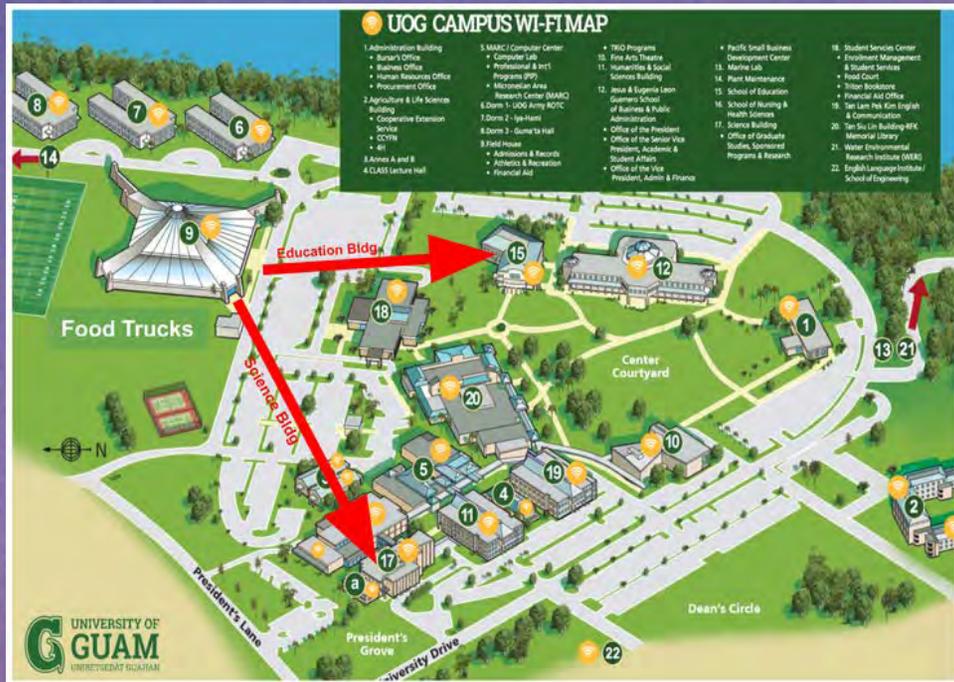


# Campus Map



# UOG CNAS STEM Conference

## Roots to Reef: Connecting Experiences in STEM



## Booth Directory List

- |                                                                                                       |                        |
|-------------------------------------------------------------------------------------------------------|------------------------|
| UOG Biological Sciences Club                                                                          | UOG WERI               |
| UOG Chapter for the Society for Advancement of Chicanos/Hispanic Native Americans in Science (SACNAS) | Lovebylibby            |
| UOG Marine Opportunities and Nature Association (MO'NA)                                               | Guam LEAF              |
| UOG American Medical Student Association (AMSA)                                                       | Sadie Ann Art          |
| UOG Post Society of American Military Engineers (SAME)                                                | MSKP Scentcerely Yours |
| UOG Community Nutrition Education Program                                                             | RaiRoseRue Collection  |
| Center for Island Sustainability / UOG SEA Grant                                                      | SENG 2 Plus 2 Program  |
| Coast 360 Federal Credit Union                                                                        | Isla Charms            |
| Guam Environmental Protection Agency                                                                  | Numa'lo Refillery      |
| USDA - APHIS - Wildlife Services                                                                      | Fressia Guam           |
| UOG Marine Lab                                                                                        | Simply Chante          |
| Guåhan Sustainable Culture/AmeriCorps Guåhan                                                          | Lovali Made Jewelry    |
| Sustainable Culture                                                                                   | Hekela Raine           |
| 4H Youth Development                                                                                  | House of Xellence      |



**April 7-8, 2023**

**UOG Calvo Field House**

# Day 1 Agenda

April 7, 2023

9:00 AM - 10:00 AM	<b>Welcoming Remarks</b> Dr. Lee Yudin	UOG CALVO FIELD HOUSE
	<b>Cultural Welcome</b> Guma' Râsan A'cho' Latte	
	<b>Land Acknowledgement</b> Victoria Manley	
	<b>Emcees</b> Kyle Mandapat, Amanda Dedicataria	
10:00 AM - 11:00 AM	<b>Student Poster Presentations</b>	UOG CALVO FIELD HOUSE
10:00AM - 2:00PM	<b>Food Trucks Open</b> 50 Calzone, Pokeyz, Lyn's BBQ Stix	UOG CALVO FIELD HOUSE OVERFLOW PARKING LOT
11:00 AM - 12:00 PM	<b>Expo Hall</b>	UOG CALVO FIELD HOUSE
12:00 PM - 12:45 PM	<b>Volunteers and Citizen Science in Guam</b> Olympia Terral	SCIENCE BUILDING RM 101
12:00 PM - 1:45 PM	<b>Sloan Workshop: Understanding the Hidden Curriculum for Improved Access to Graduate Programs and Research Opportunities</b> Dr. Cheryl Sanguenza, Natasha Suba, Dr. Mary Cruz	SCHOOL OF EDUCATION RM 108
1:00 PM - 1:45 PM	<b>Crossing the Boundaries: The Relationship of Art and Science</b> Emily Stergar	SCIENCE BUILDING RM 200
2:00 PM - 2:45 PM	<b>Opportunities at Guam National Wildlife Refuge</b> Marybelle Quinata	SCIENCE BUILDING RM 101
	<b>University of Guam Drone Corps</b> Keanno Fausto, John Borja	SCIENCE BUILDING RM 200
3:00 PM - 4:30 PM	<b>Keynote Address</b> Dr. Ernesto Guades	UOG CALVO FIELD HOUSE
	<b>Day 1 Closing Remarks/Recap</b>	
	<b>Announcements</b>	

# Si Yu'os ma'âse'!

## NIYOK



## GUASALI



## MAFUTE'



## SPECIAL ACKNOWLEDGEMENTS



# Si Yu'os ma'ase' from our team to you!

## Lee S. Yudin, Ph.D.

### UOG CNAS Dean/Director

On behalf of the entire CNAS administration and faculty we want to wish you a very successful 2023 STEM conference. This year marks the 3rd year the STEM majors in CNAS have devoted their time and energy to make this event take place. The first two conferences were held online due to COVID restrictions however this year we are in person at the UOG Calvo Fieldhouse. Being able to meet face to face and personally interact with each other will make this conference different than the previous ones. Please take the time to listen to the keynote speakers, meet the poster presenters and outside speakers and take advantage of networking. Introduce yourself to others and build relationships that can last a lifetime.



## Maika Vuki, Ph.D.

### UOG CNAS Division Chair

The STEM Conference is growing to become an important capstone experience for our STEM students. It will showcase some of our finest in both research and communication. I congratulate the organizers and all the presenters for this year's conference. Biba CNAS! Biba UOG!



## Gabriella Prelosky

### UOG 3rd CNAS STEM Conference Organizer

Buenas everyone! Thank you all for joining us for the 3rd Annual STEM Conference! We are so great full to have this conference in person, for the first time. My fellow CNAS students and I have worked very hard to make sure this conference showcases amazing work done by UOG students, and Guam. We hope you all enjoy what it has to offer! Biba STEM!



## Si Yu'os ma'ase' to the committee for making this event possible:

### Committee Chairs:

Gabriella Prelosky  
Louise Pascua  
Anna Aguirre  
Anela Duenas

Sabrina Zhi  
Britney Sison  
Hilary Tirazona

Jacquelyn Cabusi  
Nico Valencia  
Laura Caser

### Committee Members:

Aryanna Sanele  
Angelica Rico  
Jerson Monton  
Keanu Masga  
Veronica Manicsic  
Saraí Vega

Kyle Dahilig  
Lynn Galang  
Paul Dumaraos  
Zillian Unsay  
Edward Ju

Reina Evangelista  
Ariana Orallo  
Franchesca Tibayan  
Julie Laxamana  
And all our amazing volunteers!

# Day 2 Agenda

April 8, 2023

9:00 AM - 10:00 AM	<b>Welcoming Remarks</b> Dr. Maika Vuki	UOG CALVO FIELD HOUSE
	<b>Keynote Address</b> Dr. Else Demeulenaere	
	<b>Emcees</b> Kyle Mandapat, Amanda Dedicataria	
10:00 AM - 11:00 AM	<b>Student Poster Presentations</b>	UOG CALVO FIELD HOUSE
10:00AM - 2:00PM	<b>Food Trucks Open</b> 50 Calzone, Pokeyz, Lyn's BBQ Stix	UOG CALVO FIELD HOUSE OVERFLOW PARKING LOT
11:00 AM - 12:00 PM	<b>Expo Hall</b>	UOG CALVO FIELD HOUSE
12:00 PM - 12:45 PM	<b>UH Manoa College of Engineering</b>	SCIENCE BUILDING RM 101
	<b>Guam's Coral Reef Fisheries</b> Leilani Sablan	SCIENCE BUILDING RM 200
1:00 PM - 1:45 PM	<b>Elevating Our Environmental Opportunities</b> Kyle Dahilig	SCIENCE BUILDING RM 101
	<b>Mental Wellness and the SafeGU Mobile App</b> Jaime Pangelinan, Anthony Dujmovic	SCIENCE BUILDING RM 200
	<b>[INVITATION ONLY] Sloan Workshop: Near Peer Mentorship for Research</b> Dr. Cheryl Sanguenza, Natasha Suba, Dr. Mary Cruz	SCHOOL OF EDUCATION RM 108
2:00 PM - 2:45 PM	<b>HOME Program - Summer Internship Opportunity for Pre-Medical Students</b> Dr. Amanda del Rosario	SCIENCE BUILDING RM 101
	<b>Bee Keeping in Guam</b> Chris Rosario	SCIENCE BUILDING RM 200
3:00 PM - 4:30 PM	<b>Student Presentation Awards</b> <b>Day 2 Closing Remarks/Recap</b> <b>Announcements</b>	UOG CALVO FIELD HOUSE

# Keynote Speakers



**Ernesto J. Guades, Ph.D.**  
**Sustainability of Guam Civil Infrastructures: Research Accounts and Proposed Interventions**

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 obtained his PhD in Structural Engineering at the University of Southern Queensland (Australia) and Master of Engineering at Saitama University (Japan). 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.



**Else Demeulenaere, Ph.D.**  
**Connecting Land, Ocean, and People through Biocultural Research Approaches**

Else Demeulenaere is the Associate Director for Natural Resources, at the University of Guam's Center for Island Sustainability and Sea Grant. Her team conducts research on forest and watershed restoration, endangered species protection and recovery. Else is committed to promoting sustainable practices and preserving Guam's irreplaceable natural and cultural heritage. Else holds a Master's in Botany (Ecology) from the University of Ghent and a PhD

Biogeography, Ethnobotany, and Policy (Interdisciplinary Studies) from the University of Alaska Fairbanks in a joint program with the University and of Guam. Through her dissertation "Rooted in Environmental Justice: Phytogeography and Ethnoecology of Serianthes," she investigated the interdisciplinary connections between Guam's species, ecosystems, sacred spaces, and people to advocate for policies that would benefit their conservation and cultural connections.

# Student Poster Presenters

April 7, 2023

**Sophie D.V Santos**

Total Phenolics, Antioxidant Activity, Quality, and Methylglyoxal Content of Local Multifloral Honeys

**Edward S. Ju**

Finding the Magic in Coding Theory: An Error-Correcting Magic Trick using the 9 Element Field

**Edina Lee**

Anti-diabetic Potential, Total Phenolic Content, and Antioxidant Capacity in Guam's Local Mango (*Mangifera indica* L.) Leaves for Health Benefits

**Renee S. Crisostomo**

Phenotypic plasticity in *Acropora aspera* and its implications for Coral Restoration

**Daniel Encio**

Developing Agroforestry Techniques for the Prevention of Sedimentation in Degraded Watershed Basins in Southern Guam

**Rckaela Aquino**

Food Insecurity and dietary habits of University of Guam College students: findings from the 2021 Pacific Islands Cohort of College Students (PICCS)

**Brandon Salas**

Association of Alcohol Consumption and Stress Amongst College Students

**Angelica R. Rico**

The Relationship Between Physical Activity and Mental Health Among Adults in Guam

**Maria S.Minas**

Playing the Global Game: Modeling Effective Strategies to Combat COVID-19 on Guam

**Zia B. Crytser**

Diversity and distribution of *Fusarium* sp. in soil and leaf litter of a premontane rainforest of southern Costa Rica

**Cabrini C Aguon**

Breast cancer incidence trends in Guam. Guam Cancer Registry

**Victoria Mapa**

Sensory Evaluation of Rosketti Incorporated with Calamansi (*Citrus microcarpa*) Peel Powder

**Jerson Monton**

Patterns of Betel-Nut Use Among Adolescents in Guam: Understanding Ethnic Differences on Perceived Social Norms, Social Influence, Accessibility, and Permissiveness on Betel-Nut Use

April 8, 2023

**Merry J.U. Remetira**

The Relationship between Seagrass Cover and Water Physicochemical Parameters in Achang Bay, Guam

**Atasha Bautista**

Evaluating the Vulnerability of Guam's Water Production Wells Through a Solute Transport Model

**David Quichocho**

A Comparison of "Adult Generation Z" and "Baby Boomer" Perceptions on Chamorro Traditional Healing

**Britney J. Sison**

Assessing the Impact of COVID-19 on the Mental Health of College Students in Guam

**Liann Torres**

The Relationship between Sleep and Stress among University of Guam Students