

Shirley Pomponi

Cooperative Institute for Ocean Exploration, Research & Technology – NOAA – \$1,196,959
 Transforming natural products discovery: Sponge ecology and supply – Harbor Branch Oceanographic Institute Foundation – \$58,974
 (with Dagleish) Year 6 cooperative institute AUV/ROV technology development
 (with Reed) Year 7 cooperative institute MPA
 (with Reed) Year 7 cooperative institute mesophotic
 (with Voss) Year 7 cooperative institute mesophotic
 (with Wright) Year 7 cooperative institute novel therapeutics

John Reed

(with Pomponi) Year 7 cooperative institute MPA – NOAA – \$87,640
 (with Pomponi) Year 7 cooperative institute mesophotic – NOAA – \$72,236
 Co-PI: Robertson Coral Reef Research and Conservation Program (Hanisak)
 Co-PI: Population connectivity of the Pulley Ridge South Florida coral reef ecosystem: Processes to decision-support tools (Hanisak)
 Co-PI: Cooperative Institute for Ocean Exploration, Research & Technology (Pomponi)

Adam Schaefer

Epidemiology and population health of Indian River Lagoon bottlenose dolphins – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$207,787
 PWD Marine Mammal Research & Conservation stranding response and research – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$150,625
 PFW Marine Mammal Research & Conservation stranding response and research – *Protect Florida Whales* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$111,596
 Pathophysiology of stress in wild and managed-care bottlenose dolphins (*Tursiops truncatus*) data analysis – Georgia Aquarium – \$6,141
 Co-PI: Dolphin abundance in the vicinity of land/ocean biogeochemical observatories: Relationship to water quality (Mazzoil)

Joshua Voss

An integrative assessment of estuarine impacts on coral health and the implications for water resource management in southeast Florida – Florida Sea Grant – \$75,632
 (with Pomponi) Year 7 cooperative institute mesophotic – NOAA – \$115,095
 CLOUD: comprehensive landscape observation via unmanned drone – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$17,612
 Co-PI: Robertson Coral Reef Research and Conservation Program (Hanisak)
 Co-PI: Population connectivity of the Pulley Ridge South Florida coral reef ecosystem: Processes to decision-support tools (Hanisak)
 Co-PI: Cooperative Institute for Ocean Exploration, Research & Technology (Pomponi)

Anni Vuorenkoski Dagleish

Application of underwater laser technology to track fish eggs – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$14,978
 Co-PI: Year 6 cooperative institute AUV/ROV technology development (Dagleish/Pomponi)
 Co-PI: (Chérubin) Ventilation rates of the IRL through its inlets
 Co-PI: Detection and characterization of fish spawning aggregations using a novel, persistent presence robotic approach (Dagleish)
 Co-PI: Airborne compressive sensing topographic LiDAR (Ouyang)
 Co-PI: Cost effective and non-intrusive larval fish enumeration and growth monitoring using light field rendering camera and active learning based classifier (Ouyang)
 Co-PI: Expanding applicability of the compressive line sensing underwater laser imaging system (Ouyang)
 Co-PI: An initiative to design and demonstrate a prototype integrated multi-trophic aquaculture system for sustainable land-based aquaculture (Wills)

Paul Wills

An initiative to design and demonstrate a prototype integrated multi-trophic aquaculture system for sustainable land-based aquaculture – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$100,079
 Collaborative research project to advance IMTA research and technology in support of a viable environmentally sustainable aquaculture industry – Amy's Island Seafood – \$76,800
 Co-PI: Indian River Lagoon algal blooms investigation: Analysis of submersed aquatic vegetation tissue nutrient content and the response of drift macroalgae to extreme levels of salinity, temperature and light (Hanisak)
 Co-PI: Culture of the aquatic plant *Egeria densa* in a closed system (Hanisak)
 Co-PI: Love Your Lagoon research initiative: Development of a seagrass nursery for restoration of seagrass in the Indian River Lagoon (Hanisak)
 Co-PI: Indian River State College aquaculture degree program (Laramore)
 Co-PI: Cost effective and non-intrusive larval fish enumeration and growth monitoring using light field rendering camera and active learning based classifier (Ouyang)

Amy Wright

Discovery of marine invertebrate-derived antimalarial agents – National Institutes of Health – \$182,483
 Undergraduate and graduate training in biomedical marine research – Gertrude E. Skelly Charitable Foundation – \$55,153
 Transforming natural products discovery: Natural products isolation – Harbor Branch Oceanographic Institute Foundation – \$94,065
 Discovery of marine natural products targeting latent *M. tuberculosis* – University of Central Florida – \$224,250
 Discovery of secretase modulatory compounds from marine organisms – University of Florida – \$50,000
 (with Pomponi) Year 7 cooperative institute novel therapeutics – NOAA – \$44,099

**HARBOR
BRANCH**

FLORIDA ATLANTIC UNIVERSITY®

FAUDIVISION OF RESEARCH
Florida Atlantic University**FUNDED PROJECTS** July 1, 2014—June 30, 2015**RESEARCH RECOGNITION
LUNCHEON****NOON — 1:30 p.m.****WELCOME REMARKS**

Megan Davis, Ph.D.—FAU Harbor Branch Interim Executive Director

BRIEF INTRODUCTIONS

All Attendees

DIVISION OF RESEARCH HIGHLIGHTS VIDEO**RESEARCH RECOGNITION REMARKS**

Dan Flynn, Ph.D.—FAU Vice President for Research

SPONSORED PROGRAMS**OCTOBER 23, 2015 | FAU HARBOR BRANCH
LINK BUILDING—LE246**

AWARDS

Laurent Chérubin

Integrated MODels for Evaluating Climate change, population growth, and water management effects on south Florida coastal marine and estuarine ecosystems (iMODEC) – NOAA – \$20,013
Ventilation rates of the IRL through its inlets – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$51,420
Co-PI: Detection and characterization of fish spawning aggregations using a novel, persistent presence robotic approach (Dalglish)
Co-PI: Application of underwater laser technology to track fish eggs (Vuorenkoski Dalglish)

Fraser Dalglish

Detection and characterization of fish spawning aggregations using a novel, persistent presence robotic approach – Harbor Branch Oceanographic Institute Foundation – \$309,829
(with Pomponi) Year 6 cooperative institute AUV/ROV technology development – NOAA – \$250,000
(with Skemp) Unobtrusive multi-static derial LiDAR imager for wide-area surveillance and identification of marine life at MHK installations – US Department of Energy – \$87,811
Co-PI: Ventilation rates of the IRL through its inlets (Chérubin)
Co-PI: Airborne compressive sensing topographic LiDAR (Ouyang)
Co-PI: Cost effective and non-intrusive larval fish enumeration and growth monitoring using light field rendering camera and active learning based classifier (Ouyang)
Co-PI: Expanding applicability of the compressive line sensing underwater laser imaging system (Ouyang)

Megan Davis

North Atlantic right whale conservation and outreach program – *Protect Florida Whales* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$35,000

Esther Guzmán

Applying new technologies to transform natural products drug discovery – Harbor Branch Oceanographic Institute Foundation – \$84,982

M. Dennis Hanisak

Robertson Coral Reef Research and Conservation Program – Banbury Foundation – \$62,009
Indian River Lagoon algal blooms investigation: Analysis of submersed aquatic vegetation tissue nutrient content and the response of drift macroalgae to extreme levels of salinity, temperature and light – St. Johns River Water Management District – \$261,998
Evaluating the feasibility of transplanting to promote seagrass recovery in the Indian River Lagoon – St. Johns River Water Management District – \$30,000
Culture of the aquatic plant *Egeria densa* in a closed system – Florida Department of Agriculture Aquaculture Review Council – \$81,654
Population connectivity of the Pulley Ridge South Florida coral reef ecosystem: Processes to decision-support tools – University of Miami – \$126,022
Land/ocean biogeochemical observatories for intensive, real-time water quality sampling in the St. Lucie estuary and nearby Indian River Lagoon – Florida Department of Environmental Protection – \$2,000,000
An initiative to design and demonstrate a prototype integrated multi-trophic aquaculture system for sustainable land-based aquaculture: assimilative component – macroalgae – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$33,333
Indian River Lagoon Observatory: Biodiversity and ecosystem function of an estuary in transition – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$200,986
Love Your Lagoon research initiative: Development of a seagrass nursery for restoration of seagrass in the Indian River Lagoon – Harbor Branch Oceanographic Institute Foundation – \$111,840
Link Foundation summer internships – The Link Foundation – \$48,000
The Indian River County Junior Scientists Fellows Program – Wells Fargo Foundation – \$40,000
Lincoln Park Academy Harborside: A science and education partnership agreement – School Board of St. Lucie County – \$20,845
Marine Oceanographic Academy: A science and education partnership agreement – School Board of St. Lucie County – \$236,507
Land/ocean biogeochemical observatories for intensive, real-time water quality sampling in the St. Lucie Estuary – South Florida Water Management District – \$183,007
Co-PI: Cooperative Institute for Ocean Exploration, Research & Technology (Pomponi)

Mingshun Jiang

Co-PI: Year 6 cooperative institute AUV/ROV technology development (Pomponi/Dalglish)
Co-PI: An initiative to design and demonstrate a prototype integrated multi-trophic aquaculture system for sustainable land-based aquaculture (Wills)

Brian Lapointe

2014-2015 Martin County septic tank study – Martin County – \$124,500
Determining sources, history and status of eutrophication at Naval Station Guantanamo Bay, Cuba – Naval Facilities Engineering Command – \$116,753
The ecology and nutrition of macroalgal blooms in the Indian River Lagoon – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$59,014

Co-PI: Indian River Lagoon algal blooms investigation: Analysis of submersed aquatic vegetation tissue nutrient content and the response of drift macroalgae to extreme levels of salinity, temperature and light (Hanisak)
Co-PI: Land/ocean biogeochemical observatories for intensive, real-time water quality sampling in the St. Lucie estuary and nearby Indian River Lagoon (Hanisak)

Susan Laramore

Increasing shrimp production in Florida by establishing environmental mineral guidelines for low-salinity shrimp culture operations – Florida Department of Agriculture Aquaculture Research Council – \$65,827
Indian River State College aquaculture degree program – Indian River State College – \$32,234
An initiative to design and demonstrate a prototype integrated multi-trophic aquaculture system for sustainable land-based aquaculture: Incorporation of biofloc culture and fresh seaweed to increase production of the white shrimp, *Litopenaeus vannamei* – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$33,000
Reproductive patterns and nutritional status of cultured and wild sunray venus clams – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$35,000
Comparative benchmarking of growth, survival and feed conversion efficiencies of *Litopenaeus vannamei* fed diets of varying nutritional composition in individual and group clear water culture systems – Zeigler Brothers, Inc. – \$63,624
The development of controlled individual disease challenge systems for the evaluation of the relative susceptibility of shrimp to viral and bacterial pathogens – Zeigler Brothers, Inc. – \$52,767

Marilyn Mazzoil

Dolphin abundance in the vicinity of land/ocean biogeochemical observatories: Relationship to water quality – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$34,978
Nocturnal feeding strategies of IRL dolphins – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$34,894
Photo identification – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$462,520

Peter McCarthy

Integrated multi-trophic aquaculture system: Efficient degradation of waste products using biofloc technology – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$33,500
Microbial Source Tracking in the Indian River Lagoon – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$25,000
The pathogenic *Vibrios* in the Indian River Lagoon and their potential threat to human health – *Save Our Seas* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$12,500
Microbiology of marine invertebrates – Harbor Branch Oceanographic Institute Foundation – \$1,515
Transforming natural products discovery: Microbiology – Harbor Branch Oceanographic Institute Foundation – \$81,979
Indian River Lagoon graduate research fellowships – Harbor Branch Oceanographic Institute Foundation – \$80,981
Developing source tracking for indicators of fecal contamination – River Branch Foundation – \$39,877
Co-PI: The development of controlled individual disease challenge systems for the evaluation of the relative susceptibility of shrimp to viral and bacterial pathogens (Laramore)
Co-PI: CetOMICS: A state-wide cetacean OMICS initiative to investigate health, fitness, behavior and ecology of whales and dolphins – dolphin component (O’Corry-Crowe)

Greg O’Corry-Crowe

Immunogenetic profiling of Florida whales: The genomics of adaptive responses to environmental change – *Protect Florida Whales* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation –\$24,964
Ancient DNA analysis of pygmy *Kogia breviceps* and dwarf *K. Sima* sperm whale teeth – *Protect Florida Whales* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation –\$14,624
Molecular genetic studies of Unusual Mortality Events of Florida dolphins – *Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$24,993
CetOMICS: A state-wide cetacean OMICS initiative to investigate health, fitness, behavior and ecology of whales and dolphins – *Protect Florida Whales/Protect Wild Dolphins* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$137,067/\$95,618
SNP genotyping as a new approach to genetic mark-recapture studies of polar bears, *Ursus maritimus*, in the Alaskan Arctic – North Slope Borough – \$170,377
Genetic analysis of population structure and stock identity of beluga whales from Kotzebue Sound, Alaska: mtDNA analysis of whale teeth using aDNA techniques – North Slope Borough – \$55,400

Bing Ouyang

Airborne compressive sensing topographic LiDAR – Air Force Office of Scientific Research – \$119,917
Cost effective and non-intrusive larval fish enumeration and growth monitoring using light field rendering camera and active learning based classifier – *Aquaculture* license plate sales granted through the Harbor Branch Oceanographic Institute Foundation – \$34,992
Development of a compressive line sensing prototype to study turbulence imaging – Naval Research Laboratory – \$60,000
Expanding applicability of the compressive line sensing underwater laser imaging system – Office of Naval Research – \$99,937
Co-PI: Ventilation rates of the IRL through its inlets (Chérubin)
Co-PI: Detection and characterization of fish spawning aggregations using a novel, persistent presence robotic approach (Dalglish)
Co-PI: Year 6 cooperative institute AUV/ROV technology development (Dalglish/Pomponi)