

## NCCOS PARTICIPATION AT CERF 2019

(NCCOS affiliates in bold type)

### CHAired ORAL SESSIONS

BIOGEOCHEMICAL CYCLING AND TRANSPORT ACROSS THE LAND–OCEAN AQUATIC CONTINUUM. Raymond Najjar (PSU), **Marjorie Friedrichs** (VIMS), et al.

COLLABORATIVE MODELING FOR RESPONSIVE, RELEVANT, AND TIMELY COASTAL MANAGEMENT. **Mark Brush** (VIMS), et al.

ECOSYSTEM-BASED MANAGEMENT: CHALLENGES AND OPPORTUNITIES FOR REGIONAL IMPLEMENTATION. **Michael Roman** (UMD), **Felix Martinez** (NCCOS), **Amie West** (UMD)

EXPLORING INTERDISCIPLINARY AND COLLABORATIVE SEA-LEVEL RISE RESEARCH FOR COASTAL ADAPTATION. **David Kidwell** (NCCOS), **Renee Collini** (DISL), and **Matthew Bilskie** (LSU)

GULF OF MEXICO OXYGEN DEFICIENCY: WHEN, WHERE, WHAT TO DO? **Nancy Rabalais** (LUMCON), **Steve DiMarco** (TAMU), et al.

IMPACTS OF COASTAL HYPOXIA ON FISHES, FOOD WEBS AND ECOSYSTEMS. **Kim de Mutsert** (GMU), **Stephen Brandt** (OSU)

OCEAN ACIDIFICATION IN A MULTIPLE-CLIMATE CHANGE-STRESSORS CONTEXT: SCIENCE-BASED TOOLS FOR MANAGEMENT. **Daniele Bianchi** (UCLA), **Richard Feely** (OAR), **Elizabeth Turner** (NCCOS), **Nina Bednarsek** (UWA), **Martha Sutula** (SCCWRP)

QUANTIFICATION AND VALUATION OF ECOSYSTEM SERVICES ASSOCIATED WITH SHELLFISH. Julie Rose (NMFS), **Suzanne Bricker** (NCCOS), et al.

SUPPORTING MANAGEMENT OF COASTAL ECOSYSTEMS THROUGH INTEGRATED ECOSYSTEM ASSESSMENTS. Session Co-Chair: **Mark Monaco** (NCCOS)

### POSTER SESSIONS

EXPLORING INTERDISCIPLINARY AND COLLABORATIVE SEA-LEVEL RISE RESEARCH FOR COASTAL ADAPTATION. **David Kidwell** (NCCOS), **Renee Collini** (DISL), and **Matthew Bilskie** (LSU)

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## **WORKSHOP**

CONCEPTS AND CONTROVERSIES IN TIDAL MARSH ECOLOGY REVISITED (held at Dauphin Island Sea Lab). **Carolyn Currin** (NCCOS)

## **NCCOS PROJECTS**

### ***Integrated Ecosystem Assessments***

**Oral Presentation:** SESSION INTRODUCTION: SUPPORTING MANAGEMENT OF COASTAL AND MARINE ECOSYSTEMS THROUGH INTEGRATED ECOSYSTEM ASSESSMENTS. **Mark Monaco** (NCCOS), et al.

**Oral Presentation:** SUPPORTING MANAGEMENT OF COASTAL ECOSYSTEMS THROUGH INTEGRATED ECOSYSTEM ASSESSMENTS. **Mark Monaco** (NCCOS), et al.

**Oral Presentation:** APPLYING RESULTS OF THE NORTHEAST INTEGRATED ECOSYSTEM ASSESSMENT TO THE STELLWAGEN BANK NATIONAL MARINE SANCTUARY. **David Moe Nelson** (NCCOS), **Mark Monaco** (NCCOS), et al.

**Oral Session:** SUPPORTING MANAGEMENT OF COASTAL ECOSYSTEMS THROUGH INTEGRATED ECOSYSTEM ASSESSMENTS. Session Co-Chair: **Mark Monaco** (NCCOS)

### ***Saltmarsh Response to Decadal Change***

**Oral Presentation:** DECADAL RESPONSE OF NATURAL AND STABILIZED FRINGING SALTMARSHES TO SEA LEVEL RISE, HURRICANES, AND DROUGHT. **Carolyn Currin, Jenny Davis, Anna Hilting, Michael Greene, Quentin Walker** (all NCCOS)

### ***Shellfish Ecosystem Services***

**Oral Presentation:** OYSTER AQUACULTURE AS A METHOD OF NITROGEN BIO-EXTRACTION IN THE FLORIDA PANHANDLE. **Suzanne Bricker** (NCCOS), et al.

**Oral Presentation:** BUILDING AN OYSTER FILTRATION MODEL FROM THE GROUND UP. **Suzanne Bricker** (NCCOS), et al.

**Oral Presentation:** HIGH STAKES: DECISION SUPPORT FOR OYSTER MARICULTURE WITHIN AN ESTUARINE RESERVE. **Suzanne Bricker** (NCCOS), et al.

**Oral Session:** QUANTIFICATION AND VALUATION OF ECOSYSTEM SERVICES ASSOCIATED WITH SHELLFISH. Julie Rose (NMFS), **Suzanne Bricker (NCCOS)**, et al.

**Poster Session:** QUANTIFICATION AND VALUATION OF ECOSYSTEM SERVICES ASSOCIATED WITH SHELLFISH. Julie Rose (NMFS), **Suzanne Bricker (NCCOS)**, et al.

### ***Emerging Contaminants***

**Oral Presentation:** EMERGING CONTAMINANTS IN OUR COASTAL WATERS: A NATIONAL MUSSEL WATCH ASSESSMENT. **Dennis Apeti** (NCCOS), **Mary Rider** (NCCOS)

### ***Long-Term Ecological Trends***

**Oral Presentation:** HOW HAS THE JUVENILE FISH COMMUNITY IN MANGROVES CHANGED IN A QUARTER OF A CENTURY? **Matt Kendall** (NCCOS), **Bethany Williams** (NCCOS), **Arliss Winship** (NCCOS), et al.

**Oral Presentation:** HOW HAS THE JUVENILE FISH COMMUNITY IN MANGROVES CHANGED IN A QUARTER OF A CENTURY? **Matt Kendall** (NCCOS), **Bethany Williams** (NCCOS), **Arliss Winship** (NCCOS), et al.

#### **COASTAL HYPOXIA RESEARCH PROGRAM (CHRP)**

**Oral Presentation:** TRANSGENERATIONAL AND CARRYOVER EFFECTS OF HYPOXIA AND WARMING ON EASTERN OYSTER PERFORMANCE. Sarah Donelan (SERC), **Denise Breitbart** (SERC), et al.

**Oral Presentation:** DRIVERS AND PREDICTABILITY OF SUBSEASONAL VARIATIONS OF DISSOLVED OXYGEN IN CHESAPEAKE BAY. **Marjorie Friedrichs** (VIMS), **Ming Li** (UMD), et al.

**Oral Presentation:** IMPACTS OF SEA LEVEL RISE ON CHESAPEAKE BAY AND ITS SEASONAL HYPOXIA. **Marjorie Friedrichs** (VIMS), **Ming Li** (UMD), et al.

#### **ECOLOGICAL EFFECTS OF SEA LEVEL RISE PROGRAM (EESLR)**

**Oral Presentation:** IMPACTS OF INCIDENT WAVE AND VEGETATION PROPERTIES ON WAVE ATTENUATION BY SALT MARSHES. **Jana Haddad** (UNC CH), **Johanna Rosman** (UNC CH), **Rick Luettich** (UNC CH), **Christine Voss** (UNC CH)

**Oral Presentation:** ROLE OF VEGETATION IN REDUCING COASTAL FLOODING VULNERABILITY DUE TO SEA LEVEL RISE AND STORMS. **Peter Sheng** (UF), **Vladimir Paramygin** (UF), **Karen Thorne** (USGS), **Kevin Buffington** (USGS), **Mike Savarese** (FGCU), **David Kidwell** (NCCOS), et al.

**Oral Session:** EXPLORING INTERDISCIPLINARY AND COLLABORATIVE SEA-LEVEL RISE RESEARCH FOR COASTAL ADAPTATION. **David Kidwell** (NCCOS), **Renee Collini** (DISL), and **Matthew Bilskie** (LSU)

**Poster Session:** EXPLORING INTERDISCIPLINARY AND COLLABORATIVE SEA-LEVEL RISE RESEARCH FOR COASTAL ADAPTATION. **David Kidwell** (NCCOS), **Renee Collini** (DISL), and **Matthew Bilskie** (LSU)

#### **ECOLOGY AND OCEANOGRAPHY OF HARMFUL ALGAL BLOOMS PROGRAM (ECO HAB)**

**Oral Presentation:** UNDERSTANDING ENVIRONMENTAL CONTROLS ON MARGALEFIDINIUM POLYKRIKOIDES BLOOMS IN THE LOWER CHESAPEAKE BAY. **Eileen Hofmann** (ODU), **John Klinck** (ODU), **Margaret Mulholland** (ODU), et al.

**Oral Presentation:** CLIMATE-INDUCED INTERANNUAL VARIABILITY AND LONG-TERM CHANGE IN SEVERAL COMMON HABS OF CHESAPEAKE BAY. **Patricia Glibert** (UMD), **Ming Li** (UMD), et al.

**Oral Presentation:** CHEMICAL ECOLOGY MADE EASY: TEACHING STUDENTS ABOUT THE LINK BETWEEN TOXIN CHEMISTRY AND HABS. **Alison Robertson** (DISL), **Mindy Richlen** (WHOI), et al.

#### **ECOSYSTEM BASED MANAGEMENT (EBM)**

**Oral Presentation:** EMERGING RESEARCH NEEDS FOR REGIONAL ECOSYSTEM-BASED MANAGEMENT: TALES FROM THE FIELD. **Amie West** (UMD), **Michael Roman** (UMD), **Felix Martinez** (NCCOS), William Dennison (UMD), **Kenneth Rose** (UMD), **Lisa Wainger** (UMD), et al.

**Oral Session:** ECOSYSTEM-BASED MANAGEMENT: CHALLENGES AND OPPORTUNITIES FOR REGIONAL IMPLEMENTATION. **Michael Roman** (UMD), **Felix Martinez** (NCCOS), **Amie West** (UMD)

#### **EVENT RESPONSE FOR HABS**

**Oral Presentation:** KARENIA BREVIS BLOOM INDUCED DEAD ZONE IN THE SOUTHEAST GULF OF MEXICO. **Alfonse Martignette** (DISL), **Mark Thompson** (Sanibel-Captiva Conservation Foundation), **Richard Bartleson** (Sanibel-Captiva Conservation Foundation), et al.

**Oral Presentation:** INTEGRATING FISHERMEN INTO SCIENCE: MAXIMIZING DATA COLLECTION ON RED DRUM REPRODUCTION DURING A RED TIDE. **Sarah Walters Burnsed** (FWC), et al.

#### **NORTHERN GULF OF MEXICO ECOSYSTEMS AND HYPOXIA ASSESSMENT PROGRAM (NGOMEX)**

**Oral Presentation:** PREDICTING THE EFFECTS OF REDUCED NUTRIENTS AND HYPOXIA ON FISHES IN THE GULF OF MEXICO. **Stephen Brandt** (OSU), **Arnaud Laurent** (Dalhousie), **Kim de Mutsert** (GMU), et al.

**Oral Presentation:** USING COUPLED ECOSYSTEM MODELING TO EVALUATE NUTRIENT AND HYPOXIA REDUCTIONS ON LIVING MARINE RESOURCES. **Kim de Mutsert** (GMU), **Stephen Brandt** (OSU), **Arnaud Laurent** (Dalhousie), et al.

**Oral Presentation:** IMPACT OF HYPOXIA ON THE PELAGIC FOOD WEB OF THE NORTHERN GULF OF MEXICO. **Cassandra Glaspie** (LSU), **Stuart Ludsin** (Ohio State), **Doran Mason** (NOAA GLERL), **Michael Roman** (UMD), **Stephen Brandt** (OSU), et al.

**Oral Presentation:** GETTING TO THE BOTTOM OF COASTAL FOOD WEBS: HYPOXIA IMPACTS TO BENTHOS. **Melissa Baustian** (LSU), **Nancy Rabalais** (LUMCON)

**Oral Presentation:** EFFECTS OF HYPOXIA ON SPATIAL DYNAMICS OF PENAEID SHRIMP IN THE NORTHERN GULF OF MEXICO. **Kevin Craig** (NMFS), **Daniel Obenour** (NCSU), et al.

**Oral Presentation:** INTERACTIONS BETWEEN HYPOXIA AND THE NORTHERN GULF OF MEXICO SHRIMP FISHERY. **Kevin Craig** (NMFS), **Daniel Obenour** (NCSU), **Kenneth Rose** (UMD), et al.

**Oral Presentation:** HYPOXIC VOLUME IN THE NORTHERN GULF OF MEXICO IS ECOLOGICALLY MORE RELEVANT THAN HYPOXIC AREA. **Dubravko Justic** (LSU), **Donald Scavia** (UMich), **Daniel Obenour** (NCSU), **Kevin Craig** (NMFS), et al.

**Oral Presentation:** PREDICTING FISH POPULATION RESPONSES TO HYPOXIA USING 3-D COUPLED BIOPHYSICAL MODELS. **Kenneth Rose** (UMD), **Dubravko Justic** (LSU), **Kevin Craig** (NMFS), **Z. George Xue** (LSU), et al.

**Oral Presentation:** EFFECTS OF TIDES ON HYPOXIA AND FISH AVOIDANCE MOVEMENT IN THE GULF OF MEXICO. **Elizabeth LaBone** (LSU), **Dubravko Justic** (LSU), **Kenneth Rose** (UMD), et al.

**Oral Presentation:** CAN WE COMPARE HYPOXIA IMPACTS ON COASTAL ZOOPLANKTON ACROSS ECOSYSTEMS AND SPECIES? **Michael Roman** (UMD), **James Pierson** (UMD)

**Oral Presentation:** FUSION-BASED HYPOXIA ESTIMATES: LINKING GEOSTATISTICAL AND MECHANISTIC MODELS OF DISSOLVED OXYGEN VARIABILITY. **Arnaud Laurent** (Dalhousie), **Kevin Craig** (NMFS), **Katja Fennel** (Dalhousie), **Daniel Obenour** (NCSU), et al.

**Oral Presentation:** OXYGEN INTRUSION INTO HYPOXIC BENTHOS FROM HURRICANE HARVEY AND THE EFFECT ON THE CARBONATE SYSTEM. **Wei-Jun Cai** (UDE), **Nancy Rabalais** (LUMCON)

**Oral Session:** GULF OF MEXICO OXYGEN DEFICIENCY: WHEN, WHERE, WHAT TO DO? **Nancy Rabalais** (LUMCON), **Steve DiMarco** (TAMU), et al.

**Oral Session:** IMPACTS OF COASTAL HYPOXIA ON FISHES, FOOD WEBS AND ECOSYSTEMS. **Kim de Mutsert** (GMU), **Stephen Brandt** (OSU)

**Poster Presentation:** IMPACTS OF COASTAL HYPOXIA ON FISHES, FOOD WEBS AND ECOSYSTEMS. **Kim de Mutsert** (GMU), **Stephen Brandt** (OSU)

#### **OCEAN ACIDIFICATION PROGRAM (OA)**

**Oral Presentation:** COMPARISON OF ECOSYSTEM RESPONSES TO LONG-TERM CLIMATE VARIABILITY AMONG THREE ESTUARIES. **Patricia Cockett** (TAMU), **Paul Montagna** (TAMU)

**Oral Presentation:** ECOSYSTEM METABOLISM AND CARBON BALANCE IN CHESAPEAKE BAY: A 30-YEAR MODELING STUDY. **Jeremy Testa** (UMD), **Wei-Jun Cai** (UMD), **Ming Li** (UMD), **Michael Kemp** (UMD) et al.

**Oral Presentation:** REGIONALLY DEPENDENT ACIDIFICATION IN A LARGE EUTROPHIC ESTUARY: INSIGHTS FROM A 30-YEAR MODELLING STUDY. **Chunqi Shen** (UMD), **Jeremy Testa** (UMD)

**Oral Presentation:** VALIDATION OF A HIGH-RESOLUTION PHYSICAL-BIOGEOCHEMICAL MODEL FOR POLLUTION IMPACT ASSESSMENTS IN THE SOUTHERN CALIFORNIA BIGHT. **Karen McLaughlin** (SCCWRP), **Martha Sutula** (SCCWRP), **James McWilliams** (UCLA), **Curtis Deutsch** (UWA), **Daniele Bianchi** (UCLA), **Nina Bednarsek** (UWA), **Richard Feely** (OAR), et al.

**Oral Presentation:** IMPACTS OF SUBMESOSCALE OCEAN DYNAMICS ON THE BIOGEOCHEMISTRY AND ECOSYSTEM OF THE CALIFORNIA CURRENT. **Daniele Bianchi** (UCLA), **James McWilliams** (UCLA), **Curtis Deutsch** (UWA), et al.

**Oral Presentation:** SUBMESOSCALE SIMULATIONS TO SUPPORT MANAGEMENT CONVERSATIONS ON THE IMPACT OF LOCAL POLLUTION IN SOUTHERN CALIFORNIA. **Martha Sutula** (SCCWRP), **Daniele Bianchi** (UCLA), **James McWilliams** (UCLA), **Curtis Deutsch** (UWA), **Karen McLaughlin** (SCCWRP), **Nina Bednarsek** (UWA), et al.

**Oral Presentation:** NUTRIENT POLLUTION EFFECTS ON ACIDIFICATION AND HYPOXIA IN SOUTHERN CALIFORNIA BIGHT: BIOLOGICAL -VS-WATER QUALITY IMPACTS. **Martha Sutula** (SCCWRP), **James McWilliams** (UCLA), **Curtis Deutsch** (UWA), **Daniele Bianchi** (UCLA), **Nina Bednarsek** (UWA), **Karen McLaughlin** (SCCWRP), **Richard Feely** (OAR), **Simone Alin** (OAR), **Richard Ambrose** (UCLA), et al.

**Oral Presentation:** HIGH RESOLUTION NUMERICAL OCEAN OUTFALL PLUME MODELING IN THE SOUTHERN CALIFORNIA BIGHT. **Martha Sutula** (SCCWRP), **James McWilliams** (UCLA), **Daniele Bianchi** (UCLA), et al.

**Oral Presentation:** LARVAL EXPERIENCE OF MULTISTRESSORS MIGHT CARRY OVER TO AFFECT PERFORMANCE OF JUVENILE CRASSOSTREA VIRGINICA. **Emily Rivest** (VIMS), et al.

**Oral Presentation:** TIMESCALES OF WATER QUALITY CHANGE IN 3 TEXAS ESTUARIES INDUCED BY PASSAGE OF HURRICANE HARVEY. **Michael Wetz** (TAMU), **Paul Montagna** (TAMU), **Xinping Hu** (UTX), et al.

**Oral Presentation:** OXYGEN INTRUSION INTO HYPOXIC BENTHOS FROM HURRICANE HARVEY AND THE EFFECT ON THE CARBONATE SYSTEM. **Wei-Jun Cai** (UDE), **Nancy Rabalais** (LUMCON)

**Oral Presentation:** VARIABILITY IN ENVIRONMENTAL TOLERANCES OF MERCENARIA MERCENARIA ACROSS THE EAST COAST OF THE UNITED STATES. **Emily Rivest** (VIMS), **Kimberly Reece** (VIMS), et al.

**Oral Presentation:** COLLABORATIVE MODELING USING ONLINE, REDUCED COMPLEXITY MODELS AS DECISION-SUPPORT TOOLS. **Mark Brush** (VIMS), et al.

**Oral Presentation:** Data synthesis for environmental management: A case study of Chesapeake Bay. **Jeremy Testa** (UMD) et al.

**Oral Session:** BIOGEOCHEMICAL CYCLING AND TRANSPORT ACROSS THE LAND–OCEAN AQUATIC CONTINUUM. **Raymond Najjar** (PSU), **Marjorie Friedrichs** (VIMS), et al.

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