pollen is a rich and important protein source for the colony. Photographer: Olympia Terral

CONTRIBUTORS

Bill Jeffery, Ph.D.
Eugene Herrera
Olympia Terral
UOG Center for Island Sustainability
UOG College of Natural and Applied Sciences
UOG Marine Laboratory
UOG Marketing and Communications
UOG Sea Grant
NASA Guam Space Grant
NASA Guam EPSCoR
RIM Architects



RESEARCH CORPORATION
OF THE UNIVERSITY OF GUAM



PUBLISHED BY THE RESEARCH CORPORATION OF THE UNIVERSITY OF GUAM.

The University of Guam is a U.S. Land Grant and Sea Grant Institution accredited by the WASC Senior College and University Commission. UOG is an equal opportunity provider and employer committed to diversity, equity and inclusion through island wisdom values of *inadahi yan inagofli'e*: respect, compassion, and community.



RESEARCH CORPORATION OF THE UNIVERSITY OF GUAM

BOARD OF DIRECTORS

The Research Corporation of the University of Guam is under the management and control of a Board of Directors. Board membership includes representation from the UOG Faculty Senate, the UOG Board of Regents, the UOG Research Council, UOG senior administrators, and members representing the community-at-large.

Anita Borja Enriquez, D.B.A.
Chairperson / UOG President

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Vice Chairperson / UOG Senior Vice President and Provost

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Ryan Shook, MLS
Secretary / UOG Faculty Senate Representative

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UOG Board of Regents Representative

Joanna Chun, MBOE
UOG Board of Regents Representative

Laurie Raymundo, Ph.D.
UOG Research Council Representative

Artemio R.A. Hernandez, Ph.D.
Community Member Representative

Rachael Leon Guerrero, Ph.D.
Member / Dean, UOG College of Natural and Applied Sciences

Joseph F. Ada
UOG Endowment Foundation Representative



Dr. Anita Borja Enriquez



Dr. Sharleen Santos-Bamba



Randall V. Wiegand



Ryan Shook



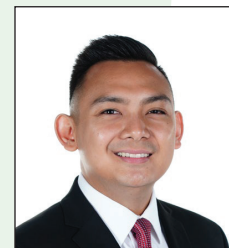
Agapito "Pete" Diaz



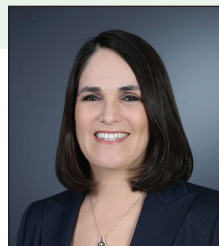
Joanna Chun



Dr. Laurie Raymundo



Dr. Artemio R.A. Hernandez



Dr. Rachael T. Leon Guerrero



Joseph F. Ada



LETTER FROM THE EXECUTIVE DIRECTOR

FY2024 marks several milestones for the Research Corporation of the University of Guam: 10 years of growth, 11 years as an organization, and the passing of the torch to the next generation of RCUOG leadership with the two founders retiring at the end of the calendar year. In FY2024, RCUOG supported \$100M in multi-year grants, the first time the organization surpassed the \$100M mark. RCUOG is a success story by any measure. It is a success story for the University of Guam, our research faculty and administrators, our federal partners, our students, and importantly, our island community.

It was never certain that RCUOG was going to work as envisioned in its enabling legislation. We had to hit some significant markers along the way to ensure RCUOG did not fail. The first marker was to ensure that there were no questioned costs on any of our grant transactions. If there had been, RCUOG would have been scrapped. For ten straight years of audits, there has never been a questioned cost on any RCUOG transaction. The second significant marker was to achieve self-sufficiency within five years to become a viable organization. RCUOG did so in 2019.

The Research Corporation of the University of Guam (RCUOG) celebrates 10 years of growth since it posted its first expenditures in FY2015. Although RCUOG was established in 2014 and accepted its first five grants between October and December of that year, there were no expenditures until 2015. Grant expenditures are one of RCUOG's key performance indicators because this data underscores growth and efficiency. It is one thing to get a grant and quite another to spend the funds in compliance with grant objectives. Early on, RCUOG set out to assist UOG scientists to

achieve their grant deliverables on time. It sounds so simple, but this was a gamechanger for the University of Guam's research enterprise.

FY2024 closed with \$26.3M in expenditures which is a 17.5% increase over the prior year. Along with our double-digit increase, we celebrated our Zero to \$100M achievement. We started with zero in 2014 and today support \$107M in multi-year grants. This remarkable accomplishment is a testament to the faculty and administrators at the University of Guam who continue to compete for and obtain grants at an impressive level for an institution of our size. Thank you to the faculty, administrators, staff, and students who support or engage in the research enterprise at UOG. All successful endeavors require teams of people who commit to positive outcomes. RCUOG is grateful for our key partners across campus including the Office of Research and Sponsored Programs, the College of Natural and Applied Sciences, the UOG Business Office, and the UOG Human Resources Office. The Research Corporation could not function without effective collaboration with these units. Thank you for eleven years of partnership and success that resulted in our collective Zero to \$100M achievement.

Lastly, thank you to Gloria Travis for collaborating with me since day one to build the Research Corporation into what it is today. We both look forward to handing the baton to a new generation. Biba UOG! Biba RCUOG!

Cathleen Moore-Linn, MFA, PMBA
Executive Director

KEY PERFORMANCE INDICATORS

FY2024 Compared to FY2023

17.5% 

increase in grant expenditures over the prior year which underscores efficiency. RCUOG supported \$26,288,503 of expenditures in FY2024.

9.8% 

increase in the number of employees compared to the prior year. As of September 2024, RCUOG employed 246 individuals on various grants compared to 224 employees in FY2023.

171 

The number of grants supported remained steady with 171 grants supported in FY2024 versus 170 grants supported in FY2023.

17 

Travel Awards were given to University of Guam students to support travel to conferences, workshops, internships, and study abroad opportunities.



THE RCUOG CORE TEAM | *Front row from left to right: Cathleen Moore-Linn, Executive Director; Gloria Travis, Accounting Specialist; Sable Sablan, Human Resources Specialist I; Precious Nagallo, Accounting Analyst I; Jammie Pamintuan, Accounting Analyst I; Enrique Villamor, Accounting Analyst I; second row: Michael Conner, Chief Business Officer; Raeanne Concepcion, Human Resources Specialist III; Danica Batac Samia, Accounting Analyst II; Jennifer Tanghal, Human Resources Specialist I; Heidee Bacani, Grant Assistant III; Anthony Agustin, Accounting Analyst I; and back row: Jayvee Cacal, Accounting Analyst I.*

PURPOSE

The purpose of this report is to capture a snapshot of the organization after its eleventh year of operation and to highlight how RCUOG supports research and outreach projects through its efficient processes, reporting, and engagement with overarching goals of the University of Guam.

FY2024 AUDIT

RCUOG activities and transactions were audited under the University of Guam's FY2024 audit. There were no findings for grant transactions supported by the Research Corporation, which indicates that RCUOG continues to utilize strong internal controls, which comply with federal regulations and its own policies. The FY2024 audit marked the tenth consecutive year of no questioned costs. Successful audits are the foundation of UOG's and RCUOG's success.

CREDIT CARD AUDIT

In FY2024, the Office of the Public Auditor initiated its audit of RCUOG's credit cards. The audit is still ongoing, and results are pending.

REVENUE AND OPERATING EXPENSES

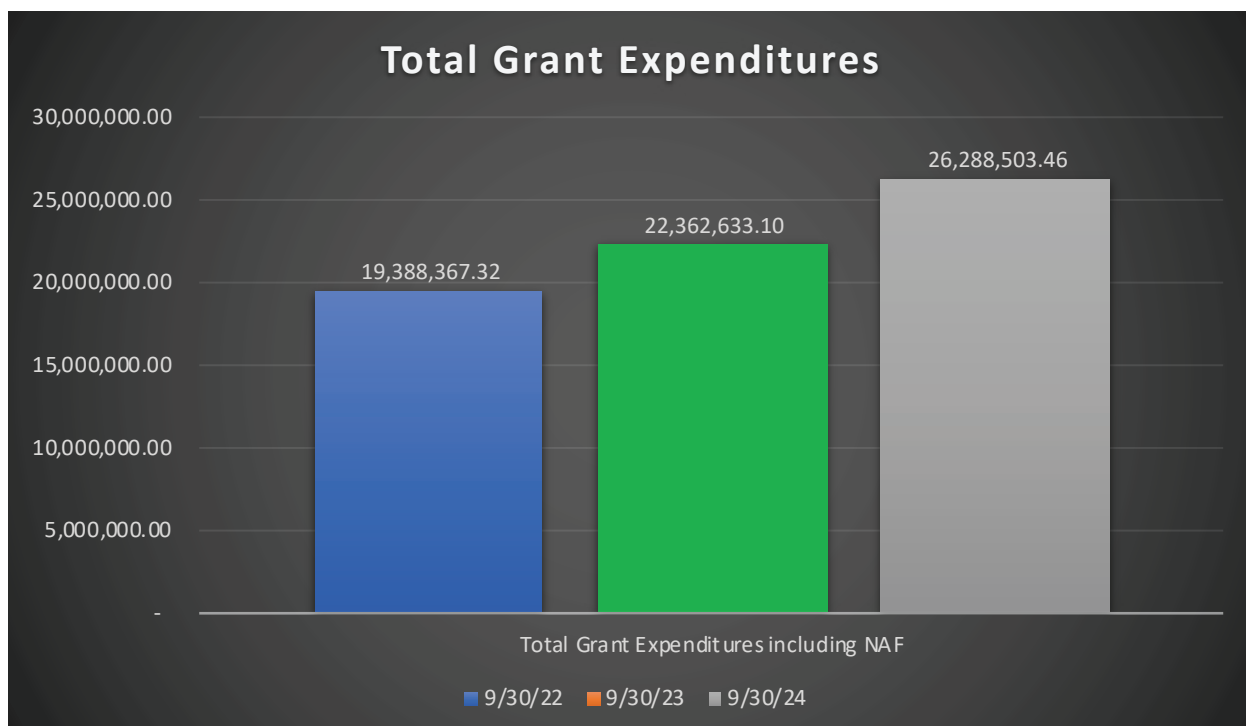
RCUOG has been self-sufficient since the end of FY2018 and relies on its own revenue generated through administrative fees and its share of indirect costs to support operations. In FY2024, RCUOG received 18% of the University of Guam's grant generated indirect cost revenue equating to \$811,455 and \$740,823 in administrative fees/other revenue (charged to those projects that do not include indirect costs) for a total of \$1,552,278. RCUOG's operating expenses for the same period were \$855,973.

FY2024 ended with net revenue of \$714,056. Of this amount, \$500,000 is committed to construction costs for the new Water and Environmental Research Institute facility and the Margaret Perez Hattori-Uchima School of Health Nursing Annex.

The RCUOG Board of Directors approved an expenditure of \$4M to support construction costs for the WERI and the Nursing Annex building project. To date, RCUOG has transferred \$1.25M to the University of Guam leaving a balance of \$2.75M. RCUOG forecasts paying off its commitment in approximately six years.

The RCUOG core team consists of eleven full-time and two part-time employees. The core team is responsible for all human resources and financial transactions as well as federal financial reporting and compliance. Lack of office space hinders further expansion. RCUOG is still using manual processes for transactions, but incremental improvements to legacy systems are underway at the University of Guam.

TOTAL GRANT EXPENDITURES (FY24 Unaudited)





READY FOR LIFTOFF | UOG Drone Corps pilot Jonelle Sayama works together with Guam Department of Agriculture officers to analyze drone imagery during a mapping mission to capture post-fire imagery of the burn site on February 2024.

GRANT EXPENDITURES UP 17.5%

Total grant expenditures for FY 2024 were \$26,288,503 which is an increase of 17.5% over the prior year's expenditures of \$22,362,633. Grant expenditures are a key performance indicator because they relate to the efficient and effective managerial environment at the Research Corporation.

At the end of the fourth quarter, RCUOG provided support services to 171 different grants, which remained stable compared to 170 grants the prior year.

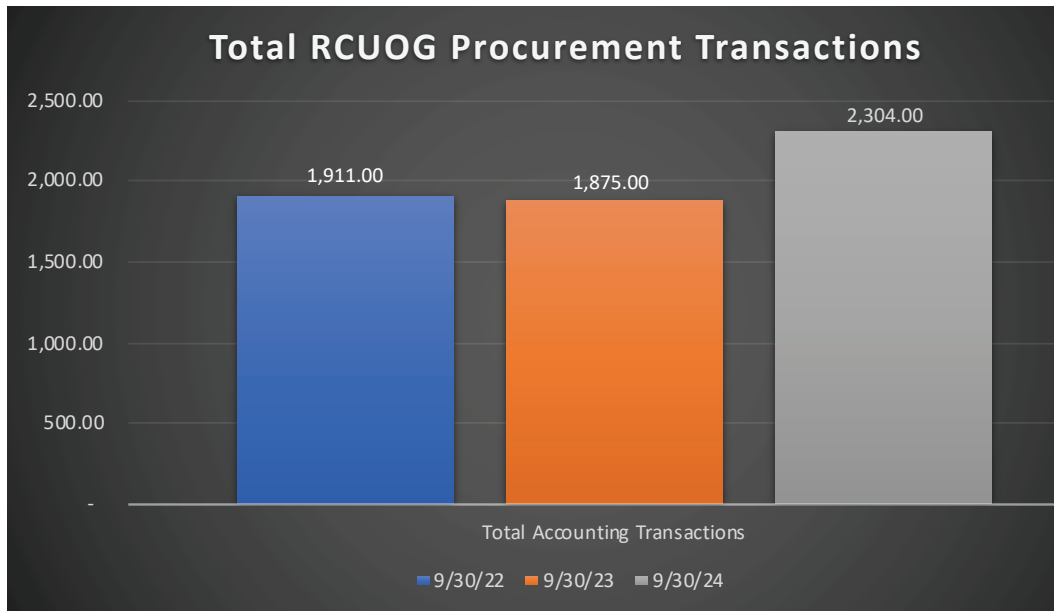
While expenditures increased by 17.5% percent, operational costs increased 24.4% primarily due to the 22% salary increase implemented in 2023. This data underscores RCUOG's elevated level of productivity.

HUMAN RESOURCES

RCUOG completed 515 personnel hiring actions in FY2024 compared to 425 hiring actions during the prior fiscal year. These hires include all temporary full-time and part-time positions based on availability of funds as well as summer salaries for UOG faculty for grant-related work. At the end of FY2024, RCUOG employed 246 individuals, 145 full-time and 101 part-time employees. Student employees accounted for 18 of the part-time positions. This marks an increase of 9.8% in the number of employees compared to the prior year.

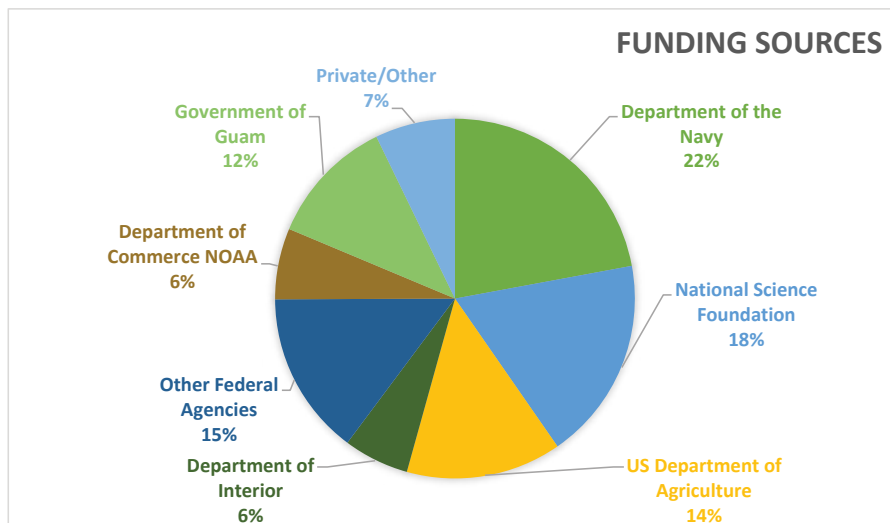
PROCUREMENT TRANSACTIONS

The number of procurement transactions, which include purchase orders, contracts, and travel authorizations, increased 22.8% in FY2024. The significant growth of grant activity at the institution, and the volume of related work, translated into longer processing times.



FOCUS ON RESEARCH

The chart below provides a breakdown of grants supported by RCUOG by funding category. Federal agencies, Government of Guam agencies, non-profit foundations, and the private sector partner with the University of Guam and RCUOG to produce research and service outcomes. The Research Corporation, with a focus on efficiency, provides support to scientists who pursue research projects that have a direct, positive, and lasting impact on Guam and the region.





CONSTRUCTION BEGINS ON WERI BUILDING AND NURSING ANNEX

The US Department of Commerce Economic Development Administration awarded \$12,839,777 to the University of Guam for construction of Water and Environmental Research Institute of the Western Pacific facility and the Margaret Perez Hattori-Uchima School of Health Nursing Annex. This amount was matched by \$8.9M of UOG, RCUOG, and Endowment Foundation funds. An additional \$2.5M from the Department of the Interior, which was authorized by Governor Lourdes Leon Guerrero, brings the project total to \$24,283,216. As the project lead, RCUOG Executive Director, Cathleen Moore-Linn worked with internal and external partners to move the project to construction.

The groundbreaking ceremony for both buildings was held in November of 2023 and construction began the following

year. The buildings are expected to be completed in November of 2025. The WERI building is a three-story 13,017 square foot facility with a Water Quality Lab, various research and instructional laboratories, classrooms, and offices, while the Nursing Annex is a two-story 11,960 square foot facility with a ten-bed teaching laboratory and four large classrooms. The project reflects an investment in STEM education, research on Guam's freshwater resources, and the development of Guam's professional workforce.

Teamwork across the campus brought this project through to fruition under the leadership of Presidents Dr. Anita Borja-Enriquez and Dr. Thomas Krise, and Vice President Randall Wiegand and his teams at the Procurement Office and Business Office, with special thanks to Wilfredo Magdalera. The UOG Endowment



Foundation Board and Executive Director Katrina Perez played an instrumental role in providing funding for the project. The Director of Facilities Management Systems, Glenn Leon Guerrero, and Capital Projects Manager, Zenon Belanger, managed construction with support from Project Coordinator Sandra McDaniel. WERI Directors Dr. John Jenson, Dr. Ross Miller, and Dr. Yuming Wen, along with faculty and staff, with special thanks to Dr. Nathan Habana, Dr. Barry Kim, Mallary Duenas, and Jen Cruz, assisted with the grant preparation and conferred with the architects on design. Dr. Margaret Perez Hattori-Uchima, Dr. Kathryn Wood,

Jonathan Nguyen, and John Michael Pineda from the School of Health worked on the grant submission and conferred with the architects on design, while Dr. Yvette Paulino offered post award guidance. UOG General Counsel Anthony Camacho worked with the US Economic Development Administration on various project related legal documents, and his work has been invaluable. Kudos to our contractor PFM, led by Rob Salas and Philsan Kim, as well as RIM Architects Brent Wiese, Phil Noret, and Inna Wiese. These individuals and many others helped to bring this project through to construction. We look forward to the ribbon cutting ceremony in 2025.

EXPANDING THE UOG CAMPUS | *Left page: University of Guam President Anita Borja Enriquez, first from left, Acting Gov. Joshua Tenorio, third from left, are among officials who participated in the groundbreaking for the construction of the two-story the Margaret Perez Hattori-Uchima School of Health Annex, and the three-story Water and Environmental Research Institute (WERI) of the Western Pacific facility. The groundbreaking occurred on campus on Monday, November 20, 2023. This page: Renderings and construction photos of the Nursing Annex (left) and the Water and Environmental Research Institute (WERI) building (right).*



RESEARCH CORPORATION
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ZERO to \$100M CELEBRATION

The Research Corporation of the University of Guam (RCUOG) was founded in 2014 to provide streamlined accounting, procurement, and human resources services for the University of Guam's research and grant-funded projects. Over the past decade, RCUOG has evolved from modest beginnings to supporting over \$100 million in multi-year grant budgets in 2024.

This timeline celebrates key milestones, from the first grants, to achieving self-sufficiency, to supporting large scale initiatives. It demonstrates RCUOG's commitment to advancing research and outreach in Guam and the Pacific region through efficient management and strategic partnerships.





DEDICATED TO NATURAL RESOURCE MANAGEMENT | *University of Guam Center for Island Sustainability Associate Director Dr. Else Demeulenaere and her team pictured in the Island Conservation Lab in the native plant nursery on the UOG campus.*

POLICIES

Policies were approved by the RCUOG Board of Directors to support efficiency within the organization, to ensure RCUOG remains a competitive employer, and to support other activities of the Research Corporation and the University of Guam. The RCUOG Board authorized \$500K of net revenue to be used to support construction of the WERI building and the Nursing annex. Policies adopted in FY2024 include:

- Amending the Employee Handbook and Policy Manual
- Amending the Student Hiring Policy and Procedures
- Adopting the Relocation Expenses Policy
- Approving the FY 2023 Reserve Expenditure Plan
- Adopting the Operating Agreement between RCUOG and UOG
- Approving the Fiscal Year 2025 Operations Budget
- Adopting RCUOG's Financial Commitment to Support Construction of the WERI Building and Nursing Annex

GUAM AQUACULTURE DEVELOPMENT AND TRAINING CENTER

RCUOG issued a lease to CoreSeed to operate the Guam Aquaculture Development and Training Center (GADTC) in January of 2020 which resulted in the University of Guam's first public-private partnership. RCUOG completed its training obligations for the Chamorro Land Trust Commission under the guidance of Dr. Bob Barber and Mark Acosta, of the College of Natural and Applied Sciences in FY2024.

FINANCIAL STATEMENT

REVENUE & EXPENSE (Unaudited 9/30/24)

REVENUE & OTHER ADDITIONS

Federal Grants	22,115,807.22
GovGuam Grants	550,000.00
Private Grants	780,036.76
Miscellaneous	3,197,406.57
Transfer from UOG	(479,196.29)

TOTAL REVENUE & OTHER ADDITIONS 26,164,054.26

EXPENDITURES AND OTHER DEDUCTIONS

Salaries	10,701,895.13
Fringe Benefits	1,371,391.10
Travel On/Off Island	1,721,156.09
Contracts	4,065,134.49
Supplies	1,138,060.73
Equipment	658,614.13
Capital Outlay	883,550.24
Miscellaneous	5,748,701.55

TOTAL EXPENDITURES 26,288,503.46

Increase/Decrease this Year	(124,449.20)
Net Assets Beg.	5,012,642.34

NET ASSETS END 4,888,193.14

BALANCE SHEET (Unaudited 9/30/24)

ASSETS

Cash in Bank	645,183.93
Account Receivables	4,374,746.57
Advances to Supplier	357,761.15
Advances to Traveler	157,698.77

TOTAL ASSETS 5,535,390.42

LIABILITIES & NET ASSETS

A/P Contracts	7,690.39
Accrued Payroll	6,381.79
Due to/fr Unrestricted	(58,687.23)
Deferred Revenue	691,812.33
Net Assets End	4,888,193.14

TOTAL LIABILITIES & NET ASSETS 5,535,390.42



CORAL RESTORATION | *Dr. Laurie Raymundo, Director of the University of Guam Marine Laboratory, cleans a coral tree at Piti Bomb Holes.*

TRAVEL GRANTS

RCUOG offers travel awards to students using mileage accrued from purchases made with the RCUOG official credit card in accordance with Public Law 32-019. RCUOG management and staff are delighted to play a small part in supporting students' academic endeavors. RCUOG distributed 17 travel awards in 2024 and a total of 102 awards since the program was launched in 2017. University of Guam students received RCUOG travel awards to support travel to research conferences, international exchange programs, and other activities that enhance their academic experiences.



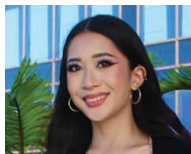
Heidee Bacani, a business major, represented UOG at the Inter-Collegiate Finance Competition in Manila in November of 2023. She also attended the Asia

Pacific Association for Fiduciary Studies Pacific Region Investment Conference. Dr. Leila Kabigting recommended her.



Ian Galang attended the SACNAS conference in Portland Oregon in October of 2023. He was funded by EPSCoR and created a research project, "A statistical

analysis on *Acropora aspera* and White Syndrome Disease Outbreak using Multiple Regression Models."



Julie Laxamana and Zia Sandoval, both criminal justice majors,

attended the Rotaract Conference in conjunction with Tokyo Rotary District 2750 in February, along with Dr. Ron McNinch-Su, as part of a series of activities focused on community development.



Ella Norris presented her thesis research on the Brown Treesnake, Invasive Species Response to Aerial Suppression in Time and Space, and a Novel Monitoring

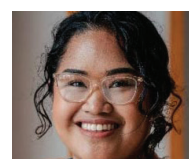
Method, at the Marianas Islands Conservation Conference in Saipan in February.



Taylor Aguon, a biology major, and **Danica Tamondong**,

a business major, traveled to Kyoto, Japan in March to attend two lectures on the Kyoto School of Philosophy as part of their undergraduate

coursework/study abroad experience. Ryukoku University served as the hub for on-site educational sessions where they learned about the history and culture of Kyoto.



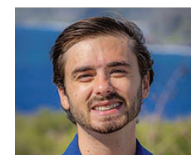
Victoria Deleon Guerrero, a graduate student in the Master of Public Administration program, Saipan cohort, traveled from Saipan to Guam in March to

participate as a team member in the 2024 Network of Schools of Public Policy, Affairs, and Administration Simulation Virtual Competition.



Sophomore **Kyra Magdangal Dela Cruz**, a biology major, attended the 2024 Summer Eye Experience at the Chicago College of Optometry program

in June. The summer experience is focused on introducing students to a career in optometry. She was recommended by Dr. Rachael Leon Guerrero and adjunct instructor Leilani Sablan Naden.



Zoe Ariellius and Garret O'Donnell, both graduate students

in biology, presented their thesis research at the European Coral Reef Symposium in Naples, Italy in July. Dr. Heloise Rouze and Dr. David Combosch recommended these students for the award.



Senior **Antoni Badowski**, a biology major, attended the Arizona State University Bermuda Institute of Ocean Science summer course on coral reef

ecology in July. He was recommended for the travel award by Dr. Peter Houk and Dr. Laurie Raymundo.



TRAVEL GRANT AWARDS | RCUOG offers travel awards to students using mileage accrued from purchases made with the RCUOG official credit card in accordance with Public Law 32-019. Sophomore biology major Kyra Magdangal Dela Cruz attended the 2024 Summer Eye Experience at the Chicago College of Optometry program.



Candace Estrada attended the Advancing Agriculture Education in Asia 2024 Summer Enrichment program in July at the Universitas Gadjah Mada in Yogyakarta, Indonesia. The pre-veterinarian biomedical major learned agricultural development practices. She was recommended by Dr. Rachael Leon Guerrero.

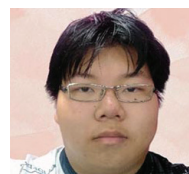


Denzyl Ngiralmu, business major, traveled to Okinawa, Japan to co-present a paper, with Professors Dr. Joann Deigo and Dr. Jackysha Green, From Theory to Application: The Perceptions of University Students on the Use of Experiential Learning Techniques in Human Resource Management, at the International Conference on Business, Economics, and Information Technology conference in March in Naha, Okinawa.



Reina Evangelista presented her poster, "Adherence to Mammography

Screening Guidelines by Family History of Breast Cancer in Guam: Preliminary Results of HIPIMR Study," and **Gian Paras** presented his poster, "Ethnic Variations in Breast Cancer Risk Factors Distribution in Guam, HIPIMR Study" at the 17th AACR Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, September 21-24, 2024, in Los Angeles, California. Both students were recommended by Dr. Grazyna Badowski.



Trevor Ho traveled to Okinawa, Japan to present his research paper, Marketing Guam to the World: A Study of the Island's Tourism Market at the International Conference on Business,

Economics, and Information Technology conference in March. Trevor will remain in Japan to participate in a one semester exchange program at Aoyama Gakuin University. Trevor is a business major minoring in Japanese language and mathematics. UOG's Global Learning and Engagement Office organized the semester exchange program with Aoyama Gakuin University.

LIST OF GRANTS AND CONTRACTS

1. 2018 Guam Forestry Watershed Restoration Project
2. 2022-2023 Sea Grant Omnibus Support
3. 2023 Guam Strategy Energy & Action Plan
4. 2024 NOAA Sea Grant Knauss Fellowship Program
5. 4-H and Youth Development Year Long Membership Program; STEAM Lifelong Learning
6. Addressing the Hidden Curriculum to Improve Access to Graduate Programs
7. American Samoa SBDC Network (CY2024)
8. AmeriCorps Program in Guam and CNMI
9. An evolutionary investigation into the high rates of metabolic disease in Pacific
10. Archaeological and Geophysical Investigation of Coastal Units of War in the Pacific National Park System
11. Atantano: Reviving historical and biological connections with the land
12. Automated science-to-management frameworks to improve coral-reef resilience and fisheries in Micronesia SIDS
13. Biomonitoring Support for Natural Resource Management at JRM AOR
14. Brown Treesnake 2024
15. Building Coral Resilience and Facilitating Post Bleaching Recovery
16. Butterfly & Snail Monitoring
17. CAPS Asian Citrus
18. CAPS Citrus Pests
19. CAPS Fire ants
20. CAPS Honeybee
21. CAPS Nursery Survey
22. Carbon Credit Certification Project
23. CESU COTS
24. CESU Stewardship and Public Engagement Program
25. CESU Vegetation Reforestation on AAFB
26. CHamoru Language and Culture Researcher Training Program
27. CHAMPS National
28. CIS P-175 Plant Salvage
29. CIS-ECASU-GCSO Consortium for Sustainability Outcomes
30. CNAS-DOAG USDA Black Pepper (Implementing the Introduction and Establishment of Black Pepper Seed Stock for Local Producers on Island Project)
31. CNMI FY2023 PPA Honeybee Survey 1S.0018.01
32. Collaborative: Implementation Grant: Navigating Home
33. Controlling edaphic factors for out planting success and genetic mixing research for inter-island *Serianthes nelsonii* recovery
34. Controlling Electrochemical Reactions
35. COTS-Pilot Study to Implement a Crown of Thorns outbreak Mitigation plan in Guam Micronesia
36. Course in Tropical Forest Ecology of the Mariana Islands
37. CRB Management, Palm Tree Pesticide Injection
38. Creation of a Cooperative BS Degree Program for the Marianas Islands and Beyond
39. Critical Evaluation of Restoration of Staghorn Acropora Population
40. Develop a comprehensive implementation plan for Phase I of the North Finegayan Forest Enhancement Site located within JRM AOR
41. Developing a Certification Program in Forest Conservation and Management in Micronesia
42. Developing Chamoru Language Infrastructure
43. Developing Economic Sustainability and Viability of Value-added on Guam



RESEARCH EXPERIENCES | *The University of Guam has partnered with the Pacific Northwest National Laboratory (PNNL) and the US Department of Energy to offer UOG students hands-on internship experiences focusing on electro-chemistry and computational chemistry. The second cohort of UOG students is pictured at PNNL in Washington.*

- | | |
|--|---|
| 44. Development of Online Courses in Tropical Wildlife Management | 57. ESA-Listed Snail Survey and Monitoring at Naval Base Guam |
| 45. Development of the Guam Reef Fisheries Management Plan | 58. Establish Guma' Tinemtom to support population health research through island wisdom |
| 46. Diabetes Surveillance to Examine Health and Nutrition Access & Availability (DISEHA) | 59. Establishing An Educational Pipeline to Strengthen the Meat Poultry Processing Industry Workforce in Guam |
| 47. DOAG USDA 2020 Guam Forest Action Plan Update | 60. Explore New Coral Engineering Methods to Enhance Coral Reef Restoration in Guam |
| 48. Economic Statistics, Recovery and Development | 61. FAFSA Access Initiative (AI) |
| 49. EDUC Stabilization Fund ESF | 62. Five Future Trainers - FCAG |
| 50. Endemic and Endangered Plant Partnership Program (Taiparehu) | 63. Forest Health Technical Assistance for the RMI |
| 51. Engaging Guam Residents to Reduce Land Based Sources of Pollution and Promote Habitat Restoration for Coral Health | 64. Forest Inventory and Monitoring Program in the Pacific Islands (FIA 2023) |
| 52. Enhancing Local Knowledge to Sustain a Forest Inventory and Monitoring Program through the Pacific Islands | 65. Fruit Bat Monitoring on AAFB |
| 53. Enhancing Monitoring Efforts to Increase Success of Coral Reef Restoration on Guam Project | 66. Fuetsan Manhoben, Guam's Evidence-Based Programs for Youth ENDS Use |
| 54. Enhancing <i>Vespa tropica</i> Detection and Survey Tools | 67. FY2025 Guam Green Growth Special Appropriation |
| 55. Erosion control and revegetation under GROW program | 68. G3 Educational Makerspace and Innovation |
| 56. Erwinia Survey and Development of a Rapid Detection Assay | 69. G3 GEDA Circular Economy |
| | 70. Gamma Phase 0 |
| | 71. Getting Guam Healthy MOU with DPHSS "Walk to Wellness Program" |
| | 72. GROW GUAM |

LIST OF GRANTS AND CONTRACTS *(cont.)*

73. GU FY2024 PPA Solanaceous Commodity 1S.054
74. GU FY24 PPA Combined Pathway Pests Multi
75. GU FY24 PPA CRB Management & Mitigation 6R.034
76. Guam Cancer Registry 2022
77. Guam Climate Pollution Reduction Planning
78. Guam Ecosystems for Corals and Oceans
79. Guam FY2023 PPA Asian Defoliator 1S.0485.01
80. Guam Green Growth (G3)
81. Guam Green Growth Renewable Energy Project and Energy Audit of Government of Guam Buildings
82. Guam Ports of Entry Coconut Rhinoceros Beetle Management Plan
83. Guam Restoration of Watershed Initiative Ugum Restoration Phase II
84. Guam Three Year State Professional Development Program Plan FY2024-2026
85. Guam Wildlife Action Plan
86. Guam's Upgrowing Agricultural Markets (GUAM): Developing Profitable Local Food Markets and Sustainable Agriculture for Small Island Economies
87. Habitat Conservation Plan Ph.3
88. Hanom Fresku: A cross-disciplinary study of coastal freshwater discharge hydrology and near-shore and coastal ecology
89. Hawaii Space Grant Consortium 2020-2024
90. Holistic Heritage of the World War II Chuuk (Truk) Lagoon Battlefield
91. Hydrogeological Assessment of Prospective Sites for Production Well Servicing Camp Blaz from Andersen AFB, Guam
92. Hydrogeological Assessments of the Suspected Sinkholes in P-012 North Ramp Infrastructure on Andersen Airforce Base, Guam
93. Hyperuricaemic Trail
94. Identifying key Reef Sites for the Management and conservation of Coral Genetic Diversity and Resilience
95. IHBEM Multidisciplinary Analysis of Vaccination Games of Equity (MAVEN)
96. Improving Hot Pepper Production of Increasing Value-Added Products in Guam
97. Improving Reef Resilience through sustainable fishery
98. Increasing Aquaculture Capacity in Guam
99. Increasing Capacity of Aquaculture Farmers in Guam with On-Farm Hatchery Demonstration for All-Male Tilapia Production
100. Information Network for Sustainable Pacific Islands Research and Education (INSPIRE) Project
101. Invasive Species Detector Dog Pilot Program
102. Island Wide Habitat Conservation Plan (HCP)
103. Local 2030 Network Islands Project: Guam Sea Grant
104. Long-term Coral Reef Ecosystem Monitoring at Joint Region Marianas Administered and Leased Submerged Lands
105. Maintenance and Upgrade of the Water Quality Lab
106. Mapping and Prioritizing Potential Privately-Owned Forest Stewardship Lands - Guam
107. Marine Biodiversity Survey at Joint Region Marianas Administered and Leased Submerged Lands
108. Mathematical Sciences Program University of Guam - Game Theory, Graph Theory, and the Magic of Coding
109. MCT Year 2 - Strengthening the adaptive capacity of communities by increasing the protection of their coral reef ecosystems through a resilience-based, science-to-management approach across the Micronesia Challenge region



STEM FOR ALL | A volunteer guides a student through the NASA NeMO-Net app during August's STEM Saturday module, "Exploring Coral Reefs."

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| 110. Molecular Research to Support Response for Invasive Hornets | 120. ORSP-UH Food System Resiliency for CHL |
| 111. MOU between Proferre, Inc and UOG RCUOG | 121. Pacific ADA Center |
| 112. NACD REPI | 122. Pacific Consortium SRAE Project |
| 113. NASA EPSCoR Research Infrastructure Development Program | 123. Pacific Consortium2 SRAE Project |
| 114. NIFA 2023 RIAA Instruction | 124. Pacific Island Climate Science Center Graduate Scholars and Summer Undergraduate Research Fellowship programs |
| 115. NIFA 2023 RIAA/AGFEI Equipment | 125. Pacific Island Partnership for Cancer Health Equity (PIPCHÉ) |
| 116. NMC Insect Collection | 126. Pacific Island Partnership for Cancer Health Equity (PIPCHÉ) - Subaward |
| 117. NSA Math REU: Game Theory and Graph Theory | 127. Palau Action Framework Coordinator |
| 118. NSF INCLUDES "NSF Inclusion Across the Nation of Communities of Learners in Underrepresented Discoverers in Engineering and Science (INCLUDES): Supporting Emerging Aquatic Scientists Island Alliance" | 128. Pesticide Safety Education for Pacific Island Educators and Stakeholders |
| 119. ORSP CESU Cycads | 129. PFM Contract- Granite Obayashi, Hensel Phelps, SWCA, Granite Obayashi, and EA Engineering. |



OUT OF THIS WORLD | NASA Guam Space Grant and NASA Guam EPSCoR team members gather for a group photo during the 3rd Annual NASA Guam Research Symposium held on April 8, 2024, at the Hyatt Regency Guam.

LIST OF GRANTS AND CONTRACTS (cont.)

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| 130. PICASC Coral Reef Bleaching Events | 141. RCUH PACIOOS |
| 131. PL 35-99 Guam Green Growth (G3) Initiative | 142. Research and Rapid Response to Control the Brown Treesnake on Guam, Prevent Introduction to Other Islands, and Mitigate its Impacts to Military Readiness in the Pacific Region |
| 132. PL no. 36-107 CIS - Guam Green Growth | 143. Restoring Staghorn Corals and Ecosystem Services on Reef Flats in Guam |
| 133. Plant and Invertebrate Surveys JRM Area of Responsibility as Specified on Guam and CNMI | 144. Restoring Watersheds through Agroforestry to Improve Erosion Control in Guam |
| 134. Port Forest Pest | 145. RIAA: Developing Multidisciplinary Research Opportunities at UOG |
| 135. Predicting and Managing the Future of Onegeim'Tketau (Jellyfish Lake), Palau in a Changing Climate | 146. RISC Support at UOG |
| 136. Promoting Beginning Farmer Training | 147. Sea Grant Omnibus (2024-2027) |
| 137. Psycho-Oncology Support Services | 148. Sea Turtle Aerial Surveys in Farallon De Medinilla (FDM) |
| 138. Public Law 36-107 Guam Cancer Registry | 149. Sea Turtle Monitoring, Projection, and |
| 139. Public Law 37-42 FY2024 Guam Green Growth Initiative | |
| 140. Rapid Response BTS | |

- Educational Outreach on Andersen Air Force Base (AAFB)
150. Serianthes nelsonii Monitoring AFB
 151. SG-SDSU EPA Environment Justice (Special Purpose Activities Related to Environmental Justice)
 152. Small Business Development Centers - American Samoa
 153. Smart Commodities and Practices to Reduce Greenhouse Gas Emissions in Pacific Island Agriculture and Forestry Systems
 154. Strengthening and Enabling the Micronesia Challenge 2030, GEF7 International Waters Project funded by Stanford University
 155. Support for PacIOOS Mission on Guam
 156. Supporting and Expanding Coral Restoration in Guam, Micronesia
 157. Supporting Fisheries Management Plans for Surgeonfishes and Parrotfishes on Guam
 158. TAP Campus Security
 159. TAP Establishing the Artifact Maintenance Program
 160. Technical Support to Use of Ocean Energy Systems to Sustain an Aquaculture Ecosystem on Guam
 161. The Pacific RISA Phase IV: Building Equitable and Just Climate Solutions for Pacific Island Resilience to Compounding Disasters and Extreme Events
 162. The Promotion of Heat Stress Awareness and Animal Nutrition for Egg and Hog Production on Guam
 163. Understanding Community Perception Around Ocean Renewable Energy
 164. USAPI Pacific Regional Central Cancer Registry (PRCCR)
 165. USDA Brown Treesnake Research Support
 166. USDA Brown Treesnake Research (22-23)
 167. USDA VRT Ag & Food
 168. Water Quality Monitoring on Joint Region Marianas Submerged Lands Guam
 169. Western Regional Agricultural Stress Assistance Program (WRASAP)
 170. WSARE State Implementation for Guam
 171. Yo'Amte Plant and Healing

ABOUT THE BACK COVER PHOTO |

Dr. William Jeffrey and his team document the Sankisan Maru in Chuuk.





RESEARCH CORPORATION
OF THE UNIVERSITY OF GUAM

ANNUAL REPORT 2024