

Welcome to the

Coastal & Ocean Science at Work for Texans

2019 Texas Sea Grant Research Symposium



HOSTED ON THE CAMPUS OF
Texas A&M University

at the

Texas A&M Hotel and Conference Center
Century Ballroom III and IV

April 9th, 2019

4 – 7 p.m.

Resilient Communities &
Economies

Healthy Coastal
Ecosystems

Sustainable Fisheries &
Aquaculture

Environmental Literacy &
Workforce Development



#COSWT2019

Group A (4 – 4:50 p.m.)

Poster ID	Name	Institution	Project Title
HCE-1	Katherine Adams	Texas A&M University	Reproductive Histology of Blacktip Sharks, <i>Carcharhinus limbatus</i> , in the Northwestern Gulf of Mexico
RCE-1	Mohammad Aghababaei (PI: Dr. Maria Koliou)	Texas A&M University	Long-Term Recovery Assessment of Infrastructure Systems and Communities Following Hurricane Harvey: Case Study for The City of Port Aransas
SFA-1	Hailey Boeck	Texas A&M University-Corpus Christi	<i>Bonamia</i> : Does it Mess with Texas? Survey for the Oyster Parasite <i>Bonamia</i> and MSX in Texas Bay Systems
HCE-4	Cesar Castillo	Texas A&M University	Assessing Hydrologic Connectivity Between a Coastal River and Its Floodplain Using a Field-Based Data Logger Array
HCE-7	Patricia Faulkner	Texas A&M University	Physiological Effects of Salinity Stress in Juvenile American Alligators (<i>Alligator mississippiensis</i>)
RCE-4	Dr. Jens Figlus	Texas A&M University at Galveston	If We Lose Follett's Island, We Lose Coastal Communities and Christmas Bay: A Geological Framework and Numerical Model Study of the Sustainability of Follett's Island
HCE-10	Dr. Chris Gabler	University of Texas Rio Grande Valley	Testing Macroclimate Models of Coastal Wetland Plant Communities

Poster ID	Name	Institution	Project Title
HCE-13	Dr. Xinping Hu (Co-PI: Dr. Michael Wetz)	Texas A&M University-Corpus Christi	Identification of Organic Matter Sources Contributing to Hypoxia Formation in Two South Texas Estuaries
RCE-10	Jin-Young Kim (PI: Dr. Kuang-An Chang)	Texas A&M University	Study of Wetland Erosion Due to Storms Through Combined Field, Laboratory, and Numerical Investigations
HCE-16	Dr. Kaijun Lu (PI: Dr. Zhanfei Liu)	University of Texas Marine Science Institute	Bioavailability and Chemical Characterization of Dissolved Organic Nitrogen in South Texas Rivers
HCE-19	Dr. Dorina Murgulet	Texas A&M University-Corpus Christi	Evaluating Groundwater/Surface-Water Inflow and Nutrient Transport to Texas Coastal Embayments
HCE-22	Dr. Steven Pennings	University of Houston	Mangroves are Invading Texas Salt Marshes: What Are the Consequences?
HCE-25	Dr. Donna Shaver	Padre Island National Seashore	Cold Stunned Green Sea Turtles in Texas
HCE-28	Rachel Weisend	Texas A&M University-Corpus Christi	Evaluating Methane Production from Texas Coastal Mangroves
HCE-31	Anne Tamalavage	Texas A&M University	Mapping Hydrologic Variability through Measuring Hydrogen Isotopic Signatures within Blackwood Sinkhole, Abaco, Northern Bahamas

Group B (4:50 – 5:40 p.m.)

Poster ID	Name	Institution	Project Title
HCE-2	Ali Al-Badran	Texas A&M University	Experimental Evaluation of the Ecotoxicological Effects of Common Agricultural and Household Pesticide on Aquatic Organisms Using Shrimp and Fish
RCE-2	Dr. Kuang-An Chang (Co-PI: Dr. Rusty Feagin)	Texas A&M University	Study of Wetland Erosion Due to Storms Through Combined Field, Laboratory, and Numerical Investigations
HCE-5	Dr. Kerri Crawford	University of Houston	Sand Dune Restoration: Do Plant Diversity and Soil Microbial Amendments Enhance Ecosystem Services?
HCE-8	Dr. Rusty Feagin (Co-PI: Dr. Kuang-An Chang)	Texas A&M University	Study of Wetland Erosion Due to Storms Through Combined Field, Laboratory, and Numerical Investigations
SFA-2	Dr. Lee Fuiman	University of Texas Marine Science Institute	Refining Pigfish Fingerling Production for Commercial Aquaculture: Captive Spawning, Feeding and Fingerling Production
HCE-11	Rachel Glazner	Texas A&M University	The Effects of Plant Structure on Predation Success of <i>Callinectes sapidus</i> : Implications of Mangrove Expansion
RCE-5	Dr. Burak Güneralp	Texas A&M University	Community Resilience Collaborative: A Systems-Oriented Post-Event Assessment of Community Resilience
HCE-14	Dr. Luis Hurtado	Texas A&M University	Conservation Genomics of The Critically Endangered Kemp's Ridley Sea Turtle (<i>Lepidochelys kempii</i>)

Poster ID	Name	Institution	Project Title
HCE-31	Noah Luecke (PI: Dr. Kerri Crawford)	University of Houston	Sand Dune Restoration: Do Plant Diversity and Soil Microbial Amendments Enhance Ecosystem Services?
HCE-17	Mark McKay	Texas A&M University-Corpus Christi	Changes in the Late Holocene Paleoenvironment of Southeast Texas Reverse Estuaries Evidenced by Multiple Proxy Observations: Request for Funds to Perform Isotopic Analysis of Foraminiferal Microfossils
HCE-20	Brie Myre	Texas A&M University	A Novel Method for Assessment of Feeding State in Loggerhead Sea Turtles (<i>Caretta caretta</i>)
HCE-23	Lee Pinnell	Texas A&M University-Corpus Christi	Microbial Colonization and Degradation of Polyethylene Terephthalate (PET) Plastic Debris in Corpus Christi Bay
RCE-7	Benjamin Ritt	Texas A&M University at Galveston	Using UAS Based Photogrammetry for the Study of Beach Replenishment Projects in Galveston, Texas
HCE-26	Matthew Streich	Texas A&M University-Corpus Christi	Assessing the Impact of a Newly Constructed Artificial Reef off Port Aransas, Texas: What are We Missing?
HCE-29	Thomas TinHan	Texas A&M University at Galveston	Feeding Ecology of Bull Sharks in the Northwestern Gulf of Mexico

Group C (5:40 – 6:30 p.m.)

Poster ID	Name	Institution	Project Title
HCE-3	Dr. Lisa Campbell	Texas A&M University	A New Early Warning Tool to Mitigate the Impacts of <i>Dinophysis</i> , an Emerging Threat in Coastal Ecosystems
HCE-32	Scott Clark (PI: Dr. Kerri Crawford)	University of Houston	Sand Dune Restoration: Do Plant Diversity and Soil Microbial Amendments Enhance Ecosystem Services?
HCE-6	Audrey Douglas	Texas A&M University-Corpus Christi	Submarine Groundwater Discharge Derived Dissolved Organic Nitrogen: The Overlooked Component in Coastal Systems and Nutrient Budgets
RCE-3	Nicole Elledge	Texas A&M University-Corpus Christi	Quantifying the Effect of Stormwater Runoff on <i>Enterococcus faecalis</i> Population Structure and Antibiotic Resistance in Corpus Christi Bay, Texas.
HCE-9	Christine Figgener	Texas A&M University	Mate Choice and Chemical Communication in Sea Turtles as Mechanism to Avoid Inbreeding and Hybridization
SFA-3	Dr. Masami Fujiwara	Texas A&M University	Economic Valuation of Brown and White Shrimps as Forage Species in the Coastal Areas of Texas
RCE-9	Dr. Kirby Goidel	Texas A&M University	Perceptions of Community Resilience in Texas Coastal Shoreline Counties & Rapid Hurricane Harvey Survey Project
RCE-6	Bimal Gyawali	Texas A&M University-Corpus Christi	Evaluation of Coastal Groundwater Storage Variability: Implications of the Effects on Climate Anomalies on Submarine Groundwater Discharge
HCE-12	Kenneth Hayes	Texas A&M University-Corpus Christi	Importance of Dissolved Organic Nitrogen and Phosphorus for Microbial Growth in a Eutrophic Estuary (Baffin Bay, Texas)
HCE-15	Dr. Andrea Kealoha	Texas A&M University	The Influence of Oceanic Particulate Organic Matter Uptake on Coral Reef Calcification: Implications for Ocean Acidification

Poster ID	Name	Institution	Project Title
HCE-18	Megan Mullis	Texas A&M University-Corpus Christi	Antimicrobial Production and Resistance Gene Expression in Mission-Aransas National Estuary Research Reserve, Texas
HCE-21	Chelsea Pavliska (PI: Dr. Diego Figueroa)	The University of Texas Rio Grande Valley	The South Texas Banks Ecosystem: Oceanography, Biodiversity, and Genetics
HCE-24	Noura Randle	Texas A&M University	UK' 37 Reconstructions of Surface Water Temperatures During the Eocene-Oligocene Transition to the Late Miocene: A North Western Pacific Perspective on the Onset of Antarctic Glaciation
HCE-27	Germán Torres (PI: Dr. Diego Figueroa)	The University of Texas Rio Grande Valley	The South Texas Banks Ecosystem: Oceanography, Biodiversity and Genetics
HCE-30	Dr. Richard Woodward	Texas A&M University	Economic Valuation of Brown and White Shrimps as Forage Species in the Coastal Areas of Texas

PLEASE JOIN US FOR THE
Awards Ceremony

at 6:30 p.m.,
featuring

Dr. Mark A. Barteau, Vice President for Research
at Texas A&M University

Most Cited Funded Publication
Most Cited Funded Student Publication
Most Engagement on Social Media Post: Principal Investigator
Most Engagement on Social Media Post: Graduate Student
Poster Presentation People's Choice Award: Best Principal Investigator
Poster Presentation People's Choice Award: Best Student
Inspire to Influence Award
Research to Application Award

TEXAS SEA GRANT RESEARCH SUPPORT AT A GLANCE



NUMBER OF
PROJECTS
FUNDED (PIs):

41



PEER-REVIEWED
PUBLICATIONS

Students: PIs:

10

78

STUDENT
THESES



Undergraduate:

29

Graduate:

44

Total:

73

STUDENTS' RESEARCH
SUPPORTED



Undergraduate:

30



Graduate:

74

Total:

104



Grants
In Aid:

68



Ralph Rayburn
Scholars:

6



AMOUNT AWARDED

PIs:

\$3,328,471

Graduate

\$165,806

Undergraduate

\$26,246

Total:

\$3,520,523