



Office of Research & Sponsored Programs

FY 2023 ANNUAL REPORT

Extramural Grant Awards, FY 2013 - 2023
Scholarly Publications, FY 2023
IRB Listing, FY 2023

**UNIVERSITY OF GUAM
OFFICE OF RESEARCH AND SPONSORED PROGRAMS**

**303 University Drive
Dean's Circle, House #7
Mangilao Guam 96913-1800
Telephone: 671.735.2989
Email: orsp@triton.uog.edu
Website: www.uog.edu/research**

Office of Research & Sponsored Programs

FY 2023 ANNUAL REPORT

Table of Contents




Chart 1: Annual Grant Funding, 2013 - 2023	5
Figure 1: Annual Grant Funding, 2013 - 2023	5
Chart 2: Federal vs. Non-Federal Awards by Year, 2013 - 2023	6
Figure 2: Federal vs. Non-Federal Awards by Year, 2013 - 2023.....	6
Chart 3: Number of Federal vs. Non-Federal Awarded, 2013 - 2023.....	7
Figure 3: Number of Federal vs. Non-Federal Awarded, 2013 - 2023	7
Figure 4: Top Principal Investigators by Funding, FY 2023 (≥ \$100K).....	8
Figure 5: USDA Land Grant Formula Funds Listing, FY 2023.....	14
Figure 6: NOAA Sea Grant Formula Funds Listing, FY 2023.....	14
Figure 7: Proposal to Award Conversion.....	14
Chart 4: Grant Awards by College/Department, FY 2023.....	15
Chart 5: ORSP Awards by Sponsor, FY 2023	15
Figure 8: Grant Awards by College/Department, FY 2023	16
Figure 9: ORSP Awards by Sponsor.....	16
Figure 10: Research Awards under ORSP, FY 2023	17
Figure 11: Grant Funding by Sponsor, 2013 - 2023.....	20
Chart 6: Completed Application (Full and Subaward) Proposals in Cayuse by College/Department, FY 2023.....	24
Figure 12: Completed Application (Full and Subaward) Proposals in Cayuse by College/Department, FY 2023..	24
Chart 7: Number of Research and Scholarly Publications by College/Department, FY 2023.....	25
Figure 13: Number of Research and Scholarly Publications by College/Department, FY 2023.....	25
Research and Scholarly Publications, FY 2023	26
List of IRB-Approved Projects, FY 2023.....	29
Office of Research and Sponsored Programs (ORSP)	35



Message from the President **ANITA BORJA ENRIQUEZ, D.B.A.**

Håfa Adai!

Welcome to the University of Guam Office of Research and Sponsored Programs Annual Report for Fiscal Year 2023. It is my privilege to share the remarkable achievements and progress made by our dedicated faculty, staff, and partners in advancing research and scholarship at UOG.

This year, the University of Guam has achieved a prestigious ranking, placing us in the top 31% of all research institutions in the nation for science research expenditures, as reported by the National Science Foundation. This recognition underscores our commitment to excellence and innovation in scientific research.

Since 2019, our grant and contract activities have grown an impressive 400%, reflecting the hard work and dedication of our research community. In 2023, we have seen a significant increase in the number of grants from non-federal sources, with 29 grant activities from foundations, non-profits, and local government partners, compared to an average of eight in previous years.

Additionally, through our new grants management software, Cayuse, we have been able to track our application and award success rate with greater accuracy. I am proud to report that our proposal-to-award conversion rate stands at an outstanding 87%, demonstrating the success and impact of our research endeavors.

As we look to the future, we remain committed to fostering a culture of research excellence and collaboration. I extend my deepest gratitude to the Office of Research and Sponsored Programs, our esteemed faculty, dedicated staff, and all who have contributed to our success. I look forward to the continued growth and impact of research, tulos mo'na, at the University of Guam.

Si Yu'os Må'ase,

Anita Borja Enriquez, D.B.A.
President



Message From The Senior Vice President and Provost **SHARLEEN SANTOS-BAMBA, Ph.D.**

Welcome to the latest edition of the University of Guam Office of Research and Sponsored Programs Annual Report for Fiscal Year 2023. This year, we have made significant strides in various research areas, demonstrating our commitment to academic excellence and innovation.

Our researchers have been actively involved in diverse fields within our six research focus areas: Marine Science, Terrestrial Biology, Water Resources, Health and Welfare, Public Policy and Economics, Micronesian History and Culture, and Agriculture. Our work in these areas not only contribute to scientific knowledge but also offer our students valuable hands-on research opportunities.

We are proud to collaborate with numerous partners who support our research efforts. Locally, we work with the Government of Guam, including the Office of the Governor, GEDA, DPHSS, and GDOE. Regionally, we engage with partners such as FSM DOE and Palau DOE. Our efforts are also bolstered by support from foundations and non-profits like the Alfred Aloan Sloan Foundation and Guam Preservation Trust. Additionally, private corporations like Environmental Chemical Corporation, Sigma Associates Inc, and Proferre, Inc., along with government programs such as the Pacific Northwest National Laboratory, play a crucial role in enhancing our research capabilities.

These partnerships not only advance our research but also enrich the learning experiences of our students, preparing them for leadership roles in their respective fields. At the University of Guam, we are committed to fostering a culture of research excellence and innovation, ensuring our work benefits our island community and the broader Pacific region.

Congratulations to the Office of Research and Sponsored Programs on this report and to all faculty, staff, and students contributing to the University of Guam's research initiatives.

Senseramente,

A handwritten signature in black ink, appearing to be 'SB' followed by a long horizontal stroke.

Sharleen Santos-Bamba, Ph.D.
Senior Vice President and Provost



Message from the Interim Vice Provost, Research and Sponsored Programs / Director of Contracts and Grants **PAMELA A. PERALTA TAITANO, Ed.D.**

Håfa Adai!

In FY 2023, the University of Guam continues its impressive and impactful research in record numbers. The pursuit of research par excellence remains strong at the University with dedication, commitment, and passion from faculty and staff in response to community and global needs despite the remnants of the COVID 19 pandemic, Typhoon Mawar, and our economic recovery.

As a Land Grant and now a Sea Grant institution, the University extramural portfolio supports UOG's Tulos Mo'na (propelling forward in unison) strategic initiatives centered on island wisdom. Research includes our on-going grants such as the NSF-funded EPSCoR-GECCO grant, the NCI-funded Pacific Island Partnership for Cancer Health Equity (U54-PIPCHE) grant, NOAA-funded Sea Grant, CEDDERS funding, a new USDA/NIFA grant with the aim of expanding educational and employment opportunities to students in the Mariana Islands, and the construction of new facilities on campus in over 20 years: the Water & Environmental Research Institute (WERI) of the Western Pacific and the Margaret Hattori Uchima Nursing Annex.

As a small Minority Serving Institution, our University ranks in the top 31% of institutions for total grant-funded research and development expenditures from the National Center for Science and Engineering Statistics. The extramural activities have also increased fourfold from pre-pandemic grant dollars.

Further, our faculty and staff continue to collaborate with federal, local, and foundation partners to advance research with island solutions, working with diverse scientists and institutions, employing talent locally and globally, and enriching our students with experiential training and research opportunities that will last a lifetime.

The Office of Research & Sponsored Programs exists to serve our university family and community stakeholders, so please do not hesitate to contact our office if you have any questions or need additional information - or partner with our University!

Si Yu'os Ma'ase,

A handwritten signature in black ink, appearing to read 'P. Peralta', written over a light gray rectangular background.

Pamela A. Peralta Taitano, Ed.D.
*Interim Vice Provost, Research and Sponsored Programs
Director of Contracts and Grants*

CHART 1
ANNUAL GRANT FUNDING
2013 - 2023

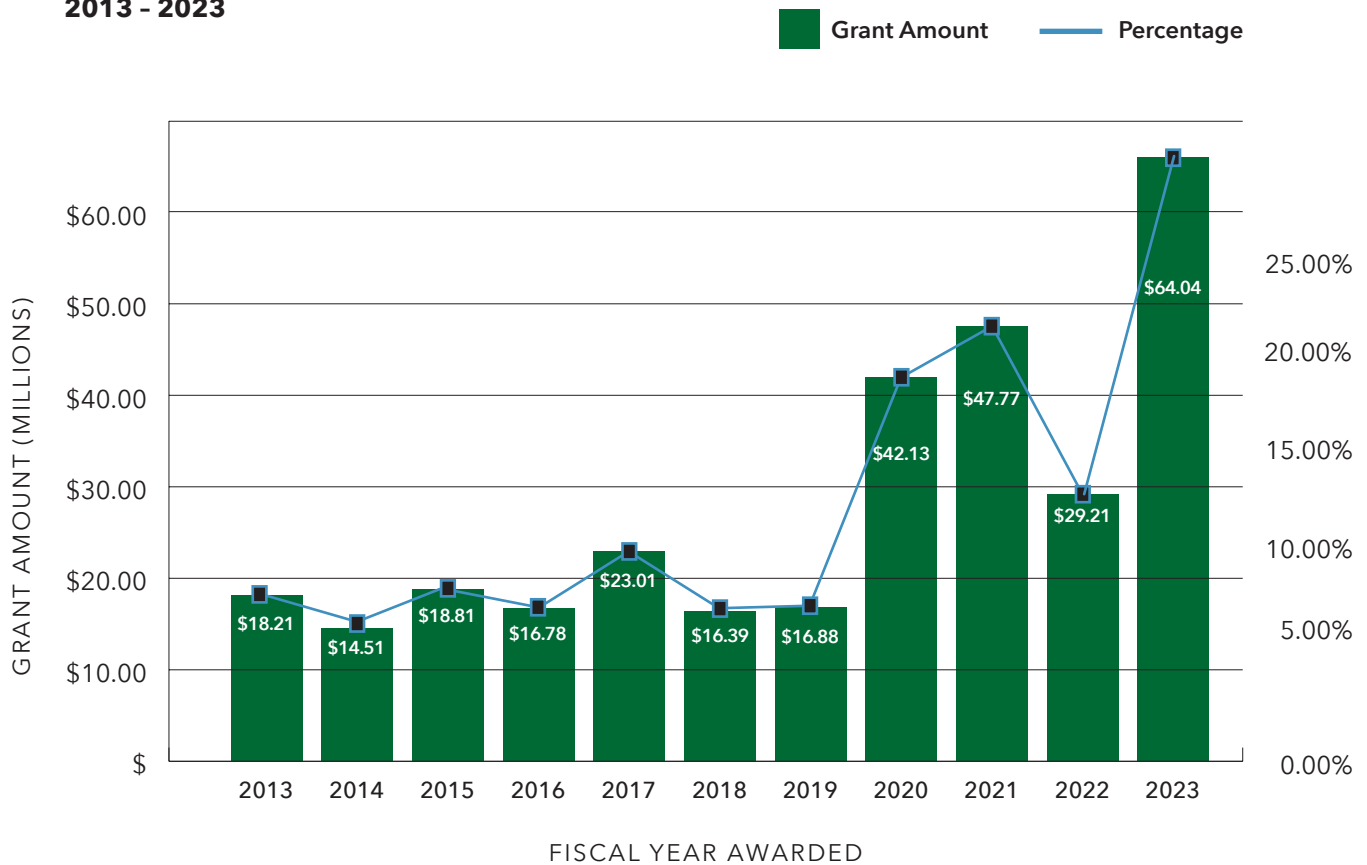


FIGURE 1
ANNUAL GRANT FUNDING
2013 - 2023

Fiscal Year	Grant Amount	Percentage
2013	\$18,208,542.37	5.92%
2014	\$14,514,119.70	4.72%
2015	\$18,811,616.03	6.11%
2016	\$16,781,813.93	5.45%
2017	\$23,014,396.47	7.48%
2018	\$16,390,953.73	5.33%
2019	\$16,882,276.78	5.49%
2020	\$42,129,717.66	13.69%
2021	\$47,771,838.07	15.52%
2022	\$29,213,067.48	9.49%
2023	\$64,042,897.19	20.80%
Grand Total	\$307,761,239.41	100.00%

CHART 2
FEDERAL VS. NON-FEDERAL AWARDS BY YEAR
2013 - 2023

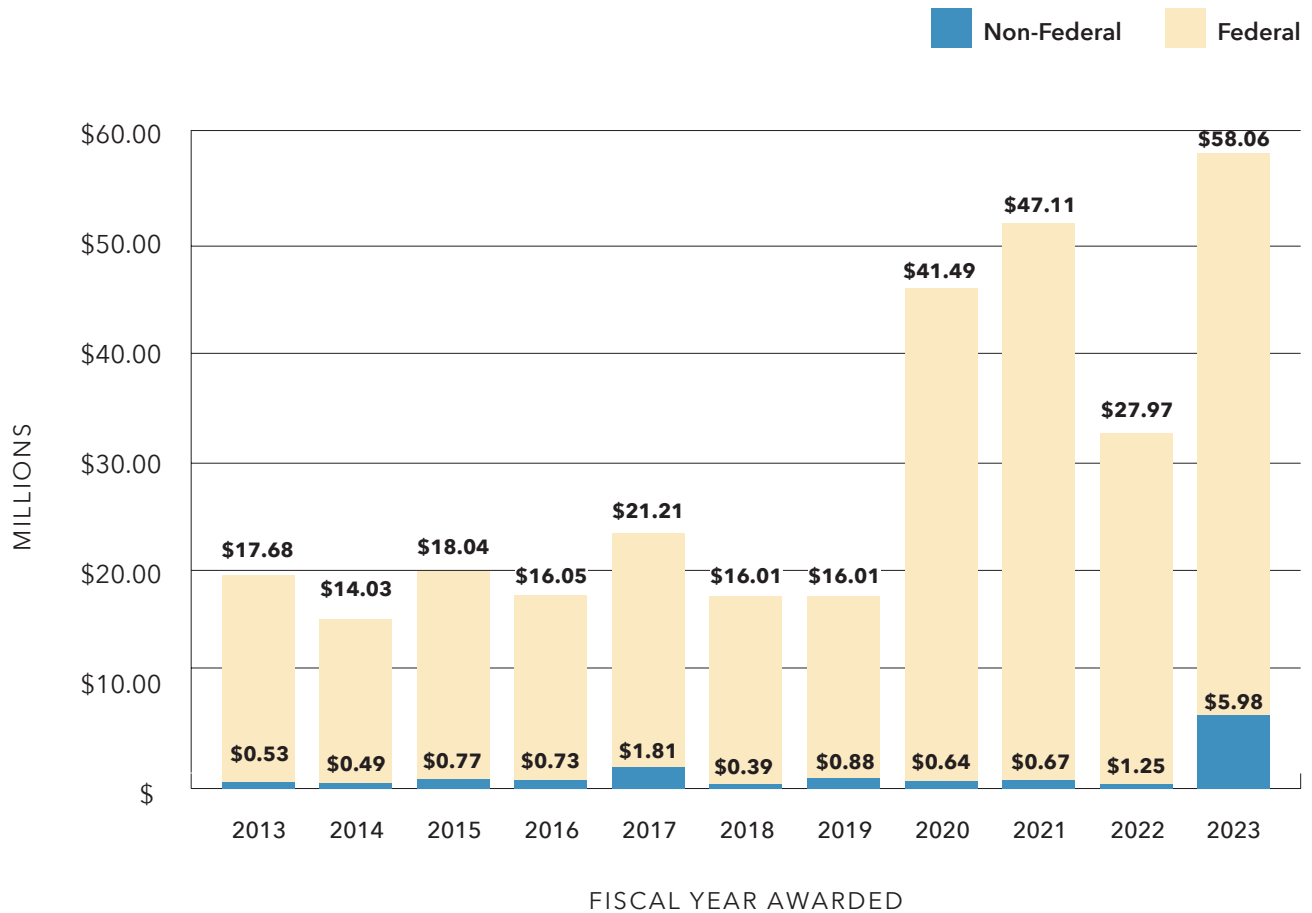


FIGURE 2
FEDERAL VS. NON-FEDERAL AWARDS BY YEAR
2013 - 2023

Fiscal Year	Federal	Non-Federal	Grand Total
2013	\$17,675,851.88	\$532,690.49	\$18,208,542.37
2014	\$14,026,350.70	\$487,769.00	\$14,514,119.70
2015	\$18,038,141.35	\$773,474.68	\$18,811,616.03
2016	\$16,047,216.93	\$734,597.00	\$16,781,813.93
2017	\$21,205,767.47	\$1,808,629.00	\$23,014,396.47
2018	\$16,005,945.73	\$385,008.00	\$16,390,953.73
2019	\$16,006,084.98	\$876,191.80	\$16,882,276.78
2020	\$41,488,776.66	\$640,941.00	\$42,129,717.66
2021	\$47,106,028.07	\$665,810.00	\$47,771,838.07
2022	\$27,966,336.48	\$1,246,731.00	\$29,213,067.48
2023	\$58,064,957.19	\$5,977,940.00	\$64,042,897.19
Grand Total	\$293,631,457.44	\$14,129,781.97	\$307,761,239.41

CHART 3
NUMBER OF FEDERAL VS. NON-FEDERAL AWARDS
2013 - 2023

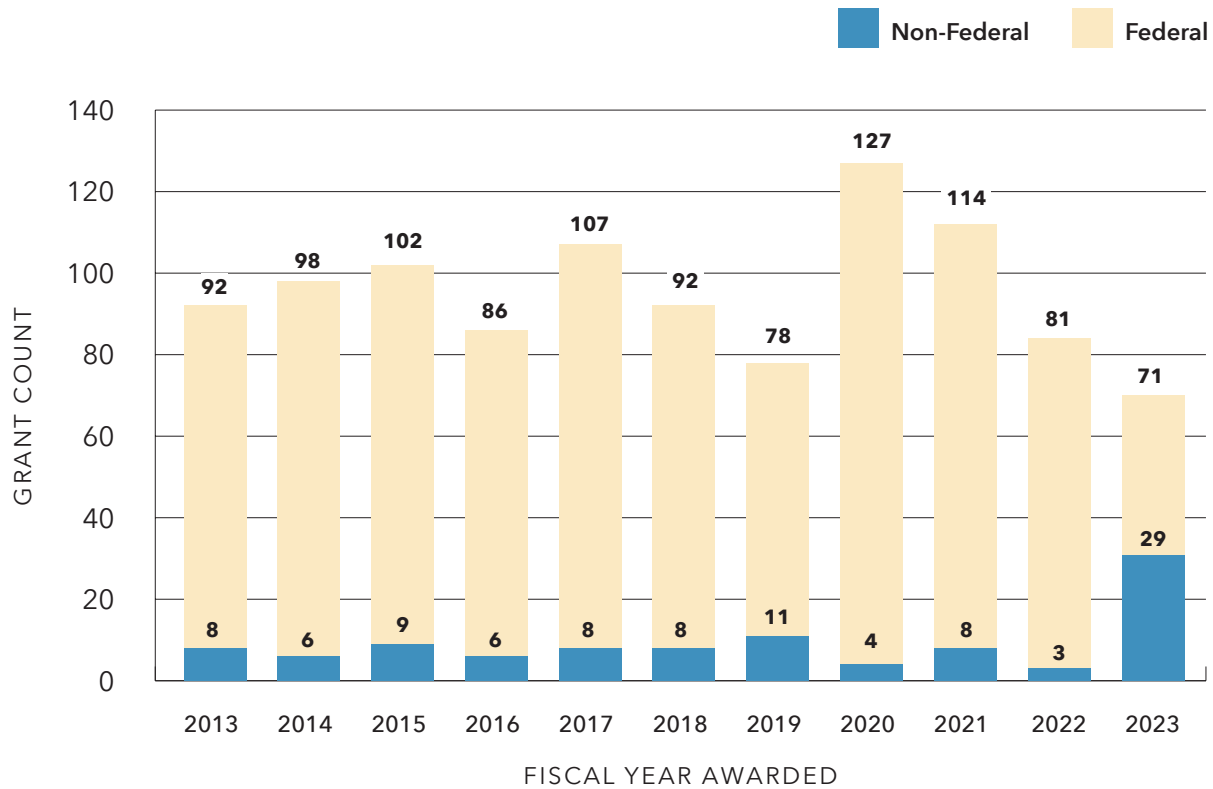


FIGURE 3
NUMBER OF FEDERAL VS. NON-FEDERAL AWARDS
2013 - 2023

Fiscal Year	Federal	Non-Federal	Grand Total
2013	92	8	100
2014	98	6	104
2015	102	9	111
2016	86	6	92
2017	107	8	115
2018	92	8	100
2019	78	11	89
2020	127	4	131
2021	114	8	122
2022	81	3	84
2023	71	29	100
Grand Total	1,048	100	1,148

FIGURE 4
TOP PRINCIPAL INVESTIGATORS BY FUNDING (≥ \$100K)
FY 2023

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
1	Cathleen Moore-Linn	\$21,776,808.00	RCUOG	DOC Economic Development Administration (EDA), University of Guam Endowment Foundation	UOG Scientific and Education Research Facilities Construction Project	University of Guam Scientific Education and Research Facilities Construction: WERI and the Margaret Hattori Uchima Nursing Annex
2	Lee S. Yudin	\$10,000,000.00	CNAS	USDA/NIFA	Creation of a Cooperative BS Degree Program for the Marianas Islands and Beyond	To expand educational and employment opportunities in FANH sciences to students in the Marianas Islands where course offerings necessary for federal employment are limited
3	Terry Donaldson (PI), Bastian Bentlage (Co-PI), Austin Shelton (Co-PI), Rachael Leon Guerrero (Co-PI)	\$3,763,277.00	EPSCOR	NSF	RII Track-1: Guam Ecosystems Collaboratorium for Corals and Oceans	Guam Ecosystems Collaboratorium for corals and oceans
4	Else Demeulenaere	\$2,505,415.00	ORSP-CIS	DOD/DON (CESU)	CESU Vegetation Reforestation	To implement management techniques to restore vegetation at the HMU and 3A Achae point to a native forest habitat for the benefit of native flora and fauna
5	Austin Shelton	\$1,568,350.88	ORSP-SG	NOAA	Restoring Watersheds through Agroforestry to Improve Erosion Control in Guam	To utilize agroforestry through intercropping fruit trees with ongoing native tree planting to improve biodiversity and habitat for birds in Guam and to reduce flow of land-based pollutants from significant soil erosion to protect coastal waters and adjacent streams that lead to the Ugum River
6	Rachael Leon Guerrero	\$1,557,956.00	ORSP	HHS/NIH/NCI	Pacific Island Partnership for Cancer Health Equity (PIPCHÉ)	Pacific-based partnerships that addresses cancer disparities in the people of Hawaii, Guam, and other affiliated Pacific Islands
7	Austin Shelton	\$1,539,436.00	ORSP-CIS	DOI	Guam Green Growth Renewable Energy Project and Energy Audit of Government of Guam Buildings	Project focusing on renewable energy, EVs, and energy efficiency. Priority is to implement a 100kWh solar generated renewable energy system
8	Austin Shelton	\$1,456,363.00	ORSP-CIS	GovGuam	EDUC Stabilization Fund ESF	Proposed two-year project will innovate through the challenges of the COVID-19 pandemic to deliver place-based educational resources to the community of Guam in the marine, environmental, traditional ecological knowledge and sustainable sciences
9	Yvette Paulino	\$1,121,847.00	ORSP	DHHS	Establish Guma' Tinemtom to support population health research through island wisdom	Supporting population health research through island wisdom

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
10	John Limtiaco	\$1,033,440.00	CNAS	U.S. Dept. of Energy	Controlling electrochemical reactions under the non-ideal conditions of seawater electrolysis	The project aims at understanding the complexity of the electrode/liquid interface and controlling reaction pathways for H2 and O2 evolution in seawater electrolysis through planned activities suitable to teach students the fundamentals of catalysis and electrochemistry.
11	Else Demeulenare	\$871,016.00	ORSP-CIS	DOAG/FWS	Habitat Conservation Plan Ph. 3	To address the public and final drafts of the HCP, the initiation and completion of the National Environmental Policy Act (NEPA) compliance and the necessary expansion of the stakeholder outreach program
12	Austin Shelton	\$864,293.00	ORSP-CIS	NSF	Collaborative: Implementation Grant: Navigating Home	Navigating Home will support recent on- and off-island graduates who identify as Black, Hispanic, Pacific Islanders or other underrepresented groups in the geosciences and who originally hail from one of three U.S. territory hubs (Guam, Puerto Rico and the U.S. Virgin Islands) by placing them in new, marine and environmental science job opportunities
13	Austin Shelton	\$840,311.00	ORSP-CIS	GovGuam	G3 Educ Marketspace and Innovation	To establish an educational space at the CHamoru Village in the Capitol City, Hagatna, called the Guam Green Growth (G3) Circular Economy Makerspace and Innovation Hub
14	Pamela Peralta	\$796,813.00	ORSP	HRSA	SNHS-HRSA Geriatrics WorkforceY4	To educate and train the health care and supportive care workforces in TTOUR sites to care for older adults by collaborating with community partners
15	Roseann Jones, Frederick Granillo	\$766,666.00	SBPA	SBA	SBDC Guam & Micronesia	Offers ongoing program of workshops, conferences, and seminars all designed to meet the needs of local small businesses in Guam and Micronesia
16	Laurie Raymundo	\$699,739.18	Marine Lab	FWS	Critical Evaluation of Restoration of Staghorn Acropora Populations on Guam, Micronesia	To assess the success of current efforts to reduce extinction risk and increase cover of eight species of essential habitat-forming staghorn Acropora in selected reef flats in Guam
17	David Crisostomo	\$690,000.00	ORSP-CIS	GovGuam (GEDA)	Increasing Aquaculture Capacity in Guam	To increase the capacity of UOG Sea Grant by providing extension education programs to the Guam community, on-farm demonstration of sustainable aquaculture practices and opportunities for professional development for aquaculture professionals
18	Tammy Mildenstein	\$659,655.00	ORSP	DON	Fruit Bat Monitoring on AAFB	To conduct a base-wide population count to monitor changes in population trends, perform and analyze habitat quality, bat sign survey and bat diet, maintain a database and map of all fruit bat sightings on and around AAFB
19	Austin Shelton	\$500,000.00	ORSP-SG	GovGuam	PL no. 36-107 CIS - Guam Green Growth	Implementation of the G3 action framework to cultivate an ecosystem for transformative action to achieve a more sustainable, prosperous, and equitable future for Guam

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
20	Anita Borja Enriquez	\$421,848.00	SVP	ED	SVP-Para Hulo-Triton Services Center	Enhancing capacity at the University of Guam to advance students in academic, financial and career advising
21	Pamela Peralta, Jason Betham	\$399,998.00	ORSP	SBA	American Samoa-SBDC	To enhance economic growth and assist individuals in American Samoa by developing entrepreneurial skills among businesses and the broader community through counseling, training, research, advocacy and other resources and activities
22	Roseann Jones, Boris Hertslet	\$399,885.00	SBPA	SOB-DOD/DLA PTAC	SOB-DOD/DLA PTAC	To provide procurement technical assistance for business firms
23	Shane Siers	\$395,615.00	CNAS	USDA-APHIS	RCUOG-USDA Brown Tree Snake BTS Research Support	To avail NWRC of the local expertise and capacity and further multiple lines of inquiry into the biology of invasive brown treesnakes and the development and testing of tools for their control
24	James McConnell	\$390,620.00	CNAS	Proferre, Inc.	MOU between Proferre, Inc and UOG RCUOG	In coordination with UOG-CNAS and the Guam Plant Extinction Prevention Program to provide technical assistance including field personnel training, field assessment, progress report writing, surveying and monitoring
25	Rachael Leon Guerrero	\$389,144.00	ORSP	DPHSS	Public Law 36-107 Guam Cancer Registry	The Guam Cancer Registry is a population-based registry that is tasked with recording all cancer cases occurring among residents of Guam
26	Cathleen Moore-Linn, R. Reed	\$383,944.00	RCUOG	USGS	Rapid Response BTS	To control the Brown Treesnakes (BTS) on Guam, to prevent its introduction to other islands, and to mitigate its impacts to military readiness in the Pacific region
27	Laurie Raymundo	\$379,401.33	ORSP-Marine Lab	NOAA	Restoring and Protecting U.S. Marine Habitats	To extend ongoing restoration initiated in Guam in 2017 focusing on conservation of eight species of staghorn Acropora, via ocean nursery rearing and re-introduction to healthy habitats
28	June De Leon	\$361,534.00	CEDDERS	Guam Department of Education	SSIP 2021 1st Renewal	To provide professional consulting services to implement the State Systemic Improvement Project (SSIP)
29	Austin Shelton	\$315,289.00	ORSP-CIS	GovGuam	Yo'Amte Plant and Healing	To advance the UOG strategic goal and address a critical island need to perpetuate traditional knowledge in native and endemic plants, their uses, and associated traditional practices
30	Monique Storie, Kenneth Kuper	\$299,154.00	MARC	DHHS	Chamoru Language and Culture Researcher Training Program	To create a workforce of trained language and culture researchers who are proficient in collecting, analyzing, and piecing together the scattered pieces of CHamoru knowledge
31	Carlos Taitano	\$287,792.00	GLE	DOI	TAP Campus Security	To implement a campus-wide security system to secure personnel and resources
32	Roseann Jones, Boris Hertslet	\$271,958.07	SBPA	DOD/DLA	Award of Cooperative Agreement for the establishment of an APEX Accelerator	Establishment for an APEX accelerator

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
33	Cheryl Sangueza	\$249,969.00	SOE	Alfred Aloan Sloan	Addressing the Hidden Curriculum to Improve Access to Graduate Programs	To develop curriculum that can both expose the hidden curriculum (unspoken or implicit norms that exist in educational settings and contribute to inequality) to undergraduate students from underrepresented population backgrounds and change mindsets within the university setting. These steps will help dismantle systemic barriers for students
34	Mari Marutani	\$238,188.21	CNAS	DOAG	CNAS-DOAG USDA Black Pepper (Implementing the Introduction and Establishment of Black Pepper Seed Stock for Local Producers on Island Project)	To introduce black pepper (<i>Piper nigrum</i>) as a potential specialty crop in Guam for niche market and sustainable agriculture
35	June De Leon	\$232,308.00	CEDDERS	Guam Department of Education	Guam Part B 2019 4th Renewal	To provide professional development for State Performance Plan (SPP) and technical support for Part B Special education
36	Laurie Raymundo	\$209,851.00	ML	NFWF	COTS-Pilot Study to Implement a Crown of Thorns outbreak Mitigation plan in Guam Micronesia	This is a pilot study to implement and test the efficacy of Guam's Crown-of-Thorns seastar (COTS) outbreak rapid response strategy, in conjunction with a pilot test of coral outplanting
37	Austin Shelton, Fran Castro	\$200,000.00	ORSP-SG	GovGuam (AG)	Erosion control and revegetation under GROW program	To support the GROW initiative's existing erosion control and revegetation activities
38	George Fiedler	\$200,000.00	CNAS	USDA	Development of Online Courses in Tropical Wildlife Management	To develop two, new online courses in wildlife management so that students will have the opportunity to take all the necessary courses to be OPM-qualified wildlife biologists upon graduation
39	Kuan-Ju Chen	\$200,000.00	CNAS	USDA	USDA VRT Ag & Food	To integrate innovative technologies in the Agriculture and Life Sciences (ALS) programs by groundbreaking methods such as virtual reality technology (VRT) in administering agriculture science courses in ours and neighboring insular institutions
40	Romina King	\$200,000.00	CNAS	USDA USFS	RISC Support at UOG	To hire a Project Coordinator to support the Regional Invasive Species Council (RISC), an advisory body to the Micronesian Islands Forum as well as support for the jurisdictions of Micronesia
41	Yong-Sang Kim	\$199,929.00	WERI	NOAA	The Maintenance and Upgrade of the WERI Water Quality Laboratory	To support and maintain WERI Lab to produce consistent, automated, controlled and calibrated BOD system to benefit local and regional water-quality research and education
42	Glenn Dulla	\$196,847.00	CNAS	USDA-APHIS	GU FY23 PPA CRB Management 6R.0344	Continuation of CRB-Metarhizium biocontrol for use at ports of entry management project
43	Pamela Peralta	\$180,955.00	ORSP	HHS/CDC/UH	USAPI Pacific Regional Central Cancer Registry (PRCCR)	To maintain employment of and house the PRCCR registrar and actively participate in the enhancements of the PRCCR by providing TA/QC audits to all jurisdictions
44	Romina King	\$175,001.00	UL	DOI/USGS/UH	PICASC	To provide financial support for tuition and professional development opportunities for students working on actionable science projects that fall under the themes of PICASC Science agenda

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
45	Glenn Dulla	\$167,815.00	CNAS	DOI	CRB Management, Palm Tree Pesticide Injection	Palm trees around Guam's Ports of Entry will be injected with pesticides to manage CRB population in areas of egress risk
46	Atsushi Fujimura	\$159,554.00	ML	NOAA	Support for the PacOOS Mission in Guam	Local coordination and management of ocean observing instrumentation high frequency (HF) radar systems measure the speed and direction of ocean surface currents in near real time
47	Hyunju Oh	\$ 156,743.00	CNAS	NSF	CNAS-IHBEM Multidisciplinary Analysis of Vaccination Games for Equity (MAVEN)	Establish and run math REU style at UOG and offer research projects and training to 5 UOG undergraduates during 8 summer weeks focusing on the actual research in vaccination game theory
48	Austin Shelton	\$ 150,000.00	ORSP-SG	RCUH	Recruitment, Management and Oversight of the Palau Action Framework Coordinator	Recruitment of Palau Action Framework Coordinator to work with Palau government, NGO and private sector partners to effectively coordinate projects and activities that support the development of Palau Green Growth.
49	Romina King	\$ 150,000.00	CNAS	NASA	The Hawaii Space Grant Consortium 2020-2024	To reflect state and NASA program needs in development and maintenance of the HiSTEM Pipelines of activities to enhance undergraduate education through NASA mission directorate research
50	Heloise Rouze	\$ 150,000.00	ORSP-Marine Lab	National Fish & Wildlife	Explore New Coral Engineering Methods to Enhance Coral Reef Restoration in Guam	Develop a novel coral engineering method to enhance resilience in corals through micro-fusion of corals and study of associated microbiomes to advance active restoration strategies for Acropora species
51	Fran Castro	\$ 148,400.00	ORSP-SG	DOD/DON (CESU)	Sea Turtle Monitoring, Protection, and Educational Outreach on Andersen Air Force Base (AAFB)	To implement management techniques and methodologies to monitor nesting sea turtles on AAFB including nest protection and educational outreach
52	June De Leon	\$ 142,297.00	CEDDERS	ROP Ministry of Education	Palau Part B Special Education Program	To assist the Special Education Program of Palau Ministry of Education for Technical Assistance and Consultation Services regarding services to the administration of the program and services to children with disabilities and special needs
53	June De Leon	\$ 136,021.00	CEDDERS	FSM Department of Education	Project LIFT	Project Literacy Intervention for FSM Leaders of Tomorrow Technical Assistance and Training (Project LIFT TA & T) represents the support and commitment that the UOG CEDDERS offers NDOE in building local capacity at the National and State-levels for applying increased knowledge and skills in the area of research-based instructional practices using student performance data and progress monitoring within the RtI
54	Glenn Dulla	\$ 130,631.00	CNAS	DOI	Port Forest Pest	This proposal builds on previous work as continued monitoring and data acquisition is needed to assess egress risk as well as detect new incursions and to treat identified infestations to halt infestation expansion within port properties and prevent escape to island neighbors

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
55	June De Leon	\$ 127,738.00	CEDDERS	DHHS-Administration for Community Living (ACL)	AT Act State Grant for Assistive Technology	This project provided information on assistive technology to individuals with developmental disabilities and their families and collaborated with local organizations in offering low interest loans for individuals requiring assistive technology devices to improve their quality of life or to become gainfully employed
56	Cathleen Moore-Linn, Patrick Keeler	\$127,650.00	RCUOG	NFWF/BSP	Engaging Guam Residents to Reduce Land Based Sources of Pollution and Promote Habitat Restoration for Coral Health	To duplicate the success of a previous community project with expanded firebreak protection around multiple reforestation sites during the dry season and increase the scale of reforestation efforts and addressing the increased risk of fire that is expected with warming temperatures
57	Cathle Moore-Linn, Shane Siers	\$125,238.00	RCUOG	USDA	USDA BTS Research (22-23)	To avail NWRC of the local expertise and capacity and further multiple lines of inquiry into the biology of invasive brown treesnakes and the development and testing of tools for their control
58	Tanisha Aflague	\$124,968.00	ORSP	USDA	ORSP-UH Food System Resiliency for CHL	Identify common dietary patterns in CHL, using the newly derived Healthy Eating Index (HEI) and data driven approaches to determine dietary patterns associated with healthy body size and determine what elements and drivers of the food system are related to these diets
59	Carlos Taitano	\$118,658.00	GLE	NEH	Towards a More Perfect Union: Teaching and Learning in Micronesia	This project explores the relationship and history between the US and Micronesia and the impact on the Guam community, specifically in teaching and learning within the classroom setting
60	June De Leon	\$100,000.00	CEDDERS	Guam Department of Education	SPDG/Project Hita Para Mo'Na 1st Renewal	CEDDERS will serve as the liaison between GDOE and other project partners and will be responsible for facilitating the evaluation team engagement for the evaluation development and implementation

FIGURE 5
USDA LAND GRANT FORMULA FUNDS LISTING
FY 2023

Rank	Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
1	Adrian Ares	\$2,556,371.02	CNAS	USDA/NIFA	HATCH FY 2023	For the Hatch program more than 10 research projects will be performed in aquaculture, food science, genome conservation, human nutrition, integrated pest management, natural resource conservation, natural products, plant health, soil management, and other topics
2	Peter Barcinas	\$2,104,386.00	CNAS	USDA/NIFA	SMITH LEVER	An education effort to apply research-based, unbiased information for daily application in the use and protection of urban natural resources in the urban and rural environments, identifying food security strategies on the micro, mezzo, and macro-levels, youth and family development for leadership, and economic sector enhancement
3	Adrian Ares	\$443,365.00	CNAS	USDA/NIFA	Multi-State FY 2023	For the Multistate Hatch, CNAS faculty participate in research programs involving several universities in the United States on aquaculture, food science, genome conservation, human nutrition, plant health, and soil conservation
4	Tanisha Aflague	\$105,542.00	CNAS	USDA/NIFA	EFNEP	To assist low-income families and youth in acquiring knowledge, skills, attitudes, and changed behaviors necessary for nutritionally sound diets and to contribute to their personal development and improvement of the total family diet and nutritional well-being
5	Adrian Ares	\$48,142.00	CNAS	USDA/NIFA	McENTIRE STENNIS FY2023	For the McIntire Stennis program, CNAS faculty conduct a limited number of projects because of sharp funding reduction on forestry issues relevant to Guam.

FIGURE 6
NOAA SEA GRANT FORMULA FUNDS LISTING
FY 2023

Principal Investigator	Grant Amount	PI's Unit	Award Sponsor	Project Title	Project Description
Austin Shelton, Fran Castro	\$2,188,000.00	ORSP	DOC/NOAA	Sea Grant Omnibus Support	To advance the comprehension, evaluation, development, management, utilization, and preservation of its ocean, waters, and natural resources

FIGURE 7
PROPOSAL TO AWARD CONVERSION

Year	Proposals	Awards	Conversion Rate
2023	115	100	87%

CHART 4

Grant Awards by College/Department

FY 2023

See Figure 8 on the next page.

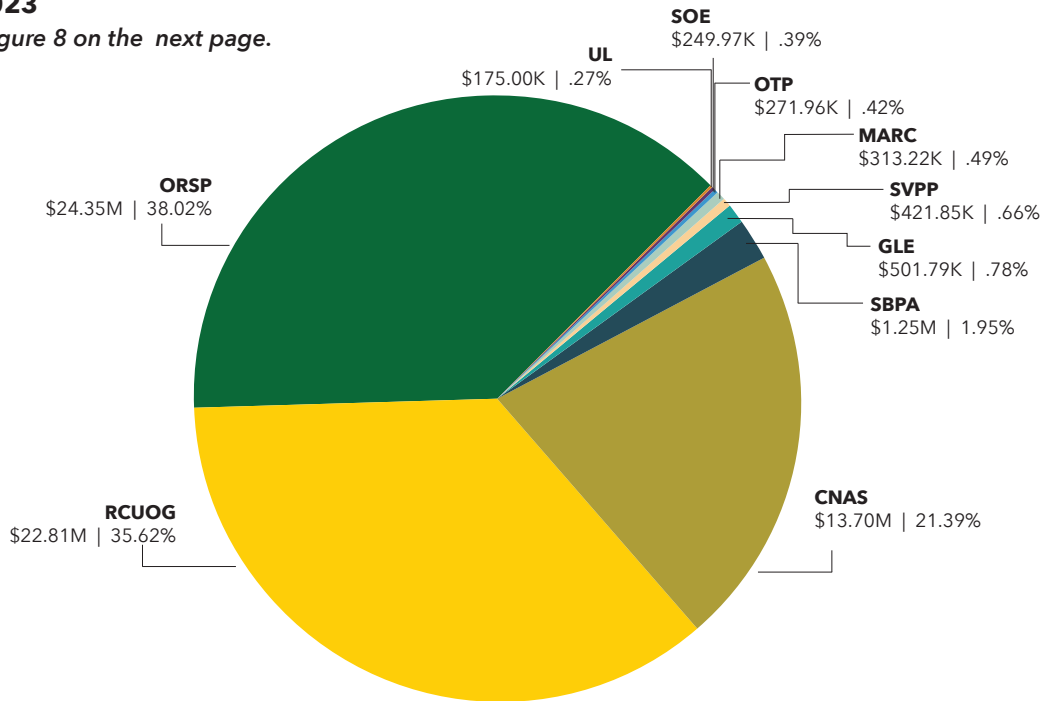


CHART 5

ORSP Awards by Sponsor

FY 2023

See Figure 9 on the next page.

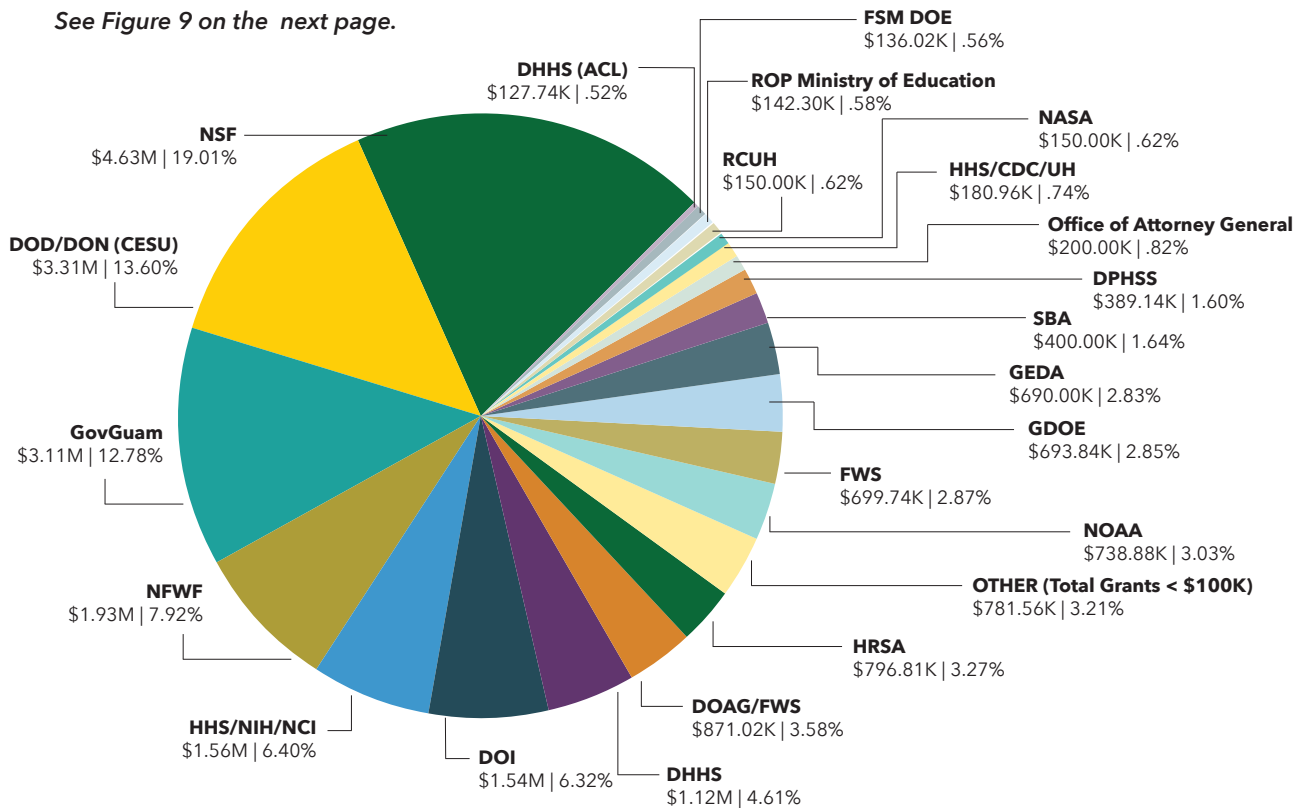


FIGURE 8
Grant Awards by College / Department
FY 2023

	Funded by	Sum of Grant Amount	%
	ORSP	\$24,348,456.39	38.02%
	RCUOG	\$22,809,255.00	35.62%
	CNAS	\$13,699,793.21	21.39%
	SBPA	\$1,251,616.52	1.95%
	GLE	\$501,786.00	0.78%
	SVPP	\$421,848.00	0.66%
	MARC	\$313,215.00	0.49%
	President's Office	\$271,958.07	0.42%
	SOE	\$249,969.00	0.39%
	UL	\$175,001.00	0.27%
	Grand Total	\$64,042,898.19	100.00%

FIGURE 9
ORSP Awards by Sponsor
FY 2023

	Funded by	Sum of Grant Amount	%
	NSF	\$4,627,570	19.01%
	DOD/DON (CESU)	\$3,313,470	13.60%
	GovGuam	\$3,111,963	12.78%
	NFWF	\$1,928,203	7.92%
	HHS/NIH/NCI	\$1,557,956	6.40%
	DOI	\$1,539,436	6.32%
	DHHS	\$1,121,847	4.61%
	DOAG/FWS	\$871,016	3.58%
	HRSA	\$796,813	3.27%
	Other	\$781,564	3.21%
	NOAA	\$738,884	3.03%
	FWS	\$699,739	2.87%
	GDOE	\$693,842	2.85%
	GEDA	\$690,000	2.83%
	SBA	\$399,998	1.64%
	DPHSS	\$389,144	1.60%
	Office of Attorney General	\$200,000	0.82%
	HHS/CDC/UH	\$180,955	0.74%
	NASA	\$150,000	0.62%
	RCUH	\$150,000	0.62%
	ROP Ministry of Education	\$142,297	0.58%
	FSM DOE	\$136,021	0.56%
	DHHS (ACL)	\$127,738	0.52%
	Grand Total	\$24,348,456	100.00%

FIGURE 10
RESEARCH AWARDS UNDER ORSP
FY 2023

Center for Island Sustainability (CIS)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
CESU Vegetation Reforestation	DOD/DON (CESU)	\$ 2,505,415.00	10.29%
Collaborative: Implementation Grant: Navigating Home	NSF	\$ 864,293.00	3.55%
EDUC Stabilization Fund ESF	GovGuam	\$ 1,456,363.00	5.98%
Erosion Control and Revegetation under GROW Program	Office of Attorney General	\$ 200,000.00	0.82%
G3 Educ Marketspace and Innovation	GovGuam	\$ 840,311.00	3.45%
Guam Green Growth Renewable Energy Project and Energy Audit of Government of Guam Buildings	DOI	\$ 1,539,436.00	6.32%
Habitat Conservation Plan Ph. 3	DOAG/FWS	\$ 871,016.00	3.58%
Increasing Aquaculture Capacity in Guam	GEDA	\$ 690,000.00	2.83%
Plant Inventory Survey at Atantano Heritage Preserve	Guam Preservation Trust	\$ 49,999.00	0.21%
Restoring Watersheds through Agroforestry to Improve Erosion Control in Guam	NFWF	\$ 1,568,351.88	6.44%
Yo'Amte Plant and Healing	GovGuam	\$ 315,289.00	1.29%
Center for Island Sustainability (CIS) - Grand Total		\$10,900,473.88	44.77%

Sea Grant (SG)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
Guam Green Growth	GovGuam	\$ 500,000.00	2.05%
Joint Region Marianas (JRM) Natural Resources (NR) Stewardship Outreach and Public Engagement Program	DOD/DON (CESU)	\$ 50,000.00	0.21%
Recruitment, Management and Oversight of the Palau Action Framework Coordinator	RCUH	\$ 150,000.00	0.62%
Sea Turtle Monitoring, Protection, and Educational Outreach on Andersen Air Force Base (AAFB)	DOD/DON (CESU)	\$ 148,400.00	0.61%
Sea Grant (SG) - Grand Total		\$ 848,400.00	3.48%

Office of Research and Sponsored Programs (ORSP)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
American Samoa-SBDC	SBA	\$ 399,998.00	1.64%
Establish Guma' Tinemtom to Support Population Health Research through Island Wisdom	DHHS	\$ 1,121,847.00	4.61%
Fruit Bat Monitoring on AAFB	DOD/DON (CESU)	\$ 659,655.00	2.71%
Public Law 36-107 Guam Cancer Registry	DPHSS	\$ 389,144.00	1.60%
RII Track-1: Guam Ecosystems Collaboratorium for Corals and Oceans	NSF	\$ 3,763,277.00	15.46%
The Hawaii Space Grant Consortium 2020-2024	NASA	\$ 150,000.00	0.62%
USAPI Pacific Regional Central Cancer Registry (PRCCR)	HHS/CDC/UH	\$ 180,955.00	0.74%
Pacific Island Partnership for Cancer Health Equity (PIPCHÉ)	HHS/CDC/UH	\$ 1,557,956.00	6.40%
SNHS-HRSA Guam/Micronesia Geriatrics Workforce Enhancement Program Y4	HRSA	\$ 796,813.00	3.27%
Office of Research and Sponsored Programs (ORSP) - Grand Total		\$ 9,019,645.00	37.04%

Center for Excellence in Developmental Disabilities Education, Research & Service (CEDDERS)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
AT Act State Grants for Assistive Technology	DHHS (ACL)	\$ 127,738.00	0.52%
FSM Mentoring Program	Sigma Associates Inc	\$ 20,000.00	0.08%
Get Guam Teleworking (TeleWork)	ED/PIMI	\$ 24,128.00	0.10%
Guam ChildLink-EHDI (GCL-EHDI)	DPHSS/BFHNS	\$ 54,280.00	0.22%
Guam Options for Alternative Loans (GOAL-AT)	ED/PIMI	\$ 24,128.00	0.10%
Guam Part B 2019 4th Renewal	GDOE	\$ 232,308.00	0.95%
Palau Part B Special Education Program	ROP Ministry of Education	\$ 142,297.00	0.58%
Project LIFT	FSM DOE	\$ 136,021.00	0.56%
SPDG/Project Hita Para Mo'Na 1st Renewal	GDOE	\$ 100,000.00	0.41%
SSIP 2021 1st Renewal	GDOE	\$ 361,534.00	1.48%
Center for Excellence in Developmental Disabilities Education, Research & Service (CEDDERS)- Grand Total		\$ 1,222,434.00	5.02%

Marine Laboratory (ML)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
COTS-Pilot Study to Implement a Crown of Thorns outbreak Mitigation plan in Guam Micronesia	NFWF	\$ 209,851.00	0.86%
Critical Evaluation of Restoration of Staghorn Acropora Populations on Guam, Micronesia	FWS	\$ 699,739.18	2.87%
Explore New Coral Engineering Methods to Enhance Coral Reef Restoration in Guam	NFWF	\$ 150,000.00	0.62%
Restoring and Protecting U.S. Marine Habitats	NOAA	\$ 379,401.33	1.56%
Support for the PacIOOS Mission in Guam	NOAA	\$ 159,554.00	0.66%
MCT VI Advancing Science	MCT	\$ 96,010.00	0.39%
Marine Laboratory (ML) - Grand Total		\$ 1,694,555.51	6.96%

Water and Environmental Research Institute (WERI)

PROJECT NAME	SPONSOR	SUM OF GRANT AMOUNT	%
Hydrogeological Assessments of the suspected sinkholes in the P-012 North Ramp Infrastructure	Environmental Chemical Corporation	\$ 61,709.00	0.25%
The Maintenance and Upgrade of the WERI Water Quality Laboratory	NOAA	\$ 199,929.00	0.82%
WERI-BASELINE HQ0 QUAL SRVY AG	BASELINE	\$ 20,978.00	0.09%
WERI-FSM WATER EDU-SUSTAINA	FSM	\$ 47,000.00	0.19%
WERI-GATNA BASIN SPATIO-TEMP A	GATNA	\$ 24,941.00	0.10%
WERI-GIS MOD -MAP GRND PR Z GU	GIS MOD	\$ 14,681.00	0.06%
WERI-GU H20KIDS-PGFR 9/22-8/23	SGS	\$ 25,144.00	0.10%
WERI-PHASEIII-SUSTAINABLE PLAN	SGS	\$ 38,359.00	0.16%
WERI-PRTCTN OF FRESH H2O THRU	PRTCTN	\$ 20,686.00	0.08%
WERI-SOUTH GUAM HYDRO WEB MAPP	WERI-SOUTH GUAM HYDRO WEB MAPP	\$ 10,597.00	0.04%
WERI-UORSP-SGS-INFO TRANSFER OF H2O QUALITY	SGS	\$ 41,241.00	0.17%
WERI-UORSP-SGS-INFORMATION TRANSFER	SGS	\$ 56,020.00	0.23%
WERI-UORSP-SGS-IN-SITU CHARACTERIZATION	SGS	\$ 8,971.00	0.04%
WERI-UORSP-SGS-PFOS TREND MONITORING	SGS	\$ 38,987.00	0.16%
WERI-UORSP-SGS-PROGRAM MANAGEMENT	SGS	\$ 35,957.00	0.15%
WERI-WASTEJ20-N-SOLUTE TRANSP	WASTEJ20	\$ 17,748.00	0.07%
Water & Environmental Research Institute (WERI) - Grand Total		\$ 662,948.00	2.72%

GRAND TOTAL RESEARCH AWARDS UNDER ORSP FY23	\$24,348,456.39	100.00%
--	------------------------	----------------

FIGURE 11
Grant Funding by Sponsor
2013-2023

Sponsor	Number of Awards	Sum of Grant Amount
AECOM Tech Svc	2	\$ 194,049.29
Alfred Aloan Sloan	1	\$ 249,969.00
American Cancer Society	1	\$ 14,088.00
AmeriCorps	3	\$ 1,494,000.00
ASDOE	1	\$ 21,942.00
AUAS/DAN	1	\$ 10,000.00
AUCD/CDC	1	\$ 94,000.00
AVP-GUAP	1	\$ 251,142.08
AVP-UAP-DPHSS	1	\$ 88,383.00
BASELINE	1	\$ 20,978.00
BBMR	2	\$ 900,000.00
Black Construction Corp	1	\$ 25,500.00
Bureau of Statistics and Plans	5	\$ 710,578.52
CES RENEWAL RESOURCES CAPACITY GRANT	1	\$ 13,500.00
CHLA	1	\$ 30,000.00
CNAS-RCUH PACIOOS	1	\$ 9,900.00
CNMI PSS	3	\$ 806,470.00
DHHS	2	\$ 1,421,001.00
DHHS-Administration For Community Living (ACL)	1	\$ 127,738.00
DHSS	3	\$ 368,546.00
DOAG	2	\$ 480,914.21
DOAG/FWS	1	\$ 871,016.00
DOC	1	\$ 16,201.00
DOC Economic Development Administration (EDA)	1	\$21,776,808.00

DOC/EDA	2	\$ 8,740,039.00
DOC/NOAA	23	\$ 5,851,459.00
DOC/NOAA/BSP	18	\$ 2,268,961.68
DOC/NOAA/CRCP	1	\$ 71,216.00
DOC/NOAA/GVB	1	\$ 50,000.00
DOC/NOAA/MCT	5	\$ 402,715.00
DOC/NOAA/NSGO	1	\$ 179,004.00
DOC/NOAA/TNC	1	\$ 58,306.00
DOC/NOAA/UH	1	\$ 140,000.00
DOC/USCB/BSP	2	\$ 468,500.00
DOD/DLA	10	\$ 3,156,425.07
DOD/DON (CESU)	51	\$16,635,541.69
DOD/GANG	1	\$ 23,865.00
DOD/USACE/CESU (Alaska)	1	\$ 743,867.00
DOI	19	\$ 5,349,337.00
DOI/BSP	10	\$ 570,153.00
DOI/COD	2	\$ 290,000.00
DOI/DOAG	4	\$ 1,907,950.00
DOI/FWS	3	\$ 89,982.00
DOI/NPS	8	\$ 539,360.50
DOI/OIA	8	\$ 2,747,615.00
DOI/UH	1	\$ 72,000.00
DOI/USGS	113	\$ 2,798,318.99
DOI/USGS/GWA	1	\$ 531,300.00
DOI/USGS/UH	10	\$ 1,554,932.46
DOJ	1	\$ 300,000.00
DOJ/OPW	1	\$ 300,000.00
DON	3	\$ 3,374,874.00
DOS	1	\$ 19,740.00
DPHHS	9	\$ 2,005,647.00
DPHSS	4	\$ 704,742.00
DPHSS/DHSS	1	\$ 500,000.00

Sponsor	Number of Awards	Sum of Grant Amount
DPHSS-BFHNS	1	\$ 54,280.00
Duenas & Associates	1	\$ 65,018.00
ED	42	\$37,421,946.00
ED/GDOE	29	\$ 5,687,297.14
ED/GovGuam	4	\$ 2,863,313.00
ED/San Jose State University (PT)	2	\$ 151,000.00
ED/UCORP	1	\$ 25,911.00
Environmental Chemical Corporation	1	\$ 61,709.00
EPA	6	\$ 365,409.00
EPA/CNMI	1	\$ 8,860.00
FEMA/GHS/OCD	1	\$ 419,025.00
Ford Motor Company	1	\$ 15,000.00
FSM	2	\$ 139,966.00
FSM Department of Education	1	\$ 136,021.00
FSM National DOE	4	\$ 378,629.00
FWS	4	\$ 1,088,470.18
GATNA	1	\$ 24,941.00
GBHWC	1	\$ 19,382.00
GDOE	4	\$ 863,413.40
GEPA	3	\$ 183,996.00
GIS MOD	1	\$ 14,681.00
GovGuam	12	\$ 4,213,016.00
GovGuam (AG)	1	\$ 200,000.00
GovGuam (GEDA)	2	\$ 693,809.00
GovGuam (GVB)	1	\$ 5,000.00
GovGuam (GWA)	2	\$ 91,792.06
Granite-Obayashi Construction (JV)	2	\$ 160,978.00
Guam Department of Education	3	\$ 693,842.00
Guam Preservation Trust	1	\$ 49,999.00
Harvard	1	\$ 314.68

HHS	9	\$ 1,663,390.00
HHS/ACF	2	\$ 747,930.00
HHS/ACL	20	\$ 6,699,323.71
HHS/ACL/UCEDD	1	\$ 59,701.00
HHS/ACYF/FYSB	2	\$ 151,982.00
HHS/BBMR	1	\$ 310,000.00
HHS/CDC	2	\$ 41,909.00
HHS/CDC/AMCHP	3	\$ 30,000.00
HHS/CDC/AUCD	1	\$ 94,000.00
HHS/CDC/DPHSS	1	\$ 644,656.00
HHS/CDC/UH	4	\$ 432,923.00
HHS/DPHSS	25	\$ 3,311,506.40
HHS/HRSA	21	\$ 6,534,752.48
HHS/HRSA/AMCHP	1	\$ 100,000.00
HHS/HRSA/BHW	3	\$ 2,254,026.00
HHS/HRSA/EHDI	7	\$ 1,031,012.00
HHS/MCH	1	\$ 42,753.96
HHS/NIH	3	\$ 2,439,630.35
HHS/NIH/NCI	4	\$ 5,863,134.00
HHS/NIH/NIMHD - U24 PICCAH	5	\$ 2,795,683.00
HHS/NIH/UH - COVID RADx-UP	2	\$ 115,159.00
HHS/NIH-PSU	2	\$ 140,989.00
HHS/PHI	1	\$ 400,000.00
HHS/UH	4	\$ 397,441.00
HRSA	1	\$ 796,813.00
HSS/DPHSS	4	\$ 197,014.00
IMLS	1	\$ 97,792.00
KAHA	8	\$ 47,000.00
Library of Congress	1	\$ 45,868.00
MAA	2	\$ 12,000.00
MCT	2	\$ 100,556.06
Merrick & Company	1	\$ 186,480.00
ML-MCT	1	\$ 96,010.00
MSU	2	\$ 109,040.00
NARA/NHPRC	1	\$ 142,078.00

Sponsor	Number of Awards	Sum of Grant Amount
NASA	14	\$ 3,257,802.89
NEH	3	\$ 535,456.00
NASA/UH	2	\$ 400,000.25
National Fish & Wildlife	1	\$ 150,000.00
NCEO	1	\$ 23,040.00
NFWF	7	\$ 1,485,143.72
NFWF/BSP	2	\$ 255,300.00
NIH/NCI/UH	8	\$ 4,570,346.00
NIH/PSU	16	\$ 1,558,418.00
NIH/URI	1	\$ 25,903.00
NIH-Scripps Research Institute	1	\$ 29,279.00
NMHC	1	\$ 5,000.00
NOAA	5	\$ 2,366,491.21
NOAA/BSP	2	\$ 80,000.00
NOAA/NFWF	1	\$ 69,769.00
NOAA/RCUH	2	\$ 114,822.00
NPS	1	\$ 56,587.00
NSF	14	\$ 25,899,969.00
NSF/AU (PT)	1	\$ 39,000.00
NSF/BCS	1	\$ 274,312.00
NSF/MAA	4	\$ 116,539.00
NSF/UH	6	\$ 367,656.00
NSF/UNH	1	\$ 43,446.00
OAGG	1	\$ 200,000.00
PALAU	1	\$ 142,297.00
PFM Inc	1	\$ 218,843.00
Proferre, Inc.	1	\$ 390,620.00
PRTCTN	1	\$ 20,686.00
PW Ministry of Ed, Sp Ed	9	\$ 1,075,466.00
RCUH	1	\$ 150,000.00
ROP Ministry of Education	1	\$ 142,297.00
SBA	70	\$ 9,882,011.00
SCS	1	\$ 25,260.00

Sigma Associates Inc	1	\$ 20,000.00
SIGMA FSM	1	\$ 20,000.00
SOB-DOD/DLA PTAC	1	\$ 399,885.00
SRG	1	\$ 35,000.00
Sundance	2	\$ 72,543.00
Sustainable Resource Group	1	\$ 35,000.00
TECO	1	\$ 8,600.00
Tides Center	1	\$ 4,000.00
TNC	1	\$ 33,773.76
U.S. Dept. of Energy	1	\$ 1,033,440.00
UCEDD	1	\$ 59,701.00
UH	7	\$ 571,812.00
University of Otago (New Zealand)	1	\$ 22,645.00
UOG EF	1	\$ 45,000.00
UPEI	1	\$ 7,518.00
US Department of Education/PIMI	2	\$ 48,256.00
USDA	42	\$ 4,872,219.87
USDA USFS	1	\$ 200,000.00
USDA/AMS/BBMR/DOAG	1	\$ 203,840.63
USDA/AMS/DOAG	1	\$ 210,938.97
USDA/APHIS	25	\$ 2,084,494.00
USDA/APHIS/DOAG (PT)	1	\$ 58,062.00
USDA/APHIS/PPQ	49	\$ 1,744,804.00
USDA/CSU	1	\$ 5,000.00
USDA/CTSA	1	\$ 12,800.00
USDA/DOAG	6	\$ 787,096.08
USDA/DPHSS	10	\$ 1,615,227.00
USDA/FS	15	\$ 1,649,110.74
USDA/Idaho	2	\$ 60,000.00
USDA/KSU	6	\$ 135,232.00
USDA/LSR/GDOAG/FSRD	3	\$ 442,780.00

Sponsor	Number of Awards	Sum of Grant Amount
USDA/MCT	1	\$ 62,000.00
USDA/MSU	1	\$ 72,871.00
USDA/NASS	1	\$ 25,000.00
USDA/NIFA	79	\$44,063,604.00
USDA/NIFA	1	\$ 35,000.00
USDA/NIFA/MSU	5	\$ 559,313.00
USDA/NIFA/UH	3	\$ 533,936.00
USDA/NIFA/USU	7	\$ 284,263.70
USDA/NMC	1	\$ 6,500.00
USDA/NRCS	3	\$ 224,883.00
USDA/OIA	1	\$ 63,816.00
USDA/UCDavis	5	\$ 123,366.00
USDA/UH	5	\$ 1,683,295.00
USDA/UOPR	1	\$ 132,125.00

USDA/UOVI	1	\$ 81,008.00
USDA/UW	4	\$ 76,002.00
USDA/WSU	1	\$ 44,999.00
USDA-APHIS	2	\$ 592,462.00
USDA-Forest Service	1	\$ 50,000.00
USDA-MSU	1	\$ 99,099.00
USFWS	1	\$ 12,000.00
USGS	8	\$ 1,531,842.68
USGS/UH	1	\$ 169,320.00
WASTEJ20	1	\$ 17,748.00
WERI-GU	1	\$ 25,144.00
WERI-PHASEIII-SUSTAINABLE PLAN	1	\$ 38,359.00
WERI-SOUTH GUAM HYDRO WEB MAPP	1	\$ 10,597.00

GRAND TOTAL

Number of Awards:

1,148

Sum of Grant Amonut:

\$307,761,239.41

CHART 6

COMPLETED APPLICATION (FULL AND SUBAWARD) PROPOSALS IN CAYUSE BY COLLEGE/DEPARTMENT

FY 2023

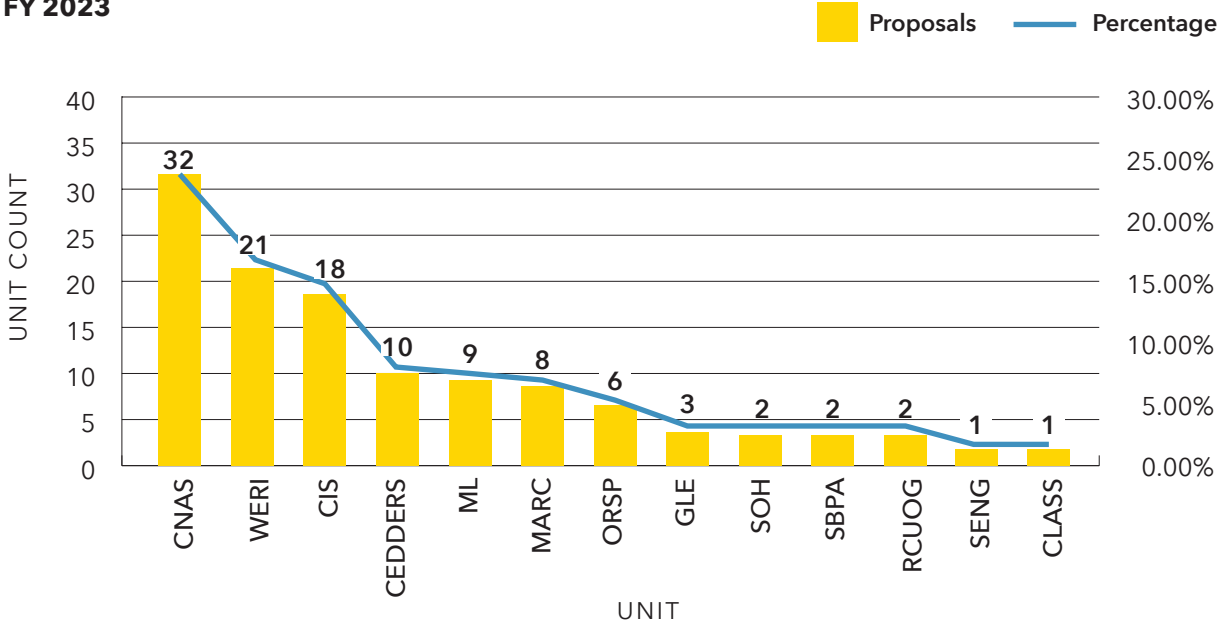


FIGURE 12

COMPLETED APPLICATION (FULL AND SUBAWARD) PROPOSALS IN CAYUSE BY COLLEGE/DEPARTMENT

FY 2023

Unit	Unit Count	Percentage
CNAS	32	27.83%
WERI	21	18.26%
CIS	18	15.65%
CEDDERS	10	8.70%
ML	9	7.83%
MARC	8	6.96%
ORSP	6	5.22%
GLE	3	2.61%
SOH	2	1.74%
SBPA	2	1.74%
RCUOG	2	1.74%
SENG	1	.87%
CLASS	1	.87%
Grand Total	115	100.00%

CHART 7
NUMBER OF RESEARCH AND SCHOLARLY PUBLICATIONS BY COLLEGE/DEPARTMENT

FY 2023

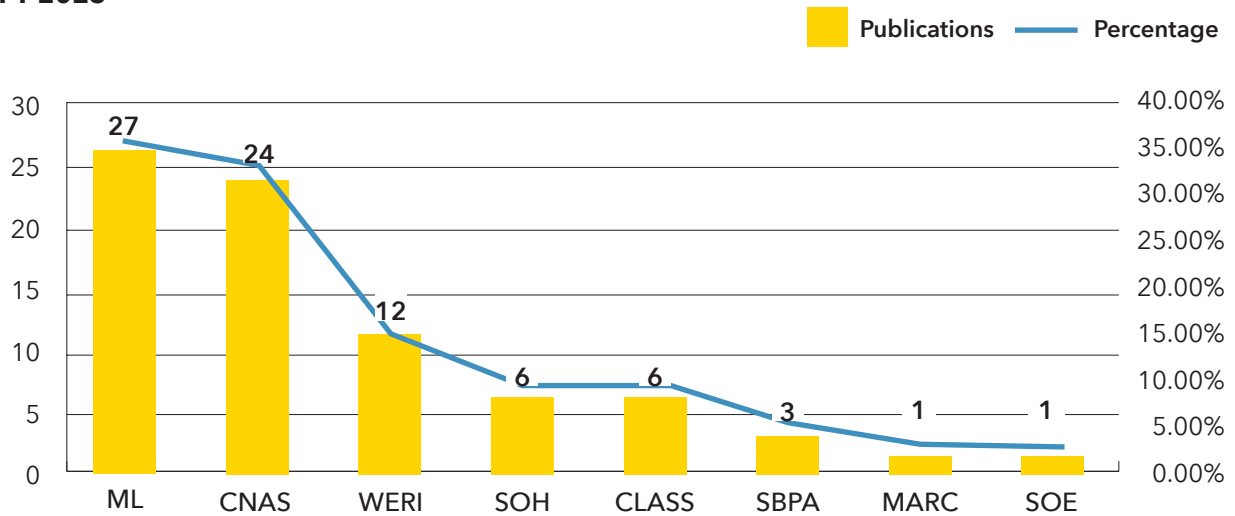


FIGURE 13
NUMBER OF RESEARCH AND SCHOLARLY PUBLICATIONS BY COLLEGE/DEPARTMENT

FY 2023

Unit	Publications	Percentage
Marine Laboratory	27	33.75%
College of Natural and Applied Sciences (CNAS)	24	30.00%
Water and Environmental Research Institute (WERI)	12	15.00%
Margaret Perez Hattori-Uchima School of Health (SOH)	6	7.50%
College of Liberal Arts and Social Sciences (CLASS)	6	7.50%
School of Business and Public Administration (SBPA)	3	3.75%
Richard F. Taitano Micronesia Area Research Center (MARC)	1	1.25%
School of Education	1	1.25%
Grand Total	80	100.00%

Research and Scholarly Publications

FY 2023 and Prior Years

Aflague TF, Esquivel MK, **Hammond K**, Delos Reyes B, Kaholokula JK. Traditional and new lifestyle interventions to prevent breast cancer recurrence (TANICA): a qualitative study. *Support Care Cancer*. 2023 Mar 17;31(4):218. doi: 10.1007/s00520-023-07663-0. Review. PubMed PMID: 36929295; PubMed Central PMCID: PMC10020071.

Aflague TF, **Hammond K**, Delos Reyes B, Rios D, De Leon E, **Leon Guerrero RT**, Esquivel MK. Barriers, Facilitators, and Strategies for Developing a Culturally Informed Lifestyle Intervention for Native Hawaiian, Chamoru, and Filipino Breast Cancer Survivors: Mixed-Methods Findings from Focus Group Participants. *Int J Environ Res Public Health*. 2023 Jun 7;20(12). doi: 10.3390/ijerph20126075. PubMed PMID: 37372662; PubMed Central PMCID: PMC10298141.

Alexis Byers, **Hyunju Oh**, and Gail Tang (2023). (Article) Tensor-SUMMA Grants, MAA Focus, page 9, June 2023.

Anderson, L., McLean, M., **Houk, P.**, Graham, C., Kanemoto, K., Terk, E., ... & Beger, M. (2023). Co-variation of fish and coral traits in relation to habitat type and fishery status. *Coral Reefs*, 42(2), 279-284.

Anthony CJ, **Lock C**, **Bentlage B** (2023) Rapid, high-throughput phenotypic profiling of endosymbiotic dinoflagellates (Symbiodiniaceae) using benchtop flow cytometry. *PLOS One* 18: e0290649

Anthony CJ, McDermott G, **Lock C**, Miller T, **Bentlage B**, **Raymundo LJ** (2023) Depth independent phenotypic variation of massive Porites coral color morphs. *Marine Ecology* e12788

Anthony CJ, Tan KC, Pitt KA, **Bentlage B**, Ames CL (2023) Leveraging public data to predict global niches and distributions of rhizostome jellyfishes. *Animals* 13: 1591

Anthony CJ, **Taylor BM**, **Bentlage B** (2023) Cellular plasticity facilitates phenotypic change in a dominant coral's Symbiodiniaceae assemblage. *Frontiers in Ecology and Evolution* 1288596

Baquiano, M. J. (2023). Immersion in Micronesia classrooms with my cultural background. In A. Perez (Ed.), *Teaching and Learning in Micronesia: Reflections on Island-Centered Pedagogy*. (pp. 143-146). Guam: UOG Press.

C. Levia, R. Perez Portela, **S. Lemer**. Genomic signatures suggesting adaptation to ocean acidification in a coral holobiont from volcanic CO₂ seeps. *Communications Biology*. 2023. 6(1), 769

Cannon, S. E., Donner, S. D., Liu, A., González Espinosa, P. C., Baird, A. H., Baum, J. K., & Wilson, S. K., **Houk, P.** (2023). Macroalgae exhibit diverse responses to human disturbances on coral reefs. *Global Change Biology*, 29(12), 3318-3330.

Chandler JF, Burn D, **Caballes CF**, Doll PC, Kwong SL, Lang BJ, Pacey KI, Pratchett MS (2023). Increasing densities of Pacific crown-of-thorns starfish (*Acanthaster cf. solaris*) at Lizard Island, northern Great Barrier Reef, resolved using a novel survey method. *Scientific Reports* 13: 19306

Combosch DJ, **Burdick D**, Primov K, **Rios D**, Rios K, Fernandez J. Barcoding and mitochondrial phylogenetics of Porites corals. *PLOS ONE*. 2024;19: e0290505. doi: 10.1371/journal.pone.0290505

De la Vega P, **Shimpi GG**, **Bentlage B** (2023) Genome sequence of the endosymbiotic *Endozoicomonas* sp. Strain GU-1 (Gammaproteobacteria), isolated from the staghorn coral *Acropora pulchra* (Cnidaria: Scleractinia). *Microbiology Resource Announcements* 12: e01355-22

Dela Cruz R, Novotny R, Wilkens LR, Shvetsov YB, Yamanaka AB, Butel J, **Aflague TF**, Coleman P, Shallcross L, Deenik J, Mapa VLR, Boushey CJ, Fleming T. Diet Quality of Young Children in the US-Affiliated Pacific's Children's Healthy Living (CHL) Program. *J Acad Nutr Diet*. 2023 Dec;123(12):1781-1792. doi: 10.1016/j.jand.2023.08.003. Epub 2023 Aug 9. PubMed PMID: 37562772; PubMed Central PMCID: PMC10840861.

Doll PC, Uthicke S, **Caballes CF**, Diaz-Pulido G, Abdul-Wahab MA, Lang BJ, Jeon SY, Pratchett MS (2023). Settlement cue selectivity by larvae of the destruction crown-of-thorns starfish. *Biology Letters*: rsbl.2022.0399.

Doll PC, Uthicke S, **Caballes CF**, Patel F, Gomez-Cabrera MD, Lang BJ, Pratchett MS (2023). Induction of larval settlement in crown-of-thorns starfish is not mediated by conspecific cues. *Scientific Reports* 13:17119

Esquivel MK, **Aflague TF**, Yamanaka AB, **Guerrero RTL**, Coleman P, Fialkowski MK, Shallcross L, Fleming T, **Davis J**, Boushey CJ, Wilkens LR, Braun K, Novotny R. Children's Dietary Intake by Early Care and Education Setting in the US Affiliated Pacific. *J Nutr Educ Behav*. 2023 Jun;55(6):437-446. doi: 10.1016/j.jneb.2023.03.002. Epub 2023 Apr 5. PubMed PMID: 37029080; PubMed Central PMCID: PMC10353568.

Ferdosh, S. (2023). Ethnobotanical review of selected medicinal plants in Guam for the treatment of urinary tract ailments and their pharmacological properties. *Scientia Pharmaceutica*, 91(3). <https://www.mdpi.com/2218-0532/91/3/43>

Ferdosh, S., Bari, N., **Wu, B.**, & Sarker, Z. (2023). Supercritical fluid extraction of phenolics from *Anisophyllea disticha* (Jack) Baill. and evaluation of their antioxidant activities. *The Natural Products Journal*. https://www.uog.edu/_resources/files/wptrc/2023-wptrc-ferdosh-supercritical-fluid-extraction.pdf

Ferdosh, S., Ghafoor, K., & Sarker, Z. (2023). Total phenolic content and antioxidant activity of date palm (*Phoenix dactylifera* L.) seed extracts using Soxhlet method. *Analytical Chemistry Letters*, 13(3). <https://www.tandfonline.com/doi/abs/10.1080/2297928.2023.2242862>

Fiedler, G.C. & A.M. Kerr (2022). Final Annual (FY22) Performance Report for DAWR: State Wildlife Grant F17AF1204-03, Terrestrial Snail Inventory. 11 pp.

Fiedler, G.C. (2023). Annual (FY22) Report for Guam DAWR: USFWS Permit: ES190076C, Captive Rearing of the Marianas eight spot butterfly (MESB), *Hypolimnas octocula marianensis*. 13pp.

Fiedler, G.C. (2023). Final Annual (FY22) Performance Report for DAWR: State Wildlife Grant F13AF01300-08, Establishment of a Captive Population and Managed Population of the Mariana Eight Spot Butterfly (*Hypolimnas octocula marianensis*). 8 pp.

G.J. Barord, **D. Combosch**, G. Giribet, N. Landman, **S. Lemer**, J. Veloso, P. Ward. 2023. Three new species of Nautilus Linnaeus, 1758 (Mollusca, Cephalopoda) from the Coral Sea and South Pacific. 2023. *ZooKeys*, 1143, 51-69

Gutierrez, K.J., Santos, M.M., & Green, J.N. (2023, June). Faculty reflections of negotiating instructional frames and assessing our work. *Micronesia Educator*, Volume 33, Fañomñakan 2023, 5-13.

Harrison HB, Drane L, Berumen ML, Cresswell BJ, Evans RD, Galbraith GF, Srinivasan M, **Taylor BM**, Williamson DH, Jones GP. (2023). Ageing of juvenile coral grouper (*Plectropomus maculatus*) reveals year-round spawning and recruitment: implications for seasonal closures. *Proceedings of the Royal Society B* 290: 20230584. doi: 10.1098/rspb.2023.0584

Herzog, T. A., Wilkens, L. R., **Badowski, G., Mendez, A. J. P.**, Franke, A. A., Pokhrel, P., Chennaux, J. S. N., Tenorio, L. F., Sotto, P. P., Kawamoto, C. T., & **Paulino, Y. C.** (2023). The Betel Nut Intervention Trial (BENIT)-A Randomized Clinical Trial for Areca Nut and Betel Quid Cessation: Primary Outcomes. *International journal of environmental research and public health*, 20(16), 6622. <https://doi.org/10.3390/ijerph2016622>

Hingle M, Short E, **Aflague T**, Boushey C, Butel J, Coleman P, Deenik J, Fleming T, Olfert M, Shallcross L, Wilkens LR, Novotny R. Food Security is Associated with Higher Diet Quality Among Children of the US-Affiliated Pacific Region. *J Nutr.* 2023 Mar; 153(3):848-856. doi: 10.1016/j.tjnut.2023.01.015. Epub 2023 Jan 13. PubMed PMID: 36775673.

Ho, K.K.W., Chiu, D.K.W., & **Sayama, K.C.** (2023). When privacy, distrust, and misinformation cause worry about using COVID-19 contact-tracing apps. *IEEE Internet Computing*, 27(2), 7-12.

Huang, P. S., **Paulino, Y.C.**, So, S., Chiu, D.K.W., **Ho, K.K.W.** (2023). Editorial - COVID-19 Pandemic and Health Informatics (Part 3). *Library Hi Tech*, 41(1).

J. A. S. Caasi, A.L. Guerrero, K. Yoon, **L. J. Camacho Aquino, A. Moore, H. Oh**, J. Rychtar, and D. Taylor (2023). A mathematical model of invasion and control of coconut rhinoceros beetle *Oryctes rhinoceros* (L.) in Guam, *Journal of Theoretical Biology*, Volume 570, <https://doi.org/10.1016/j.jtbi.2023.111525>

Keighan, R., van Woesik, R., Yalon, A., Nam, J., & **Houk, P.** (2023). Moderate chlorophyll-a environments reduce coral bleaching during thermal stress in Yap, Micronesia. *Scientific Reports*, 13(1), 9338.

Kerr, A. M. 2023. Some Cyrtophoraspp. (Araneae, Araneidae) build silk stabilimenta. *Acta Arachnologia* 72: 47-54

Kerr, A.M. 2023. Katot yan panao: A case study of indigenous botanical nomenclature in the scientific literature. *Micronesica* 2023-2: in the press.

Kirk Johnson and Artemia Perez (eds.) 2023. *Teaching and Learning in Micronesia: Reflections on Island Centered Pedagogy*. Mangilao, Guam: University of Guam

Ko, H. and **Wen, Y.** (2023). Patterns and Trends of Salinity in Finegayan Basin and Effects of Precipitation, *Proceedings of the 14th International Conference on Environmental Science and Development*, May 25-27, 2023 in Xiamen, China

Ko, H., **Wen, Y.** and **Jenson, J.** (2022). Geospatial and Temporal Analysis of Patterns and Trends of Salinity in Finegayan Basin, Technical Report 177, Water & Environmental Research Institute, University of Guam.

Ko, H., **Wen, Y.** and **Jenson, J.** (2023). Geospatial and Temporal Analysis of Patterns and Trends of Salinity in Yigo-Tumon Basin, Technical Report 178, Water & Environmental Research Institute, University of Guam.

Lang BJ, Donelson JM, Bairos-Novak KR, Wheeler CR, **Caballes CF**, Uthicke S, Pratchett MS (2023). Impacts of ocean warming on echinoderms: A meta-analysis. *Ecology and Evolution* 13: e10307

Lasley, R. M. Jr., Evans, N., Paulay, G., Michonneau, F., Windsor, A., Irwansyah, Ng, P. K. L. (2023). Allopatric mosaics in the Indo-West Pacific crab subfamily Chlorodieliinae reveal correlated patterns of sympatry, genetic divergence, and genitalic disparity. *Molecular Phylogenetics and Evolution* 181: 107710

Lasley, R. M. Jr., Evans, N., Paulay, G., Uyeno, D., Carvalho, S. (2023). First record of the Harlequin crab *Lissocarcinus orbicularis*, an obligate symbiont of sea cucumbers, from the Red sea. *Specimen*.

Lasley, R. M. Jr., Mendoza J. C. E., Paulay, G. (2023). Revision of the Indo-West Pacific crab genus *Soliella* (Brachyura: Xanthidae: Etisinae): "pseudocryptic species" and basinal speciation. *Systematics and Biodiversity*.

Lee, D., **Varghese, A.**, Bataclan, S., **Hattori-Uchima, M.** (2022). Improving participation in advance care planning in the Guam/Micronesia geriatric community through education. *POJ Nurs Prac Res.* 6(1):1-9. DOI: <https://doi.org/10.32648/2577-9516/6/1/3>

Liao, T., Chen, Y., Tsai, I., Chao, C., Huang, T., Hong, C., Wu, Z., Tsai, I., Lee, H., **Schlub, R.**, et al. (2023) Translocation of fungicides and their efficacy in controlling *Phellinus noxius*, the cause of brown root rot disease. *Plant Disease*, 107(7). <https://apsjournals.apsnet.org/doi/abs/10.1094/PDIS-06-22-1285-RE?journalCode=pdis>

Liu, J., Lindstrom, A.J., Marler, T.E. Gong, X. (2022) Not that young; combining plastid phylogenomic, plate tectonic and fossil evidence indicates a Palaeogene diversification of Cycadaceae. *Annals of Botany* 129: 217-229.

Madrid Alvarez-Piñer, C. (2023). Una fuente inédita para el estudio de las islas Marianas. La captura de Guam en 1898, narrada por uno de los oficiales españoles protagonistas. In: Rodríguez-Ponga, R., Barbero, M.A., (Coords.) *Quinientos años de un océano llamado Pacífico*. ESIC, Madrid.

MAppFx: Production Well Nitrates Northern Guam Lens Aquifer, D.K.U. Valerio, M.W.M. Zapata, **N.C. Habana** | 02 20. <https://weri-cdn.uog.edu/wp-content/PDFs/TRs/WERI%20TR%20180%2020Valerio%20et%20al%202023.pdf>

MAppFx: Southern Guam Ugum Watershed Streamflow Duration Curves **N.C. Habana**, L.F. Heitz, D.K.U. Valerio | 07 2023. <https://weri-cdn.uog.edu/wp-content/PDFs/TRs/WERI%20TR%20181%20-%20Habana%20et%20al%202023.pdf>

Mia, A., Ahmed, Q., **Ferdosh, S.**, et al. (2023). Anti-obesity and antihyperlipidemic effects of *Phaleria macrocarpa* fruit liquid CO₂ extract: In vitro, in silico and in vivo approaches. *Journal of King Saud University - Science*, 35(8). <https://www.sciencedirect.com/science/article/pii/S1018364723003270>

Miklavič, B, Habana, N.C. 2023: Hydrogeological assessment of prospective sites for production wells servicing Camp Blaz from Andersen AFB, Guam, WERI-RCUOG.

Miklavič, B. The tectonic rock uplift history of northern Guam (Mariana Islands) deduced from marine terraces. XXI INQUA Congress, Rome, Italy, July 2023.

Miklavič, B., Yeo, M-H., 2023: Hydrogeologic assessment of two breached cavities on building J-37 and J-39 of the 5 bachelor enlisted quarters (5 BEQ) complex in Camp Blaz, south Finegayan, Guam, WERI-RCUOG.

Nishio, A., Shibuya, F., de los Reyes, C.S., Estrada, C.A., Gregorio Jr., E., Sari, D., Warnaini, C., Kadriyan, H., **Cruz, M.S., Hattori-Uchima, M.**, Dacanay, P., Dacanay, R., Enos, H., Ngirmang, T., Khalif, M., Volavola, S., Tomokawa, S., Kigawa, M., & Kobayashi, J. (2023). Content analysis of health-related subjects in the K12 school curricula of Japan, Indonesia, Philippines, Guam, Micronesia, Marshall Islands, Palau, and Fiji. *Tropical Medicine and Health*, 51. <https://doi.org/10.1186/s41182-023-00511-1>.

Pacey KI, **Caballes CF**, Pratchett MS (2023). Using size-weight relationships to estimate biomass of heavily targeted aquarium corals by Australia's coral harvest fisheries. *Scientific Reports* 13: 1448

Patil U.D., Mabagos D., Yeo M-H, Congress S.S.C., **Shelton A.,** and **Demeulenaere E.** Improvement in Stability of a Tropical Hillslope via Mechanical Root Reinforcement. *GeoCongress* 2023. P. 469-477. <https://doi.org/10.1061/9780784484654.047>

Patil U.D., Yeo M-H, Aquino E., Congress S.S.C., and **Demeulenaere E.** Role of Acacia tree root's reinforcement in hill slope stability. 9th International Congress on Environmental Geotechnics (ICEG2023). <https://doi.org/10.53243/ICEG2023-258>

Paudel, S., Jackson, T., Mansfield, S., Ero, M., **Moore, A.,** & Marshall, S. (2023). Use of pheromones for monitoring and control strategies of coconut rhinoceros beetle (*Oryctes rhinoceros*): A review. *Crop Protection*, 174. <https://www.sciencedirect.com/science/article/pii/S0261219423002235?via%3Dihub>

Paulino YC, Hattori-Uchima M, Buback LE, Cruz TP, Aguon AL, **Taitano CR,** Reid MJA. Guest essay: Guam experience and lessons for responding to epidemic threats - Academic institution fosters collaborations/multisectoral approach for COVID outbreak and vaccine preparedness. In: Kevany S, Kirk A, Gallani R, eds. *Outbreaks, Epidemics, and Health Security*. London, UK: Elsevier Inc.; 2022: 182-87.

Pratchett MS, **Caballes CF,** Hobbs JP, DiBattista JD, Bergseth B, Waldie P, Champion C, Mc Cormack SP, Hoey AS (2023). Variation in the physiological condition of common coral trout (*Plectropomus leopardus*) unrelated to coral cover on the Great Barrier Reef, Australia. *Fishes* 8: 497

Quinata, Lazaro and **Kirk Johnson.** 2023. Island Centered Pedagogies: Building Classrooms and Curriculum that Truly Empower Island Students; in Perry J. Pangelinan & Troy McVey's (eds.) *Learning and Reconciliation Through Indigenous Education in Oceania*. Hershey, PA: IGI Global Publishing.

Quinata, Lazaro, and **Kirk Johnson.** 2023. Learning from our Ancestors: Reimagining Standardized Testing in Higher Education; in Perry J. Pangelinan & Troy McVey's (eds.) *Learning and Reconciliation Through Indigenous Education in Oceania*. Hershey, PA: IGI Global Publishing.

Raymundo ML, Caballes CF, Mayfield MM, Hock K (2023). Informed selection of corridors through network and graph analyses to enhance dispersal potential through an agricultural matrix. *Landscape Ecology*. 38: 449-461

S. Decker, M. Hirose, **S. Lemer,** P. Kuklinski, HG Spencer, AM. Smith, T. Schwaha. 2023 Boring bryozoans: An investigation into the endolithic bryozoan family Penetrantiidae. 2023. *Organisms Diversity & Evolution*. 23 (4) 743-785

Schnytzer Y, Achituv Y, **Fiedler GC,** Karplus I (2022) The intimate relationship between boxer crabs and sea anemones: what is known and what is not. *Oceanogr Mar Biol Annu Rev* 60:495-532

Setia, G., **Schlub, R.,** & Husseneder, C. (2023). Next-generation sequencing dataset of bacterial communities of *Microcerotermes crassus* workers associated with ironwood trees (*Casuarina equisetifolia*) in Guam. *Data in Brief*, 48. <https://www.sciencedirect.com/science/article/pii/S2352340923004055>

Shimpi GG, Bentlage B (2023) Ancient endosymbiont-mediated transmission of a selfish gene provides a model for overcoming barriers to gene transfer into animal mitochondrial genomes. *BioEssays* 45: 2200190

Shimpi GG, De La Vega P, Bentlage B (2023) Complete genome sequence of *Brachybacterium* sp. GU-2 (*Actinomycetota*), isolated from the massive coral *Porites lobata*. *Microbiology Resource Announcements* e00855-23

Swamy, A.R. (2023). Centripetal and Centrifugal Tendencies in Populism. In: Chacko Chennattuserry, J., Deshpande, M., Hong, P. (eds) *Encyclopedia of New Populism and Responses in the 21st Century*. Springer, Singapore. https://doi.org/10.1007/978-981-16-9859-0_290

Taafaki, M. R., Brown, A. C., Cassel, K. D., Chen, J. J., Lim, E., & **Paulino, Y. C.** (2022). Knowledge and Attitudes of Guam Residents towards Cancer Clinical Trial Participation. *International journal of environmental research and public health*, 19(23), 15917. <https://doi.org/10.3390/ijerph192315917>

Taren D, Alaofè H, Yamanaka AB, Coleman P, Fleming T, **Aflague T,** Shallcross L, Wilkens L, Novotny R. Diet and Acanthosis Nigricans over a Two-Year Period in Children of the Pacific Region. *Nutrients*. 2023 Jun 12;15(12). doi: 10.3390/nu15122718. PubMed PMID: 37375623; PubMed Central PMCID: PMC10302045.

Taylor BM, McInnis AJK, **Deinhart M,** Kawahigashi L, Gourley K. (2023). Comparative demography of surgeonfishes from the tropical western Pacific. *Reviews in Fish Biology and Fisheries* 34: 353-370. (doi: 10.1007/s11160-023-09816-0)

Trianni M, DeMartini EE, **Taylor BM.** (2023). Life history characteristics and status of the Pacific yellowtail emperor, *Lethrinus atkinsoni* (seale 1910), in the Commonwealth of the Northern Mariana Islands. *Aquaculture, Fish, and Fisheries* 3: 165-174. (doi: 10.1002/aff2.100)

Valentine, A. (2019). The Effects of Transformational Leadership on Work Engagement in the Kingdom of Thailand: A Case Study of a Thai MNC. *AU-GSB e-Journal*. 12(2).

Valentine, A. (2020). Reflections of a first-time business school professor. *Education in the New Normal: ASEAN Edition. Maestra Professional Journal For, By & Of Teachers*. 2(2) ISSN 2704-3649 (Print).

Valentine, A. (2021). Review of How to Change: The Science of Getting from Where You are to Where You Want to Be, by Katherine "Katy" Milkman, *ABAC Journal*, 41(3) (July-September).

Verhaegen G, Sangekar MN, **Bentlage B,** Hoving HJ, Collins AG, Lindsay D (2023) Drivers behind the diversity and distribution of a widespread midwater naupliar medusa. *Limnology & Oceanography* 68: 2088-2107

Wen, Y. and Ko, H. (2023). Impacts of Fine-scale Precipitation on Salinity Levels in Finegayan, Guam, US DHS S&T Directorate Office of University Program Summer Research Team Program for Minority Serving Institutions Follow-on Project Final Report.

William Jeffery and James D. Sellmann. 2022| "Yapese Environmental Philosophy and Food Sustainability," *Pacific Asia Inquiry*, volume 13, 2022. www.uog.edu/pai

Yeo, M., Ujwalkumar, P., Chang A, King, R. Changing Trends in Temperatures and Rainfalls in the Western Pacific: Guam. *Climate*. 2023; 11(4):81. <https://doi.org/10.3390/cli11040081>

List of IRB-Approved Projects

FY 2023

FY 2023 was a busy year for the UOG Committee on Human Research Subjects (CHRS/IRB). A total of 123 projects involving human subjects were submitted by UOG faculty, students, and other outside researchers. All projects were then reviewed and approved by the CHRS. The following is a comprehensive list of approved projects.

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
Stories and Shared Understanding of Asylum Seeking in Guam	Marshaley Baquiano	
SY 2022-2023 Student Survey (Gauging Return to FañomnåkanSemester)	Camarin Joleen Flores	
The Effects of Exit Tickets on Student Achievement in an 8th Grade Computer Science Class	Melinda Rolinski	Cheryl Sanguenza
The effect of Computer Assisted Instruction (CAI) - Moby Max and Students' Perceptions in 6th Grade Mathematics Classroom	Myra Ollet	Cheryl Sanguenza
Interactive Feedback on Error Analysis	Rocel Molina	Cheryl Sanguenza
The Meaning of Spirituality for Generation Z	Haley Carreon	Marshaley Baquiano
The Relationship Between Physical Activity and Mental Health Among Adults in Guam	Angelica Rico	Marshaley Baquiano
The Impacts of Simulation	Jeremy Jon Pingul	Cheryl Sanguenza
Effects of Questioning Strategies on Student Achievement	Bernadeth Gumataotao	Cheryl Sanguenza
Impact of positive behavior goal-setting in a 2nd grade classroom	Dawn Marie Perez	Cheryl Sanguenza
The Impact of Peer Feedback on Fostering Communication and Improving Project Outcomes	Mie Rabago	Cheryl Sanguenza
Prutehi I Lina'la: Increasing Reach and Uptake of COVID-19 Testing Among Pacific Islanders in Hawaii and Guam	Rachael Leon Guerrero	
An Analysis on Sociocultural Norms Shaping Relational Aggression Among Women	Chelsea Marie Gonzales	Marshaley Baquiano

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
The Process of How Sexual Jokes Are Normalized in Friend Groups	Rochelle Alviz	Marshaley Baquiano
Understanding the Link Between Social Media and Communication Skills Development	Paul Mendoza	Marshaley Baquiano
How does one's perception of social media content shape their dissatisfaction with their body image amongst young adults in Guam?	Kristoffer John Aquino	Marshaley Baquiano
Social Identity Among Guam's Local US Veterans	Daniel Quichocho	
Satisfaction with Perceived Parental Upbringing as Moderator Between Parenting Style and Adult Life Satisfaction	Carmille Serrano	Marshaley Baquiano
Cultural Influences on Social Identity of CHamorus	Anesha-Maelene Ignacio	Marshaley Baquiano
Psychological Preparedness for Deployment among Military Members	Won Joon Han	Marshaley Baquiano
Improving Nutrition Behaviors Among EFNEP Middle School Participants in Guam	Sabrina Zhi	Tanisha Aflague
The Unique Role That Family Plays in The Formation of An Individual's Identity	Lolita Blas	Marshaley Baquiano
A look on military based Transformational Leadership in the island of Guam	Lidio Fullo	Marshaley Baquiano
Defying the Odds: Academic Achievement of Poverty-Stricken Students At a Guam Public High School	Jim Reyes	
Defying the Odds: Academic Achievement of Low-Income Students at a Guam Public High School	Jim Reyes	Shirley Padua
Understanding the Role of Cultural Norms within Heteronormativity Play in Shaping the Self-Esteem of Guam's LGBTQIA+ through Compulsory Heterosexuality	Brenna Rodriguez	Marshaley Baquiano
An Interpretive Phenomenological Analysis of Military Spouses Lived Experience Moving to and Living Overseas in Guam	Amelia Delgado	Marshaley Baquiano
Sexual Abuse=DM=Repeat Cycle	Justin Lawson	Marshaley Baquiano
Guam Focus on Life	Kristianna Whitman	
An Analysis of Listening to BTS Music and Mental Health	Nicholle Pineda	Marshaley Baquiano
Recommendations to Solve the Problem of Limited Participation of Students with Orthopedic Impairments at Okkodo High School	Andria Macaraeg	
Best Practices and Models of Mentoring	Cheryl Sanguenza	
Conduct a Cost-Benefit Analysis and Develop a Methodology to Address the Impact of the Compacts of Free Association	Kristina Sayama	
CDC Registry for Bleeding Disorders Surveillance Project	Lee Meadows	
The Lived Experience of Online dating	Flora Ann Asanoma	Marshaley Baquiano
Unweaving Family Narratives of Chamorus Affected by Substance Use	Samantha Uncangco-Meno	Marshaley Baquiano

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
I Fino' Chamoru Edukasion: Student Perceptions of Indigenous Language Education on Guam	Marianna Hernandez	
Teaching Beyond Five Years: A Study of Special Education Teachers Retention In Public Schools.	Afshin Amoui	
Understanding and Sensemaking of Institutional Assessment: A Collaborative Autoethnography of Perceptions and Experiences with Assessment Work.	Kathrine Gutierrez	
WIOA Study	Polly Masga	Jesse Quenga
Teaching Beyond Five Years: Looking Into The Special Education Teachers' Retention in Guam Public Schools.	Afshin Amoui	
Traditional And New lifestyle Interventions to prevent breast cancer recurrence (TANICA): Policy, Systems, and Environmental Approaches (PSE)	Tanisha Aflague	
Faculty Evaluation of Administrators	Christopher Rasmussen	
NOAA Guam Coral Reef Social Survey	Roseann Jones	
Employee Perceptions Of The Need For Financial Literacy In The Workplace	John Mesa	
Quantification of Cyanotoxins in Guams drinking water source	Laura Ashley Biggs	Laura Ashley Biggs
Addressing the Hidden Curriculum: Strengthening Pathways to STEM Graduate Education	Cheryl Sanguenza	
Exploring High School Students' Experiences In Online Learning During The Covid-19 Pandemic	Robert Perkins	Geraldine James
WestCare Pacific Islands Project STEER - Renewal	Kimberly Marino	
Post-Graduate Survey	Camarin Joleen Flores	
Guamanian English	Hyun-Jong Hahm	
Preservice Teacher Self-Efficacy to Teach in Guam's Inclusive Classrooms	Libbie Farrell	Lawrence Camacho
Developing Chamoru Language Infrastructure: Goggue yan Chachalani Mo'na I Fino'-ta	Robert Underwood	
Enhancement and Strengthening of the Agriculture and Life Sciences (ALS) Undergraduate Degree Program in the College of Natural and Applied Sciences, UOG	Filma Calalo	
Community First Rewards Program	Bryne Garcia	
Sexual Risk Avoidance Education	Carlos Taitano	
Use of Instagram Stories and the Fear of Missing Out (FOMO)	Tatiana Ananich	Francis Dalisay
Attitudes & Motivations to learn CHamoru language	Atdao Natividad	Francis Dalisay
Parental Involvement and the Relationship to SES, Education Level and Ethnicity	Ezarrah Blas	Geraldine James
Communication Issues as Experienced by the FSM Community on Guam	Kevin Barcena	Francis Dalisay
An Exploration of the Guam Police Department's Retention Rate	Deeann Norberg	
"Screening Saves Lives" - Cancer Education Study	Angelina Mummert	
Social Representation of Smoking on Guam	Lolita Blas	Marshaley Baquiano

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
Application of Michael J. Kral's Cultural Theory of Suicide to Data from (Greater) Micronesia	Paulette Coulter	Todd Ames
The Social Construction of Mental Health In Micronesia	Rochelle Alviz	Debra Marie Cabrera
Cultural Authenticity on Guam's Tourism Industry	Anesha-Maelene Ignacio	Debra Marie Cabrera
Measuring Consumption Levels in the Visual Arts	Paula Allen	Debra Marie Cabrera
Gendered Perspectives on Anxiety and Its Influence on Social Relationships: An Exploratory Study	Briante Barretto	Debra Marie Cabrera
Survival Analysis of BRISK Participants	Rachael Leon Guerrero	
Identifying obstructions in Medicaid health benefits enrollment for COFA migrants on Guam	Rachael Leon Guerrero	
An inequality of mental health between non-binary and binary genders among adults in Guam	Cassandra Tolentino	Ann Ames
Ethnobotany of Micronesia	Else Demeulenaere	
MI503 Research Paper: Exploring how the COVID-19 pandemic affected how residents of Guam feel about the island political status	Makaelah Blas	Todd Ames
The Ideal Body: Influences on One's Body Image and Dissatisfaction	Francine Termeteet	Debra Marie Cabrera
SO491 Cancel Culture	Angelina De Leon	Debra Marie Cabrera
Guahan Women	Debra Marie Cabrera	
Cyanotoxins and Liver Cancer Development in Two High-Risk Populations	Laura Ashley Biggs	
Is Shopping a Sociological Practice?	Skylor Corpus	Ann Ames
PEACE Partnerships for Success - Needs Assessment (Youth)	Sara Harrell	
An Investigation into the Impact of Language Regard on Word Choice in Guamanian CHamoru	John Payne II	David Ruskin
Quantification of Cyanotoxins in Guams drinking water source	Laura Ashley Biggs	Laura Ashley Biggs
Assessing the Proficiency of the CHamoru Studies Program in the Public Middle Schools on Guam: Input to Enhance Policy Guidelines in Assessment	Duane Mantanona	
PICCAH-PLUS IRB Application	Elaine De Leon	Tanisha Aflague
Statistics and Data Science Graduate Programs at UOG Survey	Grazyna Badowski	
Nanan Techa: Oral Accounts and Stories of a Chamorro Mother	Christiana Palacios	Sharleen Santos-Bamba
The Preservation and Renaissance of CHamoru Language and Culture	Sara Kimmel	
Cross-Section Analysis of Areca Alkaloids in Buccal Cells and Hair from Area Candidate Biomarkers for Short and Long-term Areca Nut Exposure	Ana Joy Mendez	
Understanding Collective Leadership Development: A Qualitative Case Study of the Guam Information and Communications Technology Industry	James Ji	
Special Education Transition Planning Program For Successful Employment Of High School Students: The Case Of Guam Public Schools	Jennifer San Nicolas	

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
Need to collect UOG faculty training needs data through a survey	Deepti Birhade	
Cancer Clinical Trials in Guam Survey	Tressa Diaz	
Following the Hyperuricemia Trail - Pilot Test in Guam	Frank Camacho	
NSF INCLUDES Alliance: Islands Alliance	Else Demeulenaere	Austin Shelton III, Cheryl Sanguenza
The Preservation and Renaissance of CHamoru Language and Culture	Sara Kimmel	
Guam/Micronesia Geriatrics Workforce Enhancement Program (G/M GWEP)	Kathryn Wood	
Adapting Empire: Legal Possibilities for Climate Justice in Guam, Hawai'i, and the Republic of the Marshall Islands	Autumn Bordner	
Characterizing Family Planning Utilization in Adult Women in the Northern Mariana Islands	Heather Pangelinan	
Post Disaster Needs Assessment (PDNA)	Audrielin Santos	Clifford Kyota
Chamoru Language and Culture Researcher Training Program	Kenneth Kuper	
Pacific Islands Cohort of College Students	Yvette Paulino	
Developing a public health peer mentoring program in the US Affiliated Pacific Islands	Yvette Paulino	
Financial Literacy Certification - General Survey	Camarin Joleen Flores	
CHRS#: 22-24 - Seeking renewal, ongoing research study, no changes, no modification. Title: Health care staff implementation of Americans with Disabilities Act responsibilities: barriers and strategies to address	Rosielyn Babauta	
Financial Literacy Certification	Camarin Joleen Flores	
Para Hulo' Strategic Plan Survey	Kalyne Roberto	
Career - Handshake/TCC and Internship Surveys	Camarin Joleen Flores	
Academic - Peer/Professional Mentorship Surveys	Camarin Joleen Flores	
Academic - Student Lingo Surveys	Camarin Joleen Flores	
Professional Development as an Intervention to Develop Teacher Self-Efficacy in Science, Technology, Engineering, and Math (STEM) Lesson-Plan Development	Frank Candaso	Howard Jacobs
UOG Faculty Evaluation of Senior Administrators	Christopher Rasmussen	
Beyond the Horizon: My Autoethnographic Voyage as an Instructor in an Island Nation Distance Education Landscape	Genevieve Leon Guerrero	
A rift in representation: Investigating heterogeneity in Asian and Pacific Islander populations on mood and cognition	Cerila Rapadas	Gerald Haeffel
Comparative Analysis of Business Privilege Tax (BPT), also known as Gross Receipts Tax (GRT), Sales Tax, and Value Added Tax (VAT) as Revenue-Raising Mechanisms for the Government of Guam	Martha Suez-Sales	
Assessing Knowledge and Beliefs in Diabetes Self-Management Among Adult Hospitalized Patients with Diabetes in Guam	Lara Mazloun	Tanisha Aflague

PROJECT TITLE	PRIMARY RESEARCHER (PI)	FACULTY ADVISOR (IF ANY)
Permanent Unemployment Program in Guam and Saipan	Paige Sablan	Martha Suez-Sales
Social Representations of U.S. Military Presence in Guam	Kristoffer John Aquino	Marshaley Baquiano
Navigating Cultural Tides: Exploration of Island Nation and Westernized Leadership in a Distance Education Landscape	Genevieve Leon Guerrero	
What are the perceptions of implementing cognitive technologies (AI, RPA, BI, etc.) in financial management on Guam?	Jamabeva Masangkay	Martha Suez-Sales
The impact of emerging audit technologies and innovations on Guam entities with audit functions	Martha Suez-Sales	

OFFICE OF RESEARCH AND SPONSORED PROGRAMS (ORSP)

The Office of Research & Sponsored Programs is the central point of support and management for all research and sponsored projects at UOG. The office seeks available external funding related to the missions and goals of the university, supports faculty in their personal research endeavors, and coordinates studies with public and private agencies locally, nationally, and internationally. The office consists of a small core team as well as the sub-units indicated here that manage some of the university's primary sponsored and grant funded programs.

ORSP STRATEGIC PLAN (2023-2028)

MISSION

Ina, Deskubre, Setbe - To Enlighten, to Discover, to Serve

The University of Guam empowers the region by uniting island wisdom with universal sources of enlightenment to support exceptional education, discovery, and service that respects and benefits local and global communities.

VISION

Transforming communities through excellence in research.

OUR SHARED VALUE

We value innovative scholarly research that is ethical and inclusive and that is culturally engaged.

STRATEGIC INITIATIVES

To operationalize the UOG Research Community's Vision and Mission Statements, the following Strategic Initiatives provide the framework for deliberate, timed, and impactful action.

1. Place-based Research with Local, Regional, and Global Relevance
2. Talent Acquisition, Development, and Support
3. Infrastructure and Financial Support
4. Operational Excellence (ORSP's Office)
5. A Great Place to Work (ORSP's Office)

OFFICE OF RESEARCH AND SPONSORED PROGRAMS STAFF



Pamela A. Peralta Taitano, Ed.D.
Interim Vice Provost for Research and Sponsored Programs /
Director of Contracts and Grants



Zenaida Valencia
Accountant I



Tracy Williams, MPA
Project Coordinator



Gigi Snively
Project Coordinator (CESU)



Denielle Batac
Accounting Analyst I (CESU)



Jed C. Henson
Extension Associate I (IT)



Karlyn Borja
Grants Assistant III



www.uog.edu/research/reports



Office of Research and Sponsored Programs

303 University Drive
Dean's Circle #7
Mangilao, Guam 96913-1800

671.735.2989
orsp@triton.uog.edu
www.uog.edu/research