



INAUGURAL RESEARCH FORUM

UNIVERSITY OF GUAM

FRIDAY, AUGUST 9, 2024

Jesus and Eugenia Leon Guerrero
School of Business and Public Administration Building
UNIVERSITY OF GUAM





INAUGURAL RESEARCH FORUM

FRIDAY, AUGUST 9, 2024 | UNIVERSITY OF GUAM



PROGRAM

9:00 a.m.

WELCOMING REMARKS

Anita Borja Enriquez, D.B.A.
President

The Hon. Lourdes A. Leon Guerrero
Governor of Guam

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

9:30 a.m. to 12 noon

MORNING PRESENTATIONS

12 Noon to 1:00 p.m.

LUNCH

1:05 to 3:35 p.m.

AFTERNOON PRESENTATIONS

3:40 p.m.

CLOSING REMARKS

Pamela A. Peralta Taitano, EdD
Interim Vice Provost, Research
and Sponsored Programs
Director, Contracts and Grants

DESKUBRE

DESKUBRE • TO DISCOVER

The University of Guam is at the forefront of innovation in Micronesia. Research units at the University work locally and collaborate internationally to address some of the most important issues of our time. From cancer prevention to environmental sustainability and from coral reef preservation to cognitive challenges, UOG works to uncover new knowledge and provide the scientific data needed to inform solutions, impact policies, and improve lives across the region.



OUR EXPERTISE

The geographical location and diversity of Guam and Micronesia make the University of Guam a unique place for research on subjects specific to islands and tropical environments as well as on populations that are underrepresented in national data.

While the subjects researched at UOG are vast, UOG's research portfolio trends toward the areas of marine biology, terrestrial biology, agriculture, groundwater, Micronesian history and culture, health and welfare of Pacific Islanders, and regional public policy.

WHAT DRIVES OUR RESEARCH

Research projects are driven by faculty interest and the local and federal governments' need for data to inform plans and decisions, including managing and protecting natural resources.

Nearly half of UOG's 190 full-time faculty members are engaged in research with a desire to advance the regional and global body of knowledge.

UOG research activities are supported by the Office of Research & Sponsored Programs, which works to find, compete for, and manage external funding, to coordinate studies with public and private agencies, and to support research faculty and personnel.



HOW DOES OUR RESEARCH COMPARE?

The University of Guam performs well beyond other institutions of its size, even rivaling many larger universities, when it comes to research work and grant funding. ▼

BY THE NUMBERS

TOP 31%

**OF U.S. UNIVERSITIES
IN RESEARCH
PERFORMANCE**

Based on 2023 NSF Report
on R&D Expenditures of
Academic Institutions

9 DEDICATED
RESEARCH
CENTERS

100 Total research
grant awards
in 2023

80 Scholarly
Publications
in 2023

\$64.04M RESEARCH GRANT
FUNDING IN 2023

\$22.78M FEDERAL RESEARCH FUNDS
EXPENDED IN 2023

RESEARCH FOCUS AREAS

The University of Guam offers a unique environment to explore topics less studied globally as well as nationally. Guam – being U.S. soil but some 7,000 miles from the continental United States – is one of few places in the nation suitable for exploring a tropical environment, both on land and underwater, as well as the Pacific Islander populations that live within U.S. territories and associated states in the Western Pacific yet are largely underrepresented in national data. Moreover, research conducted at UOG often is informative and useful for tropical environments and island communities outside of Guam and the Micronesian region as well.

Driven by faculty interest, local need, and federal need in managing and protecting natural resources, the research endeavors at the University of Guam cover an array of topics and disciplines. While UOG has decades of experience in some disciplines, such as marine biology, agriculture, and Micronesian history and culture, other subjects of exploration are more recent in interest and need, such as studies on public policy and economics in the Micronesian region. This section highlights six of the University of Guam’s most specialized areas of research and what UOG is uniquely able to bring to each.

Agriculture

Guam is one of the few places in the United States with a tropical climate, providing a unique opportunity to study the potential and challenges of farming systems in this environment. The university’s College of Natural & Applied Sciences operates three experiment stations, which provide ample land for field trials, well-equipped laboratories that are continuously upgraded, and farms for research and demonstrations. UOG research on agriculture is conveyed by UOG’s extension and outreach professionals to farmers and other stakeholders in Guam and Micronesia.



Health and Welfare

Pacific Islanders suffer some of the highest mortality rates from non-communicable diseases in the world. With faculty expertise in public health, nutrition, nursing, and geriatrics and an established Cancer Research Center in partnership with the University of Hawaii, the University of Guam is well-suited to study health among Pacific Islanders, particularly those living within the Micronesian region. The diverse population of the region has also allowed UOG to develop cultural competence in research activities and strengths in minority health and cultural determinants.



Marine Science

In this era of rapid climate change, Guam's biodiverse marine systems are faced with complex human-derived environmental issues that are common to island systems around the world. The University of Guam is unique in that it is located just outside the global center of marine diversity, the Coral Triangle. Further, it has a fully equipped marine station – the UOG Marine Laboratory – situated adjacent to coral reef ecosystems. This combination of factors is quite rare among universities and gives UOG researchers the advantage of being able to access the local marine environments year-round.

Micronesian History and Culture

Unique and comparatively unstudied, this region's history and culture intrigues scholars and Micronesian descendants not only from a discovery standpoint, but in that it also holds wisdom applicable to today. Home to the Micronesian Area Research Center, the largest research center in the world dedicated to Micronesia, the University of Guam has become an authority on the region's history. Researchers through MARC have been able to answer fundamental and long-standing questions about Micronesian peoples throughout time – from their origins to the experiences that influenced their modern practices, struggles, successes, and viewpoints.

Public Policy and Economics

Guam and its surrounding region have seen an increasing demand for objective research on a range of social and humanitarian issues and proposed legislation to address them. As a land-grant university with more than 70 years of influence in the Western Pacific, the University of Guam is an honest knowledge broker intent on communicating comprehensive, unbiased research to policymakers, government leaders, and business managers. Researchers at UOG have produced and contributed to several key economics and public policy reports and projects with meaningful outcomes for the community.



Terrestrial Biology

Few places on Earth have suffered the devastating effects of invasive species like Guam has. These impacts have been fast, pronounced, and unabated. Simultaneously, the island itself is an outdoor laboratory for conducting research, making the University of Guam a prime place to understand species' competitive advantages, human and biophysical interactions, and restoration techniques in a tropical insular environment. Regional authorities on invasive species, plant pathology, soils, and the ecological relationships among them, UOG researchers provide expert advice to local and federal agencies and assist in efforts to create community awareness.



Water Quality

The University of Guam is home to one of the 54 water research institutes established at land-grant institutions by U.S. Congress. The portfolio of core expertise at UOG's Water & Environmental Research Institute of the Western Pacific spans the natural water cycle from meteorology to surface and groundwater hydrology as well as essential water-use activities. The institute's facilities include a well-equipped Water Quality Laboratory capable of microbiological, chemical, and physical tests as well as a Hydrogeological and Meteorological Laboratory, and a Bioreactor Laboratory.



Research Centers

With nine dedicated research centers, the University of Guam is able to conduct projects that advance regional and global knowledge in a breadth of subjects, in particular the unique needs and topics of relevance to the Western Pacific region.

Each of the units highlighted here has a team of faculty and staff who work to manage grant funding, carry out lab and field work, analyze the results, and bring the results to scholarly and public audiences.



Cancer Research Center

The University of Guam Cancer Research Center, established in 2009, is the only U.S. cancer research infrastructure established west of Hawaii. It houses the Pacific Island Partnership for Cancer Health Equity, which supports research on cancers of significance in the Hawaii-Pacific region, in particular to the underserved populations of CHamorus, Chuukese, and Marshallese.

Principal Investigator: Rachael Leon Guerrero, Ph.D.

📞 (671) 735-2988/9

✉️ guamcrc@triton.uog.edu

🌐 www.guamcrc.org



Established Program to Stimulate Competitive Research (Guam EPSCoR)

Guam EPSCoR is a \$20 million National Science Foundation grant that the University of Guam is utilizing to implement the Guam Ecosystems Collaboratorium for Corals and Oceans. The collaboratorium at UOG is focusing on increasing the collection, documentation, integration, and analyses of complex genetic and oceanographic data from coral reefs within the region.

Principle Investigator: Terry Donaldson, Ph.D.

📞 (671) 735-0130

✉️ tdonaldson@triton.uog.edu

🌐 guamepscor.uog.edu



UNIVERSITY OF GUAM
REGIONAL
CENTER
FOR
PUBLIC POLICY

Regional Center for Public Policy

The Regional Center for Public Policy under the UOG School of Business & Public Administration was launched in 2016 to innovate and improve governance, leadership, and public policy for the people and institutions of Guam, the Asia-Pacific region, and the world. The center aims to become the premier policy research nexus in the region.

Director: Roseann Jones, Ph.D.

📞 (671) 735-2501

✉️ rcpp@triton.uog.edu

🌐 www.uog.edu/rcpp



Center for Excellence in Developmental Disabilities Education, Research & Service

The Center for Excellence in Developmental Disabilities Education, Research & Service at the University of Guam is one of 67 federally funded university centers of its kind found in every U.S. state and territory. The center aims to create pathways that enhance and support the quality of life of individuals with developmental disabilities and their families.

Interim Director: June De Leon, M.Ed.

- 📞 (671) 735-2481
- ✉️ june.deleon@guamcedders.org
- 🌐 www.guamcedders.org



Marine Laboratory

Established in 1970, the Marine Laboratory at the University of Guam plays an important role in regional as well as national marine research. It facilitates research on tropical coral reef and marine organisms with an emphasis on conservation, adaptation to climate change, and development of marine resources in Guam and Micronesia.

Director: Laurie Raymundo, Ph.D.

- 📞 (671) 735-2175
- ✉️ lraymundo@triton.uog.edu
- 🌐 www.uog.edu/ml



Water & Environmental Research Institute of the Western Pacific

The Water & Environmental Research Institute of the Western Pacific at the University of Guam is one of 54 institutes nationwide established by the federal Water Resources Research Act. WERI provides trustworthy and timely research to support the scientifically informed development and effective management of freshwater resources in Guam, the Northern Mariana Islands, and the Federated States of Micronesia.

Director: Yuming Wen, Ph.D.

- 📞 (671) 735-2685
- ✉️ millerr@triton.uog.edu
- 🌐 www.weri.uog.edu



UNIVERSITY OF GUAM
CENTER FOR ISLAND SUSTAINABILITY

Center for Island Sustainability

The UOG Center for Island Sustainability was established in 2009 to lead and support the transition of island communities toward a sustainable future. It has since become a focal institute in the Western Pacific region for sustainability-related research and community outreach to help meet island needs in the areas of education, human society, natural environment, and the economy.

Director: Austin Shelton, Ph.D.

- 📞 (671) 734-2918
- ✉️ shelton@triton.uog.edu
- 🌐 www.uog.edu/cis



Micronesian Area Research Center

The Richard Flores Taitano Micronesian Area Research Center (MARC) at the University of Guam houses the largest collection in the world of historical documents related to Micronesia. The center was established in 1967 to serve as an educational institution that acquires, preserves, and provides access to unique collections about the Micronesian region.

Director: Carlos Madrid Álvarez-Piñer, Ph.D.

- 📞 (671) 735-2150/1
- ✉️ madridc@triton.uog.edu
- 🌐 www.uog.edu/marc



UNIVERSITY OF GUAM
WESTERN PACIFIC TROPICAL
RESEARCH CENTER

Western Pacific Tropical Research Center

The Western Pacific Tropical Research Center at the UOG College of Natural & Applied Sciences operates three agricultural research stations, the Triton Farm, and the Aquaculture Development & Training Center. With federal and local grants, WPTRC concentrates on applied research that directly impacts agriculture in Guam, Micronesia, the Western Pacific, and the tropics in general.

Interim Associate Director: Frank A Camacho, Ph.D.

- 📞 (671) 735-2005
- ✉️ fcamacho@triton.uog.edu
- 🌐 www.uog.edu/wptrc

PRESENTERS

UOG Inaugural Research Forum

MORNING PRESENTATIONS
9:30 A.M. TO 12 NOON

Five Years of Multidisciplinary Research and Strategic Outreach at MARC: Innovations and Impact



Carlos Madrid, Ph.D.

*Director of Research,
Richard Flores Taitano
Micronesian Area
Research Center*

Dr. Carlos Madrid Alvarez-Piñer, is Director of Research and Professor of Spanish Pacific History

at the Micronesian Area Research Center of the University of Guam. He has conducted research projects about Micronesia, Spain, and the Philippines since 1996, and has given lectures at the University of the Philippines, Keio University of Japan, University of Guam, and in the Diplomatic School of Madrid.

From 2014 to 2018 he was the Director of Instituto Cervantes de Manila. Dr. Madrid specializes in management of cultural resources, documentary research and popularization of history. He co-curated the exhibit Biba Chamoru! Culture and Identity in the Mariana Islands, in National Museum of Anthropology in Madrid in 2021, among other exhibits in Palau and Aurora Province, Philippines.

University of Guam: Land Grant Western Pacific Tropical Research Center



Frank A. Camacho, Ph.D.

*Interim Associate
Director of Research,
Western Pacific Tropical
Research Center*

Frank Camacho joined the Western Pacific Tropical Research

Center as its interim associate director in May 2024. He brings a background in ecology and natural resource management, including nearly two decades of service as a scientific advisor on fisheries in the Western Pacific. Prior to joining the WPTRC, he was a Professor of Biology in the College of Natural and Applied Sciences, where he served in a variety of leadership roles. He received a B.A. (1994) and M.S. (1997) in Biology from the University of Guam before completing his Ph.D. in Biology from the University of Alabama at Birmingham in 2005.

UOG Cooperative Extension Grants and Research



L. Robert "Bob" Barber Jr., Ph.D.

*Interim
Associate Director,
Cooperative Extension &
Outreach*

Dr. Bob Barber is serving as the Interim Associate Director of University of Guam Cooperative

Extension & Outreach. With a Ph.D. in adult education, a master's in agricultural economics, and a bachelor's in horticulture science and plant protection, he has been employed as an Extension Specialist/Professor of Agriculture

Economics and Sustainable Agriculture at UOG for the past 31 years. He teaches courses in the Agriculture & Life Sciences degree program in personal and family finance, farm management, and sustainable technologies for agriculture. Additionally, he conducts public workshops and provides technical assistance to farmers, gardeners, and local nonprofits specific to sustainable agriculture, organic production, agroforestry, and financial and business management in agriculture.

I Chalan Mo'na (The Road Ahead): A Knowledge for Freedom Program at the University of Guam



Brett A. Fulkerson-Smith, Ph.D., *Associate Professor of Philosophy, College of Liberal Arts & Social Sciences*

Dr. Brett Fulkerson-Smith, Associate Professor of Philosophy at the University of Guam,

specializes in the history of philosophy with an emphasis on German idealism. His primary research focuses on the philosophical methodologies of Immanuel Kant and J.G. Fichte – and the role of the imagination therein – and can be found in book chapters and scholarly journals like “Kantian Review,” “Bulletin of the Hegel Society of Great Britain,” “Epoché: A Journal for the History of Philosophy,” and “Society and Politics.” He also contributes to the scholarship of teaching and learning, having presented on the transformation of physical learning environments in colleges and universities to facilitate deep learning among students, the use of argument maps in college classes, the Intercollegiate Ethics Bowl, and the Philosophy with Children (PwC) movement. He is currently writing an ethics textbook for Taylor & Francis Group that emphasizes the use of mapping for understanding and creating moral arguments.

Propelling Forward in Teaching, Learning, and Research: The Outlook for School of Education (SOE)



Alicia C. Aguon, Ph.D.
Dean, School of Education

Alicia Cruz Aguon, Ph.D., is the Dean of the School of Education (SOE) since 2018. Prior to her role as Dean, Dr. Aguon served as Associate Professor

of Mathematics with the College of Natural & Applied Sciences for 21 years. In this role, she successfully led four grants to enhance K-12 teachers’ content knowledge and pedagogical content knowledge in math (primarily), science, language arts, social studies and STEM. Currently as Dean, she is actively collaborating with the Center for Developmental Disabilities, Education, Research and Service (CEDDERS) interim director and rekindled a 2+2 partnership with Palau Community College to launch the BA in Elementary Education with specialization in Special Education for the Palau Ministry of Education cohort. Through Dr. Aguon, SOE joined and supports CEDDERS in current partnerships with SSIP, SPDG and Ina Mo’na grants.



Kathrine J. Gutierrez, Ph.D. *Associate Professor, School of Education*

Kathrine J. Gutierrez, Ph.D., is an Associate Professor with the School of Education, University of Guam. She joined the School of

Education as faculty in January 2021, coming from the University of Oklahoma where she was on faculty since 2006. She has 14 ½ years of experience as a graduate faculty member there teaching and advising master’s and doctoral students. Dr. Gutierrez served as the main academic architect of the inaugural doctoral program, the EdD in Instructional and Academic Leadership for the School of Education at University of Guam. She now leads the program as the EdD Chair of Academics, Research, and EdD Online.

Recycled Concrete Aggregates from Construction and Demolition Wastes as Sustainable Materials for Guam Concrete Infrastructure



Ernesto J. Guades, Ph.D.
Assistant Professor of Civil Engineering, School of Engineering

Dr. Ernesto J. Guades is currently an Assistant Professor in Civil/Structural Engineering at the University of

Guam (UOG). Prior to joining at UOG, he was a Marie S. Curie Post-Doctoral Research Fellow in Structural Engineering at the Technical University of Denmark. He has a 20-year of combined teaching, research, administrative and structural designing experience in Civil and Structural Engineering. He published around 40 technical papers in journals and conference proceedings and a reviewer of several high-ranking journals in Structural Engineering and Construction Materials.

Research and Related Services of the Margaret Perez Hattori-Uchima School of Health

Pacific Island Partnership for Cancer Health Equity



Yvette C. Paulino, CPH, Ph.D.
Dean, Margaret Perez Hattori-Uchima School of Health

Yvette Paulino is Dean of the Margaret P. Hattori-Uchima School of Health. Previously, as Professor of Health Science, she

led research in the Pacific on areca nut/betel quid epidemiology, including oral precancer screening, effects of chewing on the oral microbiome and liver cancer development, and a betel quid cessation trial. Dr. Paulino received the American Association for Cancer Research Minority Serving Institution Faculty Scholar Award in 2012 for her work in cancer epidemiology.

She supported the World Health Organization and International Agency for Research on Cancer on working groups on areca nut, betel quid, and smokeless tobacco use in the Western Pacific. In 2022, she expanded her research portfolio through a National Institutes of Health grant to build the Guma' Tinemtom (House of Wisdom) and the Micronesian Data Laboratory at the University of Guam, and to conduct the Guam National Health Interview Survey and sustain survey, data, and IT support.

AFTERNOON PRESENTATIONS 1:05 TO 3:35 P.M

Creating an Environment for Research Support



Cathleen Moore-Linn, MBA, MFA,
Executive Director, Research Corporation of the University of Guam

Cathleen Moore-Linn is the Executive Director of the Research Corporation of the University of Guam, a

position she has held since RCUOG's inception in 2014. RCUOG has 239 employees and supports \$38M in annual budgets for 159 different grants. She has a Master of Business and Public Administration from the University of Guam, a Master of Fine Arts in English and Writing from Long Island University Southampton, New York, and a BA in Communication from the University of Hawaii Manoa.

Vegetation Reforestation on Andersen Air Force Base (AAFB) and the Naval Munitions Station (NMS)



Vince Fabian
Program Manager, Cooperative Ecosystems Studies Unit

Vince Fabian is a Philippine-born, Guåhan-raised settler immigrant biologist focusing on

conservation and restoration research in Micronesia. He earned his B.S. in Biology from the University of Guam in 2020. Since then, he has experience in phylogenetics, ecology, and restoration management on coral reefs, reef fish, manta rays, turtles, snails, butterflies, bats, and tropical insular forest ecosystems. He presented at international conferences and taught island ecology courses on Guam and Yap. He currently works as a Program Manager for Natural Resources at the UOG Center for Island Sustainability and Sea Grant. There, he leads research on reforestation tactics and managing threatened and endangered terrestrial species populations. He aims to improve inclusivity and representation of queer and indigenous people, voices, and lifestyles in conservation. He hopes to specialize in plant ecophysiology in the future and teach the next generation of conservationists in the Pacific.

University of Guam Marine Laboratory: 74 Years of Commitment to Quality Marine Research and Conservation



Laurie J. Raymundo, Ph.D. *Director, Marine Laboratory*

Dr. Laurie Raymundo (Ph.D. Marine Ecology, Cornell University 2000) spent the first 16 years of her career in the Philippines, seeing

both the devastating impacts of intense human activities on coral reef health and the dedication of community protectors of these ecosystems. Her work focuses on coral health and conservation. She and her lab team currently manage Guam's first two ocean coral nurseries for preserving at-risk species and replenishing their populations. This work has stimulated collaborative research with other faculty to understand how corals function and the apply this knowledge to improve restoration success. She heads both the Guam Reef Restoration and Intervention Partnership and the Pacific Islands Coral Restoration Network. Dr. Raymundo is the Director of the

UOG Marine Laboratory, and is committed to improving the infrastructure, organization, and funding at the UOGML to make it the top choice for marine research in the Western Pacific.

Water and Environmental Research Institute of the Western Pacific



Nathan C. Habana, Ph.D. *Associate Professor, Water & Environmental Research Institute of the Western Pacific*

Dr. Nathan C. Habana is WERI's groundwater hydrologist, and a UOG Alumnus.

He earned his Environmental Science Master's degree at UOG, studying groundwater recharge synthesis and applying groundwater modeling. He continued working at WERI as a staff hydrologist while pursuing his PhD at Mapua University, Philippines, developing computer model simulation of vadose transport of wastewater nitrogen.

Habana continues to do research with a team of research assistants through the Guam Hydrologic Survey (GHS) and Comprehensive Water Monitoring Program, and USGS 104-b projects focused on Guam and CNMI groundwater research and development of online database products. He produces some of the most sophisticated hydrologic and hydrogeologic maps and groundwater models of Guam, including the Northern Guam Lens Aquifer (NGLA) Map and Virtual Tour into the NGLA.

He also advises the development of the WERI and GHS website that stores big hydro-data and the new data visualization products for interagency partners.

Presentation on EPSCoR



Terry J. Donaldson, Ph.D. *Project Director, Guam NSF-EPSCoR*

Dr. Terry Donaldson is Principal Investigator and Project Director of Guam NSF EPSCoR, and Professor of Ichthyology at the University of

Guam Marine Laboratory. He holds an B.S. in Fisheries (Michigan State University), a M.S. in Biology (University of Guam), and a Ph.D in Systematics and Evolutionary Biology-Ichthyology (Louisiana State University). He was a Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellow and later a U.S. National Science Foundation-JSPS Research Fellow at Kyushu University (Japan).

He has worked in government, non-governmental conservation, and academic sectors. Donaldson is President of the National Association of Marine Laboratories (USA), Chair of the Project Directors Council of NSF-EPSCoR, a member of the Executive Committee of the Indo-Pacific Fish Conference, and a member of the Editorial Board of the journal *Ichthyological Research*.

He is a Fellow of the International Coral Reef Society. His research interests in fishes promote collaborative studies with researchers globally.

Charting New Horizons: Building Local Capacity with NASA Guam-Funded Research



Leslie J. Camacho Aquino, Ph.D. *Executive Director, NASA Guam EPSCoR*

Leslie J. Camacho Aquino is an associate professor of mathematics at the University of Guam and became the executive

director of Guam NASA EPSCoR in 2019. Prior to joining UOG, she worked in the federal

government for 13 years in several disciplines, including mathematics, software application development, computer forensics, and cybersecurity. She is the first CHamoru woman to receive her doctorate in mathematics and is a strong supporter of STEM opportunities for underrepresented students in local and regional communities.



Romina King, Ph.D. *Associate Professor, Lead of the Pacific Islands Climate Adaptation Science Center*

Romina King is an associate professor of geography with the Western Pacific

Tropical Research Center at the University of Guam (UOG). Her research interests include natural resource management, coastal zone management, coral reefs, GIS, remote sensing, and climate change adaptation and vulnerability, particularly in Guam, Micronesia, and Oceania.

King currently serves as the associate director of NASA Guam Space Grant and NASA Guam EPSCoR. She is also the UOG lead of the Pacific Islands Climate Adaptation Science Center. In 2022, she was part of a team that was awarded the NASA Group Achievement Award, recognizing her contribution to the NASA NeMO-Net app and its inclusion of Guam's reefs. King has also co-lead the development of the UOG Drone Corps, a program that provides students with the opportunity to be certified drone pilots.

King holds a doctorate in geography from University College Cork (Ireland); a master's in geographic information systems/science from University Southampton (England); a master's in Micronesian studies from the University of Guam; and a bachelor's in economics from Boston College.

Introduction to Small Business Development Center Services



Frederick Granillo, MBA
Center Director, Guam Small Business Development Center

With a combined 32 years of experience in accounting, finance and income taxation, Mr.

Granillo held positions as an external auditor, internal auditor, Controller, Chief Financial Officer and Assistant Vice President - Commercial Lending. Since 2010, Mr. Granillo came to work with the Guam Small Business Development Center and found a passion to assist the small business person to realize their dream of business ownership. Mr. Granillo holds a Bachelor degree in Business Administration - Accounting and an MBA in Management.

Introduction to the Guam APEX Accelerator



Boris Hertslet, PMBA
Program Manager, Guam APEX Accelerator

Boris Hertslet is the Program Manager for the Guam APEX Accelerator. Mr. Hertslet has over 30 years of business experience. After 20 years

in the private sector, managing businesses in various industries (Automotive, Environmental Consulting, Grocery, HVAC, and Restaurants), Mr. Hertslet started as a Procurement Counselor with the Guam Procurement Technical Assistance Center (PTAC) in 2009. In 2013, he was promoted to Program Manager. In 2023, the Guam PTAC became the Guam APEX Accelerator. Mr. Hertslet has a BBA in Accounting and a Professional MBA, both from the University of Guam.

UOG Center for Island Sustainability and Sea Grant



Austin J. Shelton III, Ph.D.
Director, Center for Island Sustainability and UOG Sea Grant

Dr. Austin J. Shelton serves as an associate professor and the director of the University of Guam Center for Island

Sustainability and Sea Grant. A native of Guam, Shelton grew up observing environmental degradation and was inspired to become a marine and environmental scientist. Shelton is an Obama Leader, BMW Guam Electrifying Leader, Micronesia Conservation Coalition Tide Changer Educator, and one of 50 Under 40: Emerging Leaders in the Government of Guam. He led the team that earned the University of Guam its designation from NOAA as a Sea Grant Institute in 2022. Shelton works to revive island ecosystems and advance the 17 United Nations Sustainable Development Goals.

He is the steering committee co-chair of Guam Green Growth (G3), the island's most comprehensive public-private partnership ever created to achieve a sustainable and prosperous future. Shelton leads projects focused on watershed and coral reef restoration, circular economy, food security, aquaculture, renewable energy, science communication, and building STEM capacity in Pacific Islander communities. Since starting his career at the University of Guam in 2016, Shelton and his collaborators built a portfolio of grants exceeding \$54 Million, created more than 60 full-time jobs, provided over 260 paid workforce development experiences, and delivered thousands of community-focused impacts. His service roles include co-chair of the Climate Strong Islands Network, board treasurer of the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), and trustee for the Micronesia Conservation Trust.

Shelton earned a B.S. degree in marine biology from Hawai'i Pacific University and both an M.S. and Ph.D. in zoology with a specialization in marine biology from the University of Hawai'i at Mānoa.

Remote Access through Digital Preservation and Representation



Ryan Shook, *Associate Professor of Library Information Science, RFK Memorial Library*

Ryan Shook is an Associate Professor of Library Information Science at the RFK Memorial Library,

University of Guam. A UOG alumnus with degrees in Fine Arts and Secondary Education, Shook also holds a Master's of Library Science and Information Technology from the University of North Texas (Denton). As the university's sole Digital Librarian, Shook focuses on long-term preservation and remote access of archives through digital content management, preservation, and curation. Partnering with Dean Storie on the Enhancing the Digital Guåfak project (S425H200004), Shook has led the production of over 7,500 accessible items, including 122 Collection Level items, with a core team of digitizers, program analysts, and a web app developer. Additionally, Shook has contributed as an audio engineer to projects like *Memoirs Pasifika*, a historical podcast highlighting the rich history of Pacific islands, in collaboration with producer Tony Azios. The foundations of his digitization efforts are documented in his book chapter "Achieving Balance Through Fundamentals of Digital Librarianship" (2022).



INAUGURAL RESEARCH FORUM

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.