



UNIVERSITY OF
SOUTH FLORIDA

COLLEGE OF MARINE SCIENCE

DOCTOR OF PHILOSOPHY DEGREES

*DEGREES AWARDED BY THE DEPARTMENT/COLLEGE OF MARINE SCIENCE,
UNIVERSITY OF SOUTH FLORIDA
(Through December 2008)*

2008

Fall 2008

DELONG, Kristine

Paleoclimatic Reconstruction and Evaluation of Sub-Centennial Climate Variability in the Late Holocene Using Records from Massive Corals (New Caledonia), Tree-Rings (New Mexico) and Speleothems (China)

FLEWELLING, Leanne

Vectors of Brevetoxins to Marine Mammals

NEELY, Merrie Beth

Benthic Microalgae and Nutrient Flux in Florida Bay, USA

Summer 2008

MARRARI, Marina

Characterization of the Western Antarctic Peninsula Ecosystem: Environmental Controls on the Zooplankton Community

Spring 2008

COMNY, Robyn

Temporal and Spatial Patterns in Optical Properties of Colored Dissolved Organic Matter on Florida's Gulf Coast: Shelf to Stream to Aquifer

DARROW, Brian

Effects of Nutrients from the Water Column on the Growth of Benthic Microalgae in Permeable Sediments

REMSEN, Andrew
Evolution and Field Application of a Plankton Imaging System

2007

BOEHME-TERRANA, Linae
Trace Metals and Stable Isotopes as Tracers of Life History and Trophic Connections in
Estuarine-Dependent Fish from Tampa Bay, Florida

MILROY, Scott
A Three-Dimensional Biophysical Model of Light, Nutrient, and Grazing Controls on
Phytoplankton Competition Affecting Red Tide Maintenance on the West Florida Shelf

ADORNATO, Lori
Oceanic Interfaces: Investigations of Biogeochemical Changes across Nutriclines and
Frontal Boundaries

FISHER, Elizabeth
Assessing the Health of Coral Reef Ecosystems in the Florida Keys at the Community,
Individual, and Cellular Scales

LEVERONE, James
Comparative Effects of the Toxic Dinoflagellate *Karenia brevis* on Bivalve Mollusks from
Florida

2006

BURGHART, Scott
Micronektonic Community Composition and Trophic Structure within the Bathypelagic
Zone in the Eastern Gulf of Mexico

CASPER, Brandon
The Hearing Abilities of Elasmobranch Fishes

CHEN, Zhigang
Monitoring Water Quality in Tampa Bay: Coupling in situ and Remote Sensing

HILL, Heather
Abrupt Climate Change During the Last Glacial Period: A Gulf of Mexico Perspective

- KILBOURNE, Kelly
Tropical Atlantic and Caribbean Climate Variations During the Past Eight Centuries
- LENES, Jason
Saharan dust and phosphatic fidelity: a three dimensional biogeochemical model of *Trichodesmium* on the West Florida Shelf.
- LIU, Yonggang
Patterns and dynamics of ocean circulation variability on the West Florida Shelf
- PALANDRO, Dave
Coral Reef Habitat Change and Water Clarity Assessment (1984-2002) for the Florida Keys National Marine Sanctuary Using Landsat Satellite Data
- QUINN, Kelly
Influence of Solution and Surface Chemistry on Yttrium and Rare Earth Element Sorption
- QUINTANA-RIZZO, Ester
Group Fission-Fusion Dynamics and Communication in the Bottlenose Colphin (*Tursiops Truncatus*)
- SEREBRENNIKOVA, Yulia
Ammonium distribution and dynamics in relation to biological production and physical environment in the Marguerite Bay region of the West Antarctic Peninsula.
- SMITH, Jennifer
Geochemical Signatures in the Coral *Montastraea*: Modern and Fossil Perspectives
- VANDEBLOEMEN, Lisa
Satellite Analysis of Temporal and Spatial Chlorophyll Patterns on the West Florida Shelf (1997-2003)

2005

- NABABAN, Bisman
Bio-optical Variability of Surface Waters in the Northeastern Gulf of Mexico.
- MASSERINI, Rob
Ammonium, Nitrate, and Nitrite in the Oligotrophic Ocean: Detection Methods and Usefulness as Tracers.
- VIRMANI, Jyotika
Ocean-Atmosphere Interactions on the West Florida Shelf.

McDANIEL, Lauren

Lysogeny: Practical Applications and New Discoveries

LESTER, Kristen

Zooplankton of the West Florida Shelf: Relationships with *Karenia Brevis* Blooms

2004

JOLLIFF, JASON

The Relative Influence of Coastal Effluent and Deep Water Masses on Surface Optical Properties and Margin Productivity in the Northeastern Gulf of Mexico: A Three-Dimensional Simulation Analysis

RICHARDSON, RALPH

Florida Bay Microalgal Blooms: Physiological and Competitive Strategies of Bloom Forming Cyanobacteria and Diatoms in Florida Bay.

WARRIOR, HARI V.

Parameterization of the Light Models in Various General Ocean Circulation Models.

2003

HELBER, ROBERT

Upper Ocean Upwelling, Temperature, and Zonal Momentum Analyses
In the Western Equatorial Pacific

HOLLAND, CHIRSTINA

Interannual Volume Changes and Heat Transport Pathways in the Tropical Pacific

JARRETT, BRET

Late Quaternary Carbonate Sediments and Facies Distribution Patterns Across a Ramp to Rim Transition: A New Depositional Model for the Southwest Florida Platform

JOHN, DAVID E.

Transport and Survival of Water Quality Indicator Microorganisms in the Ground Water Environment of Florida: Implications for Aquifer Storage and Waste Disposal

QUINTERO-BENTANCOURT, WALTER

Assessment of Current and New Methods for Investigating the Occurrence of Enteric Pathogens in Ambient Waters and Water Resources for Rehydration of a Floridan Wetland

SHEHANE, STEPHANEY D.

From Source to Tap: Tools and Techniques for Investigations into Public and Environmental Health Issues Associated with Water

SIMONIELLO, CHRISTINA

The Effect of Temperature on Metabolic Characteristics and Biochemical Structure: Indices of Thermal Sensitivity in Mesopelagic Fishes

WARIK, BORIS

Diversity and Production of Phytoplankton in the Offshore Mississippi River Plume and Coastal Environments

WILLIAMSON, SHANNON J.

Lysogeny, Pseudolysogeny, and Sporulation in the Marine Environment

2002

AMES, AUDRA

Lipid Chemistry of the Florida Manatee, *Trichechus manatus latirostris*

TOLER, STRAWN

A Study of test breakage and calcification in bleaching-stressed *Amphistegina gibbosa* (Foraminifera)

CATTRALL, CHRISTOPHER

Retrieval of Columnar Aerosol Phase Function and Single-Scattering Albedo From Sky Radiance over the Ocean: Measurements of African Dust

TALGE, HELEN K.

Cytology of Symbiont Loss (Bleaching) in *Amphistegina Gibbosa*

WILLIAMS, DANA E.

Population Ecology of Bleaching-Stressed *Amphistegina Gibbosa* in the Florida Keys (1991-1999): Influence of Solar Radiation on Reef-Dwelling Foraminifera

HE, RUOYING

The response of the West Florida Shelf to Forcing at Tidal, Synoptic, Seasonal and Inter-Annual Time Scales.

2001

BURROUGHS, STEVEN M.

Upper-Truncated Power Laws and Self-Similar Criticality in Geophysical Processes

CALLAHAN, MICHAEL R.

Light Scattering and Liquid Core Waveguides: An Exploration of Two Novel Spectrophotometric Techniques for the Enhanced Measurement and Analysis of Aquatic Constituents.

DIX, THOMAS L.

The Distribution and Ecology of Benthic Foraminifera of Tampa Bay, Florida

DONALDSON, KIM A.

Molecular Evolution of a Coding and a Non-Coding Region of the Mitochondrial Genome of Three Transisthmian Species of Fishes (Centropomidae: Centropomus).

SUTTON, TRACEY T.

Analysis of Pelagic Ecosystem Structure

BURWELL, David Carl

Modeling the Spatial Structure of Estuarine Residence Time: Eulerian and Lagrangian Approaches

DOTHEROW-McFIELD, Melanie Ann

The Influence of Disturbance and Management on Coral Reef Community Structure In Belize

HAFEN, Mark Radley

Sediment Movement and Comparative Sedimentary Morphology, West Florida Shelf

SCHMIDT, Nancy Jeanne

Influence of Climate Variability on Tampa Bay, Florida

SLIFKO, Theresa Renee

Development and Evaluation of a Quantitative Cell Culture Assay for Cryptosporidium Disinfection Studies

SUTTON, Pamela Lynn

The Physico-Chemical Interactions of Polycyclic Aromatic Hydrocarbons (PAHs) in Seawater: Solubility and Sorption

2000

BERNSTEIN, Renate

Radiolarians from the Western North Pacific Ocean: A Latitudinal Study of their Distributions and Fluxes

BOEHME, Jennifer Ruth

Artificial and Natural Fluorescence of Dissolved Organic Matter in the Tampa Bay Estuary

PENTA, Bradley

Phytoplankton Competition on the West Florida Shelf: A Simulation Analysis with "Red Tide" Implications

Filename: DEGREESdms.doc

WETZEL, Dana

Novel Techniques and Temporal Trends in Assessing the Distribution of Petroleum Hydrocarbon Contamination and Accumulation in the Canals of Venice, Italy 1985-1998.

1999

FOLEY, Allen M.

Nesting Ecology of the Loggerhead Turtle (*Caretta Caretta*) in the Ten Thousand Islands, Florida.

GEIGER, Stephen

A Comparative Assessment of Biochemical Measures of Nutritional Condition in Pelagic Organisms: Oceanic Frontal Systems as Natural Laboratories

GRIFFIN, Dale

Microbiological Studies of Florida Water Quality

LIPP, Erin

Occurrence, Distribution and Transport of Human Pathogens in Coastal Waters of Southwest Florida

1998

DEL CASTILLO, Carlos

Optical Characteristics of the Colored Dissolved Organic Matter in the Eastern Caribbean, West Florida Shelf, and the Arabian Sea: Relationship between Chemical Characteristics and Optical Response.

KAWALL, Helena

Metabolic Adaptation of Antarctic Organisms: Responses to the Ice-Edge Bloom and Cold Adaptation.

KELLOGG, Christina

Genetic Diversity and DNA Repair of Environmental Marine Vibriophages.

LI, Zhenjiang

Upwelling Circulation on the West Florida Continental Shelf.

1997

BISSETT, William Paul

Carbon Cycling in the Upper Waters of the Sargasso Sea.

DUNCAN, David S.

Geologic and Paleooceanographic Evolution of the Serranilla Basin: Northern Nicaragua Rise, Caribbean Sea.

HOU, Weilin

Characteristics of Large particles and their Effects on the Submarine Light Field.

JI, Zaihua

Indian Ocean Circulation and Heat Budget in a Numerical Model.

LIU, Xuewu

Fractionation Behavior of the Rare Earths in Natural Waters: The Role of Carbonate Complexation and Phosphate.

MOYER, Michael A.

The Reproductive Ecology of the Calico Scallop, *Argopecten gibbus* (Linnaeus), and Mass Mortality Linked to a Protistan.

PIERCE, Renee Bishop

Leptocephalus Energetics: An Examination of a Unique Developmental Strategy.

1996

ARNOLD, William S.

Temporal and Spatial Pattern of Shell Growth in Hard Clams (*Mercenaria spp.*) from the Indian River Lagoon, Florida.

GILBES, Fernando

Analysis of Episodic Phytoplankton Blooming and Associated Oceanographic Parameters on the West Florida Shelf Using Remote Sensing and Field Data.

JIANG, Chengyang

Lysogeny and Transduction in the Marine Environment.

LEE, Eunil

Late Quaternary Sediments and Rapid Deposition of Pelagic Carbonates on the Central West Florida Continental Slope.

LIU, Zhengrong

The Origin and Evolution of the Easter Seamount Chain.

LU, Yan-Tian

Physiological Energetics of Larvae and Juveniles of the Bay Scallop, *Argopecten irradians concentricus*.

PEEBLES, Ernst B.

Ontogenetic Habitat and Diet Selection in Estuarine-Dependent Fishes: Comparisons of Observed Patterns with Model Predictions.

QIAO, Lin

Empirical Studies of Equatorial Ocean Dynamics from the Tropical Instability Wave Experiment.

TOSCANO, Marguerite A.

Late Quaternary Stratigraphy, Sea-Level History, and Paleoclimatology of the Southeast Florida Outer Continental Shelf.

1995

MALLINSON, David J.

Geology and Geochemistry of the Miocene Hawthorn Group in Northeast Florida: Implications for Paleooceanography, Paleoclimate, and Carbon and Phosphorus Cycles.

NETRATANAWONG, Toedsit

Stable Isotope Investigation of the Hydrological Cycle of West-Central Florida.

RAST, Jonathan P.

Rearranging Genes of the Chondrichthyan Immune System.

WANG, Chunzai

Numerical, Analytical, and Observational Studies of Tropical Ocean-Atmosphere Interactions.

WRIGHT, Eric

Sedimentation and Stratigraphy of the Suwannee River Marsh Coastline.

1994

FRISCHER, Mark

Natural Plasmid Transformation in the Marine Environment.

LEE, Zhongping

Visible-Infrared, Remote-Sensing Model and Applications for Ocean Waters.

LEONARD, Lynn

Environmental and Physical Factors Controlling Sediment Transport and Deposition in Microtidal Marsh Systems: Implications for Marsh Stability.

PRIBBLE, J. Raymond

New Production Within Gulf-Stream Induced Cyclonic Eddies in the South Atlantic Bight and the Resultant Carbon Flux to Depth: Results of a Combined 3-Dimensional Biological/Physical Simulation Model.

SNYDER, Stephen W.

Miocene Sea-Levels: Frequency and Amplitude Estimates from the Carolina Platform.

TOLLEY, S. Gregory

Physiological Energetics of the Common Snook, Centropomus undecimalis.

1993

BRIGHTMAN, Ross I.

Energetics and RNA-DNA Ratio in Larval Red Drum Sciaenops ocellatus.

CONLEY, Walter

Population Structure and Trophodynamics of Lanternfish (Pisces: Myctophidae) Larvae of the Eastern Gulf of Mexico.

KOCH, Evamaria W.

Hydrodynamics of Flow Through Seagrass Canopies: Biological, Physical and Geochemical Interaction.

LEE, Jonghyeon
Rare Earth Element and Yttrium Speciation in Seawater: Influence of Temperature and Pressure.

LOUDA, J. William
The Biogeochemistry of Chlorophyll.

MEYERS, Mark B.
The Response of Oceanic Phytoplankton to Nitrate Flux in the eastern Gulf of Mexico.

PEEBLES, Mark W.
Carbonate Sedimentology and Foraminiferal Ecology of Deep, Current-Swept Platforms, Northern Nicaraguan Rise, Caribbean Sea.

1992

BARBER, Timothy R.
Biogeochemistry of Light Hydrocarbons in South Florida Wetlands.

BRELAND, Jabe A.
Spectrophotometric Determinations of the pH and the Total Alkalinity of Sea Water Utilizing Sulfonephthalein Indicators.

KIM, Ki-Hyun
Rare Earth Element Chemistry in Sea Water / by Ki-Hyun Kim. 1992.

ROBERT-BALDO, Gillian
An Examination of Pyrite and Marcasite Oxidative/Dissolution Rates in Sea Water.

1991

DURAKO, Michael J.
Carbon Dynamics of the Seagrass Thalassia testudinum.

GIBEAUT, James C.
Morphodynamic Classification, Evolution, and Modeling of Unstructured Inlets in West Central Florida.

GREGG, Watson W.
Simulation of the 1979 Spring Bloom in the Mid-Atlantic Bight: A Coupled

1990

ERDMAN, Robert B.

Reproductive Ecology and Distribution of Deep-Sea Crabs (Family Geryonidae) from Southeast Florida and the Eastern Gulf of Mexico.

GARTNER, John V., Jr.

Ecology of the Lantern Fishes (Pisces: Myctophidae) of the Eastern Gulf of Mexico, with Emphasis on Age, Growth, and Reproductive Patterns of the Numerically Dominant Species.

SHUERT, Paul G.

Ecosystem Analysis of the Bering/Chukchi Seas Using a Coupled Time Dependent Physical/Biological Simulation Model.

1989

CONKRIGHT, Margarita E.

Stable Carbon Isotope Compositions During the Thermal Alteration of Organic Matter.

EVANS, Mark W.

Late Miocene to Quaternary Seismic and Lithologic Sequence Stratigraphy of the Charlotte Harbor Area: Southwest Florida.

JEFFREY, Wade H.

Validation of (³H) Thymidine Incorporation and its Application to Detecting Natural Transformation in the Marine Environment.

1988

ACKER, James G.

Factors Influencing the Dissolution of Aragonite in the Oceanic Water Column.

WOODS, Terri L.

Calculated Solution-Solid Relations in the Low Temperature System Ca-MgO-FeO-CO₂-H₂O.

1987

AZZARELLO, Marie Y.

A Comparative Study of the Developmental Osteology of Hippocampus zosteræ and Syngnathus scovelli.

DEFLAUN, Mary F.

The Distribution and Molecular Characterization of Dissolved DNA in Aquatic Environments.

MANGINI, Maurizio A.

Molecular Zoogeography of Florida Snook (Pisces: Centropomidae): by a Simplified Technique for the Purification of Fish Mitochondrial DNA.

PARSONS, Glen R.

Life History and Bioenergetics of the Bonnethead Shark, Sphyrna tiburo (Linnaeus): a Comparison of Two Populations.

1986

BROOKS, Gregg R.

Recent Continental Slope Sediments and Sedimentary Processes Ordering a Non-Rimmed Carbonate Platform: Southwest Florida Continental Margin.

KUMP, Lee R.

The Global Sedimentary Redox Cycle.

1985

BURKE, Roger A.

Stable Hydrogen and Carbon Isotopic Compositions of Biogenic Methanes.

1984

BARBER, Bruce J.

Reproductive Energy Metabolism in the Bay Scallop, Argopecten irradians
concentricus (Say).

CUBA, Thomas R.

Successional and Seasonal Events in the Fouling of Naturally Occurring Substrate
in a Subtropical Estuary.