

MONDAY March 30 <sup>th</sup> 2020				
6:30-8:00 AM	STUDENT BREAKFAST (STUDENTS ONLY) Hall of Fame			
8:00-8:50 AM	PLENARY: Roger Mann – <i>Managing fisheries in the mid-Atlantic in the coming decades – reflections on a period as a fisheries management council member</i> International A, B, C			
ROOM	International A	International B	International C	Carroll
SESSION TITLE	ONE HEALTH EPIGENOMES AND MICROBIOMES: FROM SOIL TO PEOPLE WORKSHOP Acacia Alcivar-Warren & Kathy F.J. Tang	SHELLFISH RESTORATION AND CONSERVATION Peter Kingsley-Smith & Dave Bushek	SHELLFISH GENETICS AND GENOMICS Louis Plough & Jon Puritz	MUSSELS Paul Rawson
9:00 AM	ONE HEALTH EPIGENOMICS AND MICROBIOMES: FROM SOIL TO PEOPLE WORKSHOP: RECOGNITION TO WINNERS OF STUDENT TRAVEL AWARDS AND OUTSTANDING RESEARCHERS IN AQUACULTURE – ONE HEALTH PIONEERS ADDRESSING ECOSYSTEM, ANIMAL, AND PUBLIC HEALTH Alcivar-Warren	LARGE-SCALE OYSTER RESTORATION IN THE CHESAPEAKE BAY, USA Westby	A PRELIMINARY WHOLE-GENOME TEST FOR ADAPTIVE DIFFERENTIATION IN AN ISOLATED LOW-SALINITY EASTERN OYSTER POPULATION Hare, Kutsumi	INTER-INDIVIDUAL VARIABILITY OF FEEDING RATES AND FEEDING-DIGESTIVE FEEDBACKS IN <i>MYTILUS EDULIS</i> Steeves*, Strohmeier, Filgueira, Strand
9:15 AM	TOWARDS TESTING THE HYPOTHESIS OF TRANSGENERATIONAL EPIGENETIC INHERITANCE (TGEI) OF HEALTH EFFECTS CAUSED BY EXPOSURE TO METALS, GLYPHOSATE, AND BISPHENOL IN NATURE Alcivar-Warren	PRINCIPLES FOR RESTORATION REEF MONITORING: ACCURACY AND PRECISION OF HABITAT-SPECIFIC ABUNDANCE AND DENSITY Lipcius, Burke, Hoenig, Schulte	WHOLE-GENOME RESEQUENCING REVEALS GENETIC VARIATIONS AND SELECTION SIGNATURES IN EASTERN OYSTER POPULATIONS FROM THE ATLANTIC COAST AND GULF OF MEXICO Liu, Guo, Yang, Wilbur, Varney, Casas-Liste, La Peyre	HABITAT TYPE INFLUENCES PHYSIOLOGICAL RESPONSE OF AN INVASIVE MUSSEL, <i>MYTILUS GALLOPROVINCIALIS</i> Collins, Burnett, Ramsey, Wagner, Zippay <sup>‡</sup>
9:30 AM	CHOOSE YOUR RESEARCH PROJECT CAREFULLY Shumway	ECOSYSTEM SERVICES OF RESTORED OYSTER REEFS: ENHANCED MACROFAUNA DENSITIES AND FISH FORAGING Seitz, Karp, Fabrizio, Pfirrmann	USING AN INDIVIDUAL-BASED MODEL TO FORECAST THE GENETIC IMPACT OF HATCHERY-BASED OYSTER RESTORATION Hornick*, Plough	A METHOD TO EXPERIMENTALLY PERTURB THE GUT MICROBIOME OF THE BLUE MUSSEL ( <i>MYTILUS EDULIS</i> ) WITH ANTIBIOTICS Griffin*, Holohan, Nigro, Ward
9:45 AM	THE MANGROVE GENOME AND EPIGENOME (MANGROVEENCODE) PROJECT: EFFORTS TO CONSERVE HEALTHY MANGROVES AND WETLAND ECOSYSTEMS Alcivar-Marcillo, Alcivar-Arteaga, Asunción, Galindo* <sup>‡</sup> , Saltos, Figueroa, Villota, Calvache, Hall, Kelley, Singh, Singh, Argandona, Zuniga, Espinoza, Luna, Berlanga-Robles, Echevarria, Ikeogu, Alcivar-Warren	USING PASSIVE AND ACTIVE ACOUSTICS TO ASSESS OYSTER RESTORATION SUCCESS Eggleston, Caretti, Bohnenstiel	CHANGE IN THE GENETICS OF THE PACIFIC OYSTER POPULATION OF WILLAPA BAY, WASHINGTON, USA Hedgecock, Pan	INTRASPECIFIC VARIATION IN TOLERANCE TO ACUTE TEMPERATURE STRESS IN THE BLUE MUSSEL, <i>MYTILUS EDULIS</i> : A TEACHING MODEL Rawson, Jayasundara
10:00 AM		RECOVERY AND RESILIENCE OF OYSTER REEFS IN THE BIG BEND REGION OF FLORIDA, USA Sturmer, Pine, Frederick	CHANNELED WHELK, <i>BUSYCOTYPUS CALAMICULATUS</i> , POPULATION GENETIC STRUCTURE IN THE MID-ATLANTIC REGION Askin*, Fisher, McDowell	ADVANCING SUBMERGED MUSSEL FARMING TECHNOLOGIES TO ALLEVIATE EIDER DUCK PREDATION Chambers, Swift, Flanigan, Prien, Duffy
10:15 AM	DISTRIBUTION AND TEN-YEAR TEMPORAL CHANGE OF MANGROVES IN THE GALAPAGOS Moity, Delgado, Salinas-de-Leon	NEW GLOBAL GUIDELINES FOR SHELLFISH REEF RESTORATION Westby, Fitzsimons, Branigan, Brumbaugh, McDonald, zu Ermgassen, DeAngelis, Geselbracht, Gillies, Hancock, Jeffs, McLeod, Pogoda, Theuerkauf, Thomas	GENOTYPE-DEPENDENT MORTALITY AND GROWTH IN LARVAE OF THE PACIFIC OYSTER Pan, Hedgecock	MODELLING HARMFUL ALGAL BLOOM IMPACTS ON BIVALVE BIOENERGETICS AND PRODUCTIVITY Lavaud, Nadalini, Filgueira, Babarro, Comeau, Tremblay
10:30-11:00 AM	MORNING BREAK			
SESSION TITLE	ONE HEALTH EPIGENOMES AND MICROBIOMES: FROM SOIL TO PEOPLE WORKSHOP Acacia Alcivar-Warren & Kathy F.J. Tang	SHELLFISH RESTORATION AND CONSERVATION Peter Kingsley-Smith & Dave Bushek	SHELLFISH GENETICS AND GENOMICS Louis Plough & Jon Puritz	SHELLFISH AQUACULTURE BUSINESS AND ECONOMICS Matt Parker & Jonathan van Senten
11:00 AM	GREENHOUSE GAS EMISSIONS AND BLUE CARBON STOCKS IN COASTAL SALT MARSHES IN MASSACHUSETTS Tang, Wang	USING STATEWIDE DEMOGRAPHIC ASSESSMENTS OF THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , TO INFORM RESTORATION AND MANAGEMENT EFFORTS IN SOUTH CAROLINA, USA Kingsley-Smith, Sundin, Wagner, Dyar	INFLUENCE OF GENOTYPE ON DNA METHYLATION AMONG OLYMPIA OYSTER POPULATIONS Spencer*, Silliman, Roberts	DEVELOPING FISHERIES AND MARKETS FOR THE INVASIVE EUROPEAN GREEN CRAB Bradt, McMahan
11:15 AM	REVERSE-TRANSCRIPTASE RELATED GENES AND TRANSITION METAL STRESS RESPONSE Yushenova, Maffa, Rodriguez, Metzger, Arkhipova	UNOCCUPIED AERIAL VEHICLES (UAV): A NEW TOOL TO IMPROVE RESTORATION AND MANAGEMENT OF INTERTIDAL OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) IN SOUTH CAROLINA, USA Sundin, Kingsley-Smith, Cook	OCEAN ACIDIFICATION INDUCES SUBTLE SHIFTS IN GENE EXPRESSION AND DNA METHYLATION IN THE TISSUE OF CALCIFICATION Lotterhos, Downey-Wall, Cameron, Ford, Begin, Venkataraman, Roberts, Ries	ECONOMICS OF SUBTIDAL OYSTER CULTURE IN DELAWARE BAY, USA Sullivan, Bushek, Calvo, Bochenek, Harman, Hollinger
11:30 AM		CAUSE OF COLLAPSE AND PROGNOSIS FOR AN ICONIC OYSTER FISHERY IN APALACHICOLA, BAY, FLORIDA Lipcius	EXAMINING THE POTENTIAL FOR ACCLIMATION OF <i>CRASSOSTREA VIRGINICA</i> LARVAE TO OCEAN ACIDIFICATION Barbosa*, Schwaner, Farhat, Espinosa, Allam	EFFECTS OF DIFFERENT FINANCING SCENARIOS ON MARYLAND OYSTER FARM PROFITABILITY AND SUCCESS Parker
11:45 AM	CONVERGENT ADAPTATION AT MULTIPLE GENOMIC LEVELS AMONG MANGROVE He, Xu, Feng, Guo, Shi <sup>‡</sup>	SITING A LARGE-SCALE LIVING SHORELINE OYSTER REEF PROJECT IN SOUTH CAROLINA, USA Brown, Strickland, Pehl	ASSESSING THE EVOLUTIONARY RESPONSE OF EASTERN OYSTER LARVAE TO EXPOSURE TO COASTAL ACIDIFICATION AND SEWAGE EFFLUENT: A CASE STUDY Puritz, Harvey, Lotterhos	THE ECONOMIC IMPACT OF SHELLFISH AQUACULTURE IN MARYLAND, USA van Senten, Engle, Parker, Webster
12:00 NOON	IN-DEPTH INVESTIGATION INTO PATHOPHYSIOLOGY OF THE GUT METAGENOME AND HOST RESPONSE TO <i>VP<sub>AHPND</sub></i> IN MADAGASCAR-MALAYSIA CROSSBRED BLACK TIGER SHRIMP, <i>PENAEUS MONODON</i> , COHORT STOCKS Soo*, Bhasu	REPURPOSING OF BRIDGE MATERIALS FOR OYSTER REEF CREATION Klein III, Leonard	ACUTE LOW SALINITY TOLERANCE IN THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ): PHYSIOLOGY, HERITABILITY, AND UNDERLYING-GENOMIC REGIONS McCarty*, Allen, Plough	IMPROVING THE (OFF) BOTTOM LINE: ASSESSING THE COSTS AND BENEFITS OF DIFFERENT CULTURE METHODS ON AN ALABAMA COMMERCIAL OYSTER FARM Hensey*, Grice, Parker, Stewart, Walton
12:15 PM	IDENTIFICATION OF RECEPTOR RESPONSIBLE FOR BINDING OF THE AMINO-SUGARS SPECIFIC LECTIN DOMAIN OF PIRAB <sup>VP</sup> TOXIN OF <i>VIBRIO PARAHAE MOLY TICUS</i> TO THE EPITHELIAL MEMBRANE OF THE SHRIMP HEPATOPANCREAS Victorio-De Los Santos*, Lozano-Olvera, Ma de Jesús Durán, Sanchez-Salgado, Ali, Zenteno, Vibanco-Pérez, Soto-Rodríguez	HOW DOES YOUR OYSTER GLOW? DEVELOPING A NOVEL OYSTER MARKING TOOL AND RESULTS FROM A RELATED DIRECT SETTING EXPERIMENT Spires, Westby, Steppe, Dumhart, Hildebrandt	DEVELOPING SUPERIOR OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) FOR HIGH SALINITY ENVIRONMENTS IN COASTAL BAYS OF NEW JERSEY Whiteside*, Ratcliff, Woodruff, Deck, Wang, Zeng, Munroe, Calvo, Bushek, De Luca, Guo	THE EFFECTS OF PERMITTING DELAYS ON RETURN ON INVESTMENT FOR PACIFIC COAST SHELLFISH AQUACULTURE van Senten, Engle
12:30-1:30 PM	LUNCH BREAK			

\* denotes student presenter

<sup>‡</sup> denotes non first-author presenter

MONDAY March 30 <sup>th</sup> 2020				
ROOM	International A	International B	International C	Carroll
SESSION TITLE	<b>ONE HEALTH EPIGENOMES AND MICROBIOMES: FROM SOIL TO PEOPLE WORKSHOP</b> Acacia Alcivar-Warren & Kathy E.J. Tang	<b>SHELLFISH RESTORATION AND CONSERVATION</b> Peter Kingsley-Smith & Dave Bushek	<b>SHELLFISH GENETICS AND GENOMICS</b> Louis Plough & Jon Puritz	<b>LEASING AND PERMITTING</b> Stephanie Showalter Otts
1:30 PM	GENOMIC ANALYSIS OF <i>VIBRIO PARAHAE MOLY TICUS</i> REVEALS THE TRANSMISSION PATTERNS OF SHRIMP ACUTE HEPATOPANCREATIC NECROSIS DISEASE (AHPND) AND THE ORIGINS OF AHPND-ASSOCIATED PLASMID <b>Fu, Wei, Xie, Pang, Huang, Dong*, Liu</b>	BAY SCALLOP RESTORATION IN NEW YORK: THE LOOMING SPECTER OF CLIMATE CHANGE <b>Tettelbach, Hughes, Peterson, Smith</b>	FROM SEQUENCE TO CONSEQUENCE: GENOMIC SELECTION TO EXPAND AND IMPROVE SELECTIVE BREEDING FOR THE EASTERN OYSTER <b>Guo, Allen, Jr., Proestou, Allam, Gomez-Chiarri, Hare, Liu, Lotterhos, Kube, Plough, Puritz, Rawson, Small, Varney, Verbyla, Wikfors, Wilbur</b>	NAVIGATING THE COMPLEXITY OF SHELLFISH AQUACULTURE LEASING AND PERMITTING: UNDERSTANDING HOW THE PIECES FIT TOGETHER <b>Ott Klein</b>
1:45 PM	SHRIMP ENDOGENOUS VIRAL ELEMENTS (EVE) OF INFECTIOUS HYPODERMAL AND HEMATOPOIETIC NECROSIS VIRUS (IHHNV) AND THEIR IMPLICATIONS FOR SHRIMP DIAGNOSIS <b>Saksmerprom, Jitrakorn, Arunrut, Kiatpathomchai, Flegel</b>	INCREASES IN POPULATIONS OF THE NORTHERN QUAHOG (= HARD CLAM) <i>MERCENARIA MERCENARIA</i> FOLLOWING THE CREATION OF SPAWNER SANCTUARIES IN SHINNECOCK BAY, NEW YORK: CAUSATION OR CORRELATION? <b>Doall, Cottrell, Peterson, Gobler</b>	APPLYING GENETIC GROUPS TO THE ANALYSIS OF TRAITS IN <i>CRASSOSTREA VIRGINICA</i> IMPROVES OUR UNDERSTANDING OF INHERITANCE <b>Small, Kube, Allen, Jr.</b>	BALTIMORE DISTRICT, CORPS OF ENGINEERS PERMITTING OVERVIEW OF COMMERCIAL SHELLFISH AQUACULTURE ACTIVITIES IN MARYLAND, USA <b>Francis, Jr.</b>
2:00 PM	DEVELOPMENT OF A CONTINGENCY PLAN FOR SHRIMP ACUTE HEPATOPANCREATIC NECROSIS DISEASE (AHPND) <b>Tang, Bondad-Reanaso, Arthur</b>	USING BIVALVES TO ENHANCE BIOLOGICAL FILTRATION, PROMOTE NITROGEN REMOVAL, AND IMPROVE WATER QUALITY IN SHALLOW NEW YORK ESTUARIES <b>Gobler, Doall, Peterson, DeSilva, Wozny</b>	EVALUATING THE GENETIC BASIS OF "TRIPLOID MORTALITY" IN THE CHESAPEAKE BAY BY TESTING FAMILIES OF TRIPLOID <i>CRASSOSTREA VIRGINICA</i> <b>Matt*, Small, Kube, Allen, Jr.</b>	GROWING AQUACULTURE IN GEORGIA: REGULATORY AND POLICY UPDATE <b>Henson*</b>
2:15 PM	DEVELOPMENTAL AND BEHAVIORAL CHANGES OF THE WHITE SHRIMP, <i>LITOPENAEUS SETIFERUS</i> , UNDER THE EXPOSURE OF PHENYLPYRAZOLE FIPRONIL <b>Albadran*, Fujiwara</b>	MAXIMIZING SHELLFISH RECRUITMENT IN LIVING SHORELINES FOR RESTORATION AND HABITAT CONSERVATION EFFORTS <b>Bouboulis, Moody, Beal, Gentry, Kreeger</b>	EVALUATION OF TEMPORAL PATTERNS OF CHROMOSOMAL LOSS IN FAMILIES OF TETRAPLOID OYSTERS, <i>CRASSOSTREA VIRGINICA</i> <b>Wolfe*, Wilbur</b>	THE NORTH CAROLINA SHELLFISH LEASE PROGRAM <b>Boyd, Graven</b>
2:30 PM	EFFECTS OF INSECTICIDES, FIPRONIL, AND IMIDACLOPRID ON THE GROWTH, SURVIVAL, AND BEHAVIOR OF BROWN SHRIMP, <i>FARFANTEPENAEUS AZTECUS</i> <b>Albadran*, Fujiwara</b>	LARGE PROJECTED POPULATION LOSS OF A SALT MARSH BIVALVE ( <i>GEUKENSIA DEMISSA</i> ) FROM SEA LEVEL RISE <b>Isdell, Bilkovic, Hershner</b>	PROSPECTS FOR GENOMIC SELECTION IN BIVALVE AQUACULTURE <b>Hollenbeck</b>	TEXAS OYSTER MARICULTURE MOVING FORWARD <b>Scarpa, Fox</b>
2:45 PM	ASSESSMENT OF THE OXIDATIVE STRESS AND BIO-TRANSFORMATION ENZYMIC EFFECTS OF GLYPHOSATE EXPOSURE ON THE PACIFIC WHITELEG SHRIMP, <i>PENAEUS (LITOPENAEUS) VANNAMEI</i> <b>Amutha, Dinesh</b>	PISMO CLAMS IN CALIFORNIA: GROWTH AND REPRODUCTION OF AN ICONIC SPECIES <b>Marquardt*, Park, Clark, Ruttenberg</b>	USING RADSEQ FOR THE IDENTIFICATION OF SNP ASSOCIATED WITH NORTHERN QUAHOG (= HARD CLAM) RESISTANCE TO QPX DISEASE <b>Farhat, Tanguy, Espinosa, Guo, Boutet, Smolowitz, Murphy, Rivara, Allam</b>	OVERVIEW OF THE FLORIDA AQUACULTURE LEASING PROGRAM <b>Culpepper III</b>
3:00 – 3:30 PM	<b>AFTERNOON BREAK</b>			
SESSION TITLE	<b>ONE HEALTH EPIGENOMES AND MICROBIOMES: FROM SOIL TO PEOPLE WORKSHOP</b> Acacia Alcivar-Warren & Kathy E.J. Tang	<b>SHELLFISH RESTORATION AND CONSERVATION</b> Peter Kingsley-Smith & Dave Bushek	<b>SHELLFISH GENETICS AND GENOMICS</b> Louis Plough & Jon Puritz	<b>CEPHALOPODS</b> Camino Gestal, Maria Prado-Alvarez & Marta Gomez-Chiarri
3:30 PM	HEAT SHOCK STRESS RESPONSE GENES REGULATED BY METHYLATION IN THE PACIFIC OYSTER, <i>CRASSOSTREA GIGAS</i> <b>Arredondo Espinoza*, Escobedo-Fregoso, Sicard-Gonzales, Peña-Rodriguez, Roberts, Ibarra</b>	FIRST NATURAL FIELD STUDY OF OYSTER SHELL LOSS: A CASE STUDY FROM THE MISSISSIPPI SOUND <b>Pace, Poussard, Powell, Ashton-Alcox, Kuykendall, Solinger, Hemeon, Soniat</b>	EFFECTS OF BITTER CRAB DISEASE ON THE GENE EXPRESSION OF ALASKA TANNER CRAB <b>Crandall*, Jensen, White, Roberts</b>	THE HAWAIIAN BOBTAIL SQUID, <i>EUPRYMNA SCOLOPES</i> , AS A MODEL HOST FOR UNDERSTANDING THE ROLE OF BENEFICIAL BACTERIA IN EGG DEFENSE AND DEVELOPMENT IN CEPHALOPODS <b>Nyholm</b>
3:45 PM	A LINE-1 (L1)-LIKE NON-LTR RETROTRANSPOSON TRANSCRIPT OF CULTURED <i>PENAEUS VANNAMEI</i> FROM BRAZIL CONTAINS 3'-END TRANSPOSASE_22 DOMAIN – BUT TRANSCRIPT IS NOT PRESENT IN THE GENOME REFERENCE ASSEMBLED FROM <i>P. VANNAMEI</i> FARMED IN CHINA <b>Alcivar-Warren</b>	SETTING OYSTER LARVAE ON EXISTING RIPRAP IN ST. LEONARD CREEK, MARYLAND, USA <b>Troy*, Agboola, Ihde, Lacouture, DeMarr</b>	CHARACTERIZATION OF THE IMMUNE-REGULATORY FUNCTION OF CSDE-1 IN <i>CRASSOSTREA VIRGINICA</i> HEMOCYTES <b>Ricigliano*, Kuldell, Krause</b>	SEQUENCE CHARACTERIZATION AND TISSUE EXPRESSION ANALYSIS OF THIOESTER-CONTAINING PROTEINS (TEP) AND COMPLEMENT MOLECULES IN THE SQUID, <i>EUPRYMNA SCOLOPES</i> : A MOLLUSCAN MODEL <b>Thuraisamy*, Castillo</b>
4:00 PM	EPIGENETIC MECHANISMS ASSOCIATED WITH METALS AND GLYPHOSATE IN MANGROVES, SHRIMP, AND PEOPLE – EPIDEMIOLOGICAL STUDIES NEEDED TO ADDRESS POTENTIAL ASSOCIATION OF METALS IN SEAFOOD WITH NEURAL TUBE DEFECTS IN SOUTHERN ECUADOR <b>Galindo*, Alcivar-Arteaga, Asuncion</b>	OPTIMIZING REMOTE SETTING ON DIFFERENT CULTCH TYPES FOR SMALL-SCALE OYSTER RESTORATION IN BARNEGAT, BAY, NEW JERSEY <b>Thompson, Parsons</b>	TWO HOST DEFENSE ASSOCIATED PROTEIN FAMILIES REFLECTING CHALLENGES TO FUNCTIONAL GENOMICS RESEARCH IN MOLLUSCS <b>Xue</b>	OCTOPUS AQUACULTURE: SEARCHING FOR A SUCCESSFUL PRODUCTION DRIVEN BY NUTRIGENOMIC AND EPIGENETIC INTERACTION STUDIES <b>Gestal, Prado-Alvarez, Morales, Cardenete, Garcia-Fernández, Dios, Varó</b>
4:15 PM	<b>DISCUSSION</b>	ASSESSING SPATIAL DISTRIBUTION OF <i>CRASSOSTREA VIRGINICA</i> LARVAL SETTLEMENT WITHIN LARGE-SCALE SETTING TANKS <b>Golding, Alexander, Alexander, Carey, Hood, Klages, Trommutter, Weschler, Willey</b>	UNLOCKING THE EXOME: EXPLORING <i>DE NOVO</i> ASSEMBLY OPTIONS FOR CAPTURE SEQUENCING <b>Green*, Puritz</b>	EFFECT OF AN ENRICHED DIET IN GLOBAL PERFORMANCE AND TRANSCRIPTOMIC RESPONSE IN <i>OCTOPUS VULGARIS</i> <b>Prado-Alvarez, Garcia-Fernández, Tur, Domingues, Dios, Varó, Gestal</b>
4:30 PM		<i>IN SITU</i> FILTRATION RATES OF OLYMPIA OYSTER, <i>OSTREA LURIDA</i> , HABITAT AND JAPANESE OYSTER, <i>CRASSOSTREA GIGAS</i> , AQUACULTURE <b>Marks*, Zacherl</b>	A CHROMOSOME-LEVEL REFERENCE GENOME ASSEMBLY FOR THE PACIFIC OYSTER ( <i>CRASSOSTREA GIGAS</i> ) <b>Peñaloza, Gutierrez, Eory, Archibald, Bean, Houston</b>	HANDBOOK OF PATHOGENS AND DISEASES IN CEPHALOPODS <b>Gestal, Pascual, Guerra, Fiorito, Vicites</b>
4:45 PM		SHELLFISH REHABILITATION EFFORTS IN NORTH CAROLINA: PAST, PRESENT, AND FUTURE <b>Luck, Byrum, Peters</b>	CLAM CONNECTIVITY: USING MOLECULAR MARKERS TO ADDRESS WILD QUAHOG (= HARD CLAM) <i>MERCENARIA MERCENARIA</i> , POPULATION STRUCTURE <b>Ropp*, McDowell, Reece, Snyder</b>	<i>ICHTHYOBODO</i> SPP.: HOST-PARASITE INTERACTIONS AND PATHOGENESIS IN CEPHALOPODS AND TELEOSTS <b>Poynton</b>
5:00 PM	IMPACTS OF OCEAN ACIDIFICATION ON BLUE MUSSEL GROWTH AND SHELLS <b>Padilla, Villanueva, Campos, Milke, Meseck, Redman, Dixon, Veilleux</b>			STATOLITH-BASED AGE ASSESSMENTS OF THE ATLANTIC BRIEF SQUID, <i>LOLLIGUNCULA BREVIS</i> , FROM THE CHARLESTON HARBOR ESTUARY, SOUTH CAROLINA, USA <b>Good*, Kendrick, Kingsley-Smith</b>
5:30 - 6:30 PM	<b>STUDENT SESSION: How I got my job: a career development panel for students</b> International A			

\* denotes student presenter

♠ denotes non first-author presenter

<b>TUESDAY March 31<sup>st</sup> 2020</b>					
<b>PLENARY: M. Luz Pérez-Parallé – ‘Omic’ technologies applied to aquaculture International A, B, C</b>					
<b>ROOM</b>	<b>International A</b>	<b>International B</b>	<b>International C</b>	<b>Hall of Fame</b>	<b>Carroll</b>
<b>SESSION TITLE</b>	<b>THE SHRIMP GENOME AND EPIGENOME (SHRIMPENCODE) PROJECT Acacia Alcivar-Warren &amp; Kathy F.J. Tang</b>	<b>OYSTERS Bill Fisher &amp; Brett Dumbauld</b>	<b>CLAMS Brian Beal</b>	<b>ECHINOIDS Chris Pearce</b>	
8:00-8:50 AM					
9:00 AM	THE SHRIMP AND GENOME AND EPIGENOME: A REVIEW OF GENOME SIZES, TRANSPOSABLE ELEMENTS, SIMPLE SEQUENCE REPEATS, INTEGRATED VIRUSES, AND EPIGENETIC COMPONENTS OF PENAEIDS <b>Alcivar-Warren</b>	EFFECT OF TIDAL RESUSPENSION WITH OYSTER BIODEPOSITS ON THE NUTRIENT AND OXYGEN DYNAMICS <b>Porter, Blickenstaff, Cornwell, Jackson</b>	GROWTH AND SURVIVAL OF NORTHERN ( <i>MERCENARIA MERCENARIA</i> ) AND SOUTHERN ( <i>M. CAMPECHIENSIS</i> ) QUAHOGS IN FLORIDA: HATCHERY AND NURSERY PHASES <b>Barber</b>	RESILIENCE TO FOOD DEPRIVATION: A CASE STUDY OF SEA URCHIN LARVAE <b>Griffith, Pan, Wang, Delatorre, Li, Manahan</b>	
9:15 AM	NON-CANONICAL EPIGENETIC SYSTEM OF BACTERIAL ORIGIN IN AQUATIC MICRO-INVERTEBRATES <b>Rodríguez, Yushenova, Arkhipova</b>	OYSTERS, NUTRIENT REGENERATION, AND ALTERNATIVE PHYTOPLANKTON COMMUNITY STATES <b>McCarthy*, Ray, Fulweiler</b>	EFFECTS OF THE HARMFUL ALGA, <i>COCHLODINUM (MARGALEFIDINUM) POLYRIKOIDES</i> ON CLEARANCE RATE OF THE JUVENILE NORTHERN QUAHOG (= HARD CLAM), <i>MERCENARIA MERCENARIA</i> <b>de Silva*, Gobler</b>	EFFECT OF TRANSPORT METHOD ON SUBSEQUENT SURVIVORSHIP AND GONAD YIELD AND QUALITY IN THE RED SEA URCHIN ( <i>MESOCENTROTUS FRANCISCANUS</i> ) <b>Pearce, Warren</b>	
9:30 AM		BIOTIC AND ABIOTIC FACTORS REGULATING MUCOSAL LECTINS IN THE OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>Espinosa, Allam, Allam</b>	EFFECTS OF GREEN CRAB, <i>CARCINUS MAENAS</i> , PREDATION ON SOFTSHELL CLAM, <i>MYA ARENARIA</i> , POPULATIONS IN MAINE DURING A WARMING OCEAN ENVIRONMENT <b>Beal, Coffin, Randall</b>	EFFECTS OF FEED RATION ON GROWTH AND GONAD PRODUCTION IN SMALL SEA URCHINS, <i>LYTECHINUS VARIEGATUS</i> <b>Gibbs, Heflin, Taylor, Lawrence, Watts</b>	
9:45 AM	COMPARATIVE GENOMICS IN DECAPOD SHRIMPS: REPETITIVE ELEMENTS EXPANSION AND GENOME EVOLUTION <b>Yuan, Zhang, Gao, Liu, Li, Xiang</b>	VARIATION IN ENERGY ALLOCATION TO REPRODUCTION OF PACIFIC OYSTER, <i>CRASSOSTREA GIGAS</i> , INFERRED FROM CULTURE EXPERIMENTS AND DYNAMIC BUDGET MODELS <b>Hasegawa, Azumaya, Unuma, Watanabe, Matsumoto, Ito, Yamazaki, Hirano-Maeda</b>	PHENOTYPIC AND TRANSCRIPTOMIC RESPONSE OF FARMED ATLANTIC SURFCLAMS ( <i>SPISULA SOLIDISSIMA</i> ) TO REPEATED HEAT STRESS AND THE FEASIBILITY OF SELECTED BREEDING FOR GREATER HEAT TOLERANCE <b>Acquafredda*, Guo, Munroe</b>	SEA URCHIN SOMATIC AND GONADAL RESPONSES TO DIFFERING STOCKING DENSITIES AND SEAWATER FLOW RATES: A CASE STUDY FOR EXPERIMENTAL DESIGN CONSIDERATIONS <b>Suckling, Czachur, Ellis, Davies</b>	
10:00 AM	THE SHRIMP GENOME AND EPIGENOME: A REVIEW OF GENOME SIZES, TRANSPOSABLE ELEMENTS, SIMPLE SEQUENCE REPEATS, INTEGRATED VIRUSES, AND EPIGENETIC COMPONENTS OF PENAEIDS <b>Alcivar-Warren</b>	CLIMATE AND ESTUARINE GRADIENT INFLUENCE PACIFIC OYSTER CONDITION AND SPAWNING IN WILLAPA BAY, WASHINGTON, USA <b>Dumbauld, Ruesink, Trimble, Forster, Hasegawa, Bolm, McIntyre</b>	ARCTIC SURFCLAM, <i>MACROMERIS POLYNYMA</i> , FIELD GROWOUT TRAILS IN EASTERN MAINE, USA, USING CULTURED JUVENILES <b>Beal, Pepperman, Ellis</b>	EFFECT OF DIET AND TEMPERATURE ON GONAD ENHANCEMENT AND WASTE DEPOSITION FOR THE RED SEA URCHIN ( <i>MESOCENTROTUS FRANCISCANUS</i> ) <b>Warren*, Flaherty, Cross, Pearce</b>	
10:15 AM	<i>GYPSY-4</i> LVA LONG TERMINAL REPEAT (LTR) RETROTRANSPON FROM SPF SHRIMP <i>PENAEUS (LITOPENAEUS) VANNAMEI</i> DOMESTICATED BY THE BREEDING PROGRAM OF THE USMSFP CONSORTIUM IS SIMILAR TO ONE OF THE MOST EXPANDED GENE FAMILIES, GAG-POL POLYPROTEIN, IN THE GENOME ASSEMBLY OF <i>P. VANNAMEI</i> FARMED IN CHINA <b>Alcivar-Warren</b>	THE UNCONVENTIONAL FINDINGS OF HERBERT PRYTHERCH ON OYSTER SETTING AND METAMORPHOSIS <b>Fisher</b>	MAINE SHELLFISH LEARNING NETWORK <b>Hillyer*, McCreavy, Perry</b>	THE EFFECT OF DIFFERING FOOD TREATMENTS ON THE ENERGY BUDGET OF THE SEA URCHIN, <i>ARBACIA PUNCTULATA</i> <b>Zavell*, Suckling</b>	
10:30-11:00 AM	<b>MORNING BREAK</b>				
SESSION TITLE	<b>THE SHRIMP GENOME AND EPIGENOME (SHRIMPENCODE) PROJECT Acacia Alcivar-Warren &amp; Kathy F.J. Tang</b>	<b>OYSTERS Bill Fisher &amp; Brett Dumbauld</b>	<b>CLAMS Brian Beal</b>	<b>BLUE CRABS Rom Lipcius &amp; Rochelle Seitz</b>	<b>AQUACULTURE AND THE PRESS: A NEW WAY FORWARD Rona Kobell, Tim Wheeler &amp; Louise Schiavone</b>
11:00 AM	THE COMPLETE GENOME OF AN ENDOGENOUS NIMAVIRUS ( <i>NIMAV-L_VA</i> ) FROM THE PACIFIC WHITELEG SHRIMP, <i>PENAEUS (LITOPENAEUS) VANNAMEI</i> <b>Bao, Tang, Alcivar-Warren</b>	SPATIAL AND TEMPORAL VARIATION IN GROWTH RATES OF WILD EASTERN OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) FROM DELAWARE BAY, NEW JERSEY, USA <b>Gius, Morson, Munroe, Kraeuter</b>	CLAM GARDENING IN SOUTH-CENTRAL ALASKA, USA <b>Hetrick</b>	LARGE-SCALE MOVEMENTS OF SPAWNING FEMALE BLUE CRABS IN THE GULF OF MEXICO: A GULF-WIDE MARK-RECAPTURE STUDY <b>Darnell, Kemberling</b>	PANEL DISCUSSION
11:15 AM		SALINITY TOLERANCE OF EASTERN OYSTERS FROM THE GULF OF MEXICO <b>La Peyre, Casas, Walton, Aguilar, Rikard, Pollack, Palmer, Breaux, La Peyre, Kelly</b>		MATERNAL AND BEHAVIORAL INFLUENCES ON LARVAL TRANSPORT IN BLUE CRABS <b>Caracappa, Munroe, Chant, Fuchs</b>	
SESSION TITLE	<b>THE SHRIMP GENOME AND EPIGENOME (SHRIMPENCODE) PROJECT Acacia Alcivar-Warren &amp; Kathy F.J. Tang</b>	<b>OYSTERS Bill Fisher &amp; Brett Dumbauld</b>	<b>FRESHWATER MUSSELS AND ECOSYSTEM SERVICES Danielle Kreeger</b>	<b>BLUE CRABS Rom Lipcius &amp; Rochelle Seitz</b>	<b>AQUACULTURE AND THE PRESS: A NEW WAY FORWARD Rona Kobell, Tim Wheeler &amp; Louise Schiavone</b>
11:30 AM	CHARACTERISTICS OF THE CHH GENES AND THEIR FUNCTIONS IN THE PROCESSES OF MOLTING AND MALE SEXUAL DIFFERENTIATION IN <i>LITOPENAEUS VANNAMEI</i> <b>Xiang</b>	EXAMINING INTRASPECIFIC DIFFERENCES IN OYSTER TOLERANCE TO REDUCED OXYGEN <b>Davis*, Paynter, Plough</b>	MUSSELS FOR CLEAN WATER INITIATIVE: EXPANDING WATER FILTRATION SCIENCE BEYOND SALTWATER AND INTO FRESHWATER ECOSYSTEMS OF THE MID-ATLANTIC <b>Cheng, Kreeger, Padeletti, Gentry</b>	CARAPACE BIOGEOCHEMISTRY REVEALS BLUE CRAB MIGRATIONS FROM NURSERY TO SPAWNING HABITATS <b>Ogburn, Aguilar, Gilmour, Hines</b>	“CRISIS ON THE HALF-SHELL: THE CHESAPEAKE BAY” DOCUMENTARY & DISCUSSION
11:45 AM	CHARACTERIZATION AND EXPRESSION PATTERNS OF A NEW CHH GENE FROM THE PACIFIC WHITE SHRIMP, <i>LITOPENAEUS VANNAMEI</i> <b>Ventura-López, Gómez-Anduro, Arcos, Lleras-Herrera, Racotta, Ibarra</b>	CARRYOVER EFFECTS OF HYPOXIA AND WARMING ON EASTERN OYSTER PERFORMANCE <b>Donelan, Ogburn, Breitburg</b>	NITROGEN BIOEXTRACTION BY JUVENILE ALEWIFE FLOATERS, <i>UTTERBACKIANA IMPLICATA</i> , DURING POND REARING IN THE DELAWARE RIVER BASIN <b>Gentry, Kreeger, Cheng, Gray</b>	ASSESSING THE ROLE OF BLUE CRAB PREDATION IN DRIVING TOP-DOWN REGULATION OF A SALT MARSH TROPIC CASCADE <b>Small*, Johnson</b>	
12:00 NOON	BULK SEGREGATION METHOD WITH TRANSCRIPTOMICS IS AN INNOVATIVE METHOD FOR IDENTIFYING TRUE SNP AND FUNCTIONAL GENES IN SPR WSSV-RESISTANT MADAGASCAR-MALAYSIA <i>PENAEUS MONODON</i> BREEDING LINE <b>Ghani, Bhassu<sup>p</sup></b>	RED MANGROVES ( <i>RHIZOPHORA MANGLE</i> ) POSITIVELY INFLUENCE THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) ALONG AN INTERTIDAL GRADIENT <b>Chacin, Bell, Stallings</b>	NITROGEN FILTRATION BY FRESHWATER AND SALTWATER BIVALVES: IMPORTANCE OF SESTON COMPOSITION <b>Kreeger, Cheng, Moody, Gentry</b>	THRESHOLD EFFECTS OF SHORELINE ALTERATIONS FOR BLUE CRABS AND FORAGE FISH IN CHESAPEAKE BAY, USA <b>Seitz, Lipcius, Saluta, Kornis, Breitburg, Jordan, Weller</b>	
12:15 PM	THE PHYSICAL CONSTRAINTS OF RECOMBINATION AND THEIR INFLUENCE ON GENETIC RISK ASSESSMENTS <b>Divilov</b>	A POTENTIAL ROLE FOR AMEBOCYTES IN OYSTER SHELL DEPOSITION <b>Fisher</b>	DISCUSSION	IMPACT OF HEATED EFFLUENT FROM THE OYSTER CREEK NUCLEAR GENERATING STATION ON ADULT BLUE CRABS IN BARNEGAT, BAY, NEW JERSEY, USA <b>Jivoff, Cosby, Jainarine, Kaufmann, Tomayko</b>	
12:30-1:30 PM	<b>LUNCH BREAK</b>				

\* denotes student presenter

<sup>p</sup> denotes non first-author presenter

<b>TUESDAY March 31<sup>st</sup> 2020</b>					
<b>ROOM</b>	<b>International A</b>	<b>International B</b>	<b>International C</b>	<b>Hall of Fame</b>	<b>Carroll</b>
<b>SESSION TITLE</b>	<b>THE SHRIMP GENOME AND EPIGENOME (SHRIMPENCODE) PROJECT Acacia Alcivar-Warren &amp; Kathy F.J. Tang</b>	<b>OYSTERS Bill Fisher &amp; Brett Dumbauld</b>	<b>CONTAMINANTS OF EMERGING CONCERN Evan Ward &amp; Kayla Mladinich</b>	<b>BLUE CRABS Rom Lipcius &amp; Rochelle Seitz</b>	<b>SEQUENCE ANALYSIS WORKSHOP Sarah Kingston &amp; Maureen Krause</b>
1:30 PM	THE <i>FEM-1</i> GENE AND ITS ANTISENSE TRANSCRIPT MAY HAVE A FUNCTION IN SEXUAL DEVELOPMENT OF THE PACIFIC WHITELEG SHRIMP, <i>PENAEUS VANNAMEI</i> <b>Galindo-Torres, Ventura-López, Llera-Herrera, Ibarra<sup>P</sup></b>	CURRENT STATUS OF THE PUBLIC OYSTER AREAS IN LOUISIANA, USA <b>Bourque, Banks</b>	SELECTIVE INGESTION AND EGESTION OF MICROFIBERS IN THE BLUE MUSSEL, <i>MYTILUS EDULIS</i> , AND EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>Mladinich*, Holohan, Shumway, Ward</b>	PREVALENCE OF THE PATHOGENIC VIRUS <i>CALLINECTES SAPHIDUS</i> REOVIRUS 1 (CsRV1) ACROSS THE TRANS-HEMISPHERIC HOST DISTRIBUTION <b>Zhao*, Behringer, Bojko, Kough, Plough, Schott</b>	<b>GOT 'OMICS? II: JOIN US FOR AN INTERACTIVE PRACTICAL SESSION FOCUSED ON INTRODUCING TOOLS FOR GENOMIC SEQUENCE ANALYSIS</b>
1:45 PM	THE <i>FEM-1</i> HOMOLOG C-LIKE PROTEIN (LOC113816458) IN THE GENOME SEQUENCE ASSEMBLY (ASM378908v1) OF <i>PENAEUS (LITOPENAEUS) VANNAMEI</i> FARMED IN CHINA IS HOMOLOGOUS TO THE <i>FEM-1</i> PROTEIN INVOLVED IN MALE SEXUAL DIFFERENTIATION AND GAMETE GENERATION CHARACTERIZED IN GONAD OF CULTURED <i>P. VANNAMEI</i> FROM MEXICO <b>Galindo-Torres*, Ventura-López, Ibarra, Alcivar-Warren</b>	WILD VS. HATCHERY-REARED SPATS OF OYSTER <i>CRASSOSTREA IREDALEI</i> : A COMPARISON OF GROWTH AND SURVIVAL IN GROW-OUT CULTURE <b>Lebata-Ramos, Dionela, Novilla, Sibonga, Solis, Mediavilla</b>	PHYSIOLOGICAL EFFECTS OF MICROPLASTIC INGESTION BY OYSTER LARVAE ( <i>CRASSOSTREA VIRGINICA</i> ) <b>Knauss*, McFarland</b>	RANKING ECOSYSTEM IMPACTS ON CHESAPEAKE BAY BLUE CRABS ( <i>CALLINECTES SAPHIDUS</i> ) USING EMPIRICAL GAUSSIAN GRAPHIC MODELS <b>Liang, Miller, Nessler, Wilberg</b>	
2:00 PM	DIFFERENCE IN GUT MICROBIOTA OF <i>LITOPENAEUS VANNAMEI</i> BETWEEN A PLANT- AND ANIMAL-BASED DIET <b>Galarza*, Castillo, Delgado, Boeing</b>	PACIFIC OYSTER ( <i>CRASSOSTREA GIGAS</i> ) LOSSES AND SEED LIMITATIONS ON THE U.S. WEST COAST <b>Hudson, Elston, Davis, Sahli, Houle, Suhrbier</b>	EFFECTS OF MICROPLASTICS ON THE GUT MICROBIOME OF THE BLUE MUSSEL, <i>MYTILUS EDULIS</i> <b>Collins*, Holohan, Griffin, Ward</b>	RECOVERY OF THE BLUE CRAB POPULATION AND FISHERY IN THE CHESAPEAKE BAY: MANAGEMENT SUCCESS, ENVIRONMENTAL CHANGE, OR DERELICT TRAP REMOVAL? <b>Lipcius</b>	
<b>SESSION TITLE</b>	<b>THE SHRIMP GENOME AND EPIGENOME (SHRIMPENCODE) PROJECT Acacia Alcivar-Warren &amp; Kathy F.J. Tang</b>	<b>OYSTERS Bill Fisher &amp; Brett Dumbauld</b>	<b>CONTAMINANTS OF EMERGING CONCERN Evan Ward &amp; Kayla Mladinich</b>	<b>BLUE CRAB GENOMICS AND TRANSCRIPTOMICS: THE PROGRESS OF THE BLUE CRAB GENOME PROJECT J. Sook Chung</b>	<b>SEQUENCE ANALYSIS WORKSHOP Sarah Kingston &amp; Maureen Krause</b>
2:15 PM	THE REVERSE TRANSCRIPTASE (RT) OF <i>RTE-3 LVA</i> NON-LTR RETROTRANSPOSON FROM SPF <i>PENAEUS (LITOPENAEUS) VANNAMEI</i> IS SIMILAR TO RT FROM <i>P. MONODON</i> ENDOGENOUS VIRUS IHNV – INSIGHTS INTO HORIZONTAL GENE TRANSFER OF A DNA PARVOVIRUS <b>Asuncion, Tang, Alcivar-Warren</b>	INVESTIGATION OF OYSTER STRAIN EFFECT IN AQUACULTURE AT COMMERCIAL SCALES <b>Golt, Conway, Mitchelmore, Miller</b>	PRESENCE OF MICROFIBERS IN ADULT OYSTERS AND WATER SAMPLES COLLECTED IN BOSTON HARBOR AND COASTAL MASSACHUSETTS <b>Tobin*, Rich</b>	GENOME SEQUENCING AND ASSEMBLY STRATEGIES FOR NON-MODEL MARINE ORGANISMS <b>Zimin</b>	<b>GOT 'OMICS? II: JOIN US FOR AN INTERACTIVE PRACTICAL SESSION FOCUSED ON INTRODUCING TOOLS FOR GENOMIC SEQUENCE ANALYSIS</b>
2:30 PM	DIFFERENTIAL TRANSCRIPTOMICS APPROACH ON AHPND-CHALLENGED DISEASE TOLERANT MADAGASCAR-MALAYSIA <i>PENAEUS MONODON</i> REVEALS SIGNATURE EXPRESSION IN CONSERVED DOMAINS OF FUNCTIONAL GENES <b>Bhassu, Soo</b>	PERFORMANCE OF SUPPLY CHAINS FOR UNITED STATES FARMED OYSTERS <b>Lane, Love, Kuehl, Clancy, Davis, Fry, Harding, Hudson</b>	RISK MANAGEMENT OF ADDITIVES TRANSFERRED FROM PLASTIC EQUIPMENT INTO FARMED OYSTERS <b>Omont, Cottin, Charbuillet, Froelich, Naffrechoux</b>		
2:45 PM	CONJUGATIVE TRANSFER OF THE pVA1 PLASMID RESULTED IN THE FORMATION OF AHPND-CAUSING <i>VIBRIO</i> BACTERIA <b>Tang, Dong, Song, Chen, Bi, Wang, Wang, Ren, Guo, Wang, Huang</b>	MECHANISMS GOVERNING INTERTIDAL AND SUBTIDAL OYSTER REEF FORMATION AND MAINTENANCE IN THE BIG BEND REGION OF FLORIDA: INTERACTIONS OF SALINITY, IMMERSION TIME, AND PREDATION <b>Tweitmann*, Frederick, Pine III</b>	THE IMPACTS OF MICROPLASTICS ON THE LARGELY OVERLOOKED MARINE INVERTEBRATE – THE SEA URCHIN <b>Suckling</b>	CRACKING THE GENOME OF THE BLUE CRAB, <i>CALLINECTES SAPHIDUS</i> <b>Bachvaroff, Plough, Chung</b>	
3:00 PM	HORIZONTAL PLASMID TRANSFER BETWEEN <i>VIBRIO PARHAEMOLYTICUS</i> PROVIDES A NOVEL MECHANISM FOR GENETIC EXCHANGE AND ENVIRONMENTAL ADAPTATION MEDIATED BY THE INSERTION SEQUENCE IS <sub>VAL1</sub> <b>Fu, Wei, Yang, Xie, Huang, Feng, Liu</b>	OYSTER HABITAT ON DIFFERENT REEF TYPES IN THE CHESAPEAKE BAY, MARYLAND, USA <b>Tracy, Heggie, Ogburn</b>	INGESTION, BIOACCUMULATION, AND DEPURATION OF MICRO- AND NANOPLASTICS BY OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) AND MUSSELS ( <i>MYTILUS EDULIS</i> ) <b>Ward, Haynes, Mladinich, Griffin, Holohan</b>	THE BLUE CRAB GENOME WEBSITE <b>McDonald, Decree, Bachvaroff, Chung</b>	
3:15PM	LONG-DISTANCE TRANSMISSION OF PATHOGENIC <i>VIBRIO</i> SPECIES BY MIGRATORY WATERBIRDS: A POTENTIAL THREAT TO PUBLIC HEALTH <b>Fu, Hao, Yang, Li, Liu</b>	OYSTER BREAKWATER REEFS PROMOTE ADJACENT MUDFLAT STABILITY AND SALTMARSH GROWTH IN A MONSOON DOMINATED SUBTROPICAL COAST <b>Chowdhury, Walles, Sharifuzzaman, Hossain, Ysebaert, Smaal</b>	THE INTERACTIVE EFFECTS OF TITANIUM DIOXIDE NANOPARTICLES AND LIGHT ON FERTILIZATION AND EMBRYOGENESIS OF THE PACIFIC OYSTER ( <i>CRASSOSTREA GIGAS</i> ) <b>Haynes*, Tallec, Paul-Pont, Soudant, Ward</b>	RANGE-WIDE POPULATION GENOMIC ANALYSIS OF THE BLUE CRAB, <i>CALLINECTES SAPHIDUS</i> <b>Plough, Lee, Schott, Kough, Behringer, Bojko, Bachvaroff, Chung</b>	
3:30 PM	PENAEID SHRIMP IN CHESAPEAKE BAY: POPULATION GROWTH AND BLACK GILL DISEASE SYNDROME <b>Tuckey, Swinford, Fabrizio, Small, Shields</b>	HURRICANE IMPACTS ON THE NATURAL OYSTER REEFS OF NORTH CAROLINA: IS THIS THE NEW PARADIGM? <b>Bowling*, Eggleston</b>	CONTAMINANTS OF EMERGING CONCERN IN CHESAPEAKE BAY OYSTER REEFS <b>Feerick*, Hain, He, Timm, Tarnowski, Blaney</b>	TRANSCRIPTOMIC AND EXPRESSION ANALYSIS OF THE GENES INVOLVED IN ECDYSTEROIDOGENESIS AND CHOLESTEROL UPTAKE IN THE Y-ORGAN OF THE BLUE CRAB, <i>CALLINECTES SAPHIDUS</i> <b>Legrand, Bachvaroff, Schock, Chung<sup>P</sup></b>	
3:45 PM	A MULTI-PARASITE APPROACH TO UNDERSTANDING BLACK GILL IN WHITE SHRIMP ( <i>PENAEUS SETIFERUS</i> ) <b>Zuidema*, Kendrick, de Buron, Podolsky, Kingsley-Smith</b>			EXAMINING THE POSSIBLE INFLUENCE OF GENETICS ON MIGRATION AND HABITAT PREFERENCE IN <i>CALLINECTES SAPHIDUS</i> <b>Moran*, Rittschof</b>	
4:00 – 6:00 PM	<b>POSTER SESSION AND HAPPY HOUR International D &amp; E</b>				
7:00 PM - ???	<b>STUDENT ENDOWMENT FUND AUCTION International A, B, C</b>				

\* denotes student presenter

<sup>P</sup> denotes non first-author presenter

WEDNESDAY April 1 <sup>st</sup> 2020				
8:00-8:50AM PLENARY: J. Evan Ward – <i>Looking down the barrel of an endoscope: insights from thirty years of in vivo investigations on suspension-feeding molluscs</i> International A, B, C				
ROOM	Fayette	Carroll	Hall of Fame	Mencken
SESSION TITLE	EASTERN OYSTER GENOME CONSORTIUM WORKSHOP Marta Gomez-Chiarri & Erin Roberts	SEAGRASS BIVALVE INTERACTIONS Brett Dumbauld & Kay McGraw	DOWN ON THE FARM Leslie Sturmer & Bill Walton	UNDERGRADUATE RESEARCH COLLOQUIUM Edward Catapane & Margaret Carroll
9:00 AM	THE NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION (NCBI) GENOME ANNOTATION RESOURCES FOR SHELLFISH SPECIES O'Leary, Thibaud-Nissen, Murphy, Eukaryotic Genome Annotation Group, Schneider	OBLIGATE AND FACULTATIVE FACILITATION OF SEAGRASSES BY CHEMOSYMBIOTIC BIVALVES Chin, de Fouw, van der Heide, Cahill, Katcher, Paul, Campbell, Peterson	EFFECTS OF DIFFERENCES IN DURATION OF LARVAL PERIOD UPON THE FIELD PERFORMANCE OF CULTURED EASTERN OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ): 2019 RESULTS Bisker*, Rikard, Chaplin, Walton	IMPACTS OF ANTHROPOGENIC POLLUTION IN NEW JERSEY AND NEW YORK ESTUARIES ON THE PHYSIOLOGY OF <i>CRASSOSTREA VIRGINICA</i> Ward*, Thompson, Pollock, Gray
9:15 AM	TRAINING ON THE USE OF NCBI RESOURCES FOR EXPLORING GENOMES AND ANNOTATION TOOLS	SEAGRASS OASIS: OCEAN ACIDIFICATION AND LOW pH SUBSIDIES Peterson, Lowell, Wallace, Gobler	OBSERVATIONS ON THE USE OF A McDONALD FISH HATCHING JAR FOR OYSTER SEED CULTURE AND IMPROVEMENTS IN BOTTLE SILO DESIGN Supan, Truesdale	CARNOSINE REDUCES NEUROTOXIC EFFECTS OF MANGANESE ON AN OYSTER GILL CLILIO-INHIBITORY DOPAMINE SYSTEM Ramirez*, Quintuna, Georges, Carroll, Catapane
9:30 AM		LINKING LARVAL AND JUVENILE PERFORMANCE IN THE BIVALVE <i>MERCENARIA MERCENARIA</i> : WHEN DOES THE JUVENILE ENVIRONMENT MATTER? Rugila*, Gobler, Lowell, Peterson, Thacker	EVALUATING SUBSTRATE REHABILITATION TECHNIQUES FOR BOTTOM CULTURE OF THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) IN CHESAPEAKE BAY, USA Long*, Cornwell, Paynter, Webster	G PROTEIN-COUPLED INWARDLY-RECTIFYING POTASSIUM CHANNEL (GIRK) AND THE CONTROL OF GILL LATERAL CELL MEMBRANE POTENTIAL AND CILIA RESPONSE OF <i>CRASSOSTREA VIRGINICA</i> Johnson*, Small, Eid, Catapane, Carroll
9:45 AM		EVALUATING THE USE OF MULTIVARIATE APPROACHES TO PREDICT HABITAT ASSOCIATIONS OF SHELLFISH COMMUNITIES IN OREGON ESTUARIES D'Andrea	IT'S IN THE BAG: TESTS OF EFFECTS OF BAG TYPE ON THE PERFORMANCE OF AQUACULTURED EASTERN OYSTERS, <i>CRASSOSTREA VIRGINICA</i> Walton, Robitaille, Spellman, Chaplin, Rikard	CARNOSINE REDUCES TOXIC EFFECTS OF MANGANESE ON MITOCHONDRIAL MEMBRANE POTENTIAL Bowman*, Wallach, Carroll, Catapane
10:00 AM		CAN PACIFIC OYSTERS BE USED TO MITIGATE EELGRASS WASTING DISEASE? Agnew*, Burge, Eisenlord, Friedman	ASSESSING THE EFFECTIVENESS OF DESICCATION IN CONTROLLING BIOFOULING IN WATER COLUMN CULTURED OYSTERS, <i>CRASSOSTREA VIRGINICA</i> , IN THREE CHESAPEAKE BAY LOCATIONS Hood*, Parker	EFFECTS OF MANGANESE ON THE CLILIO-INHIBITORY ACTIONS OF DOPAMINE D2 AGONISTS ON GILL LATERAL CELLS OF <i>CRASSOSTREA VIRGINICA</i> Ernest*, Baxter, Foster, Catapane, Carroll
10:15 AM		POSITIVE EFFECTS OF SEAGRASS VEGETATION ON OYSTER GROWTH AND SURVIVAL THROUGH MITIGATION OF ENVIRONMENTAL STRESS Hori, Hamaguchi, Richard, Derolez, Lagarde	AUTOMATING OYSTER AQUACULTURE WITH THE SUN Rice, Pattison, Summers <sup>p</sup> , Borgert, Kiefer, Engstrom, Sheckells, Fleisher	
10:30-11:00 AM		<b>MORNING BREAK</b>		
SESSION TITLE	EASTERN OYSTER GENOME CONSORTIUM WORKSHOP Marta Gomez-Chiarri & Erin Roberts	SEAGRASS BIVALVE INTERACTIONS Brett Dumbauld & Kay McGraw	DOWN ON THE FARM Leslie Sturmer & Bill Walton	REMOTE SENSING AND WATER QUALITY Stephanie Schollaert Uz & Michelle Tomlinson
11:00 AM	TRAINING ON THE USE OF NCBI RESOURCES FOR EXPLORING GENOMES AND ANNOTATION TOOLS	ON THE CO-EXISTENCE OF SUBMERGED AQUATIC VEGETATION AND CAGE-BASED OYSTER AQUACULTURE IN VIRGINIA, USA Southworth, Wesson, Berman, Rudnicki, Mann	A FISH'S-EYE-VIEW: SHELLFISH FARMS AS MARINE HABITAT IN NEW JERSEY Shinn, Munroe	TOWARDS THE SURVEILLANCE OF HARMFUL ALGAL BLOOMS IN CHESAPEAKE BAY THROUGH THE APPLICATION OF OPTICAL REMOTE SENSING, ECOLOGICAL ASSOCIATIONS, AND CITIZEN MONITORING EFFORTS Tomlinson, Wolny, Stumpf, Reece, Egerton, Meredith
11:15 AM		EVALUATING THE IMPACTS OF COMMERCIAL-SCALE FLOATING OYSTER AQUACULTURE ON A <i>ZOSTERA MARINA</i> (EELGRASS) BED IN CHESAPEAKE BAY, VIRGINIA, USA Shields, Kellogg, Dreyer	SHELLFISH FARMING AND CULTURAL SERVICES: THE OTHER ECOSYSTEM SERVICE Michaelis*, Walton, Webster, Shaffer	EXAMINING MODIS TSM TO EVALUATE CHANGES IN CHESAPEAKE BAY WATER CLARITY Lazar, Vogel, Bruce, McGowan
11:30 AM		A SHELLFISH INDUSTRY PERSPECTIVE ON SHELLFISH-EELGRASS INTERACTIONS – A PICTURE IS WORTH A THOUSAND WORDS AND VIDEO IS WORTH A MILLION Dewey	THE TOUGH PEOPLE BEHIND THE TENDER CLAMS: OCCUPATIONAL HEALTH AND SAFETY SUPPORT FOR CLAM MARICULTURISTS IN CEDAR KEY, FLORIDA, USA Kane, Myers, Durborow, Dunleavy, Rash, Brooks	USE OF CITIZEN SCIENTISTS TO MONITOR HARMFUL ALGAL BLOOMS, CHANGES IN ENVIRONMENTAL CONDITIONS, AND ITS UTILIZATION IN AQUACULTURE Morton, Maucher-Fuquay, Bravo
11:45 AM		COMPARATIVE HABITAT USE OF ESTUARINE HABITATS WITH AND WITHOUT OYSTER AQUACULTURE Bloch, Meaders <sup>p</sup> , Muething, Czesla	INTERNATIONAL SHIPPING (EXPORT) OF LIVE MOLLUSCS AND CRUSTACEANS Marston	A GLOBAL SPATIAL ANALYSIS REVEALS WHERE MARINE AQUACULTURE CAN BENEFIT NATURE AND PEOPLE Theuerkauf, Morris Jr., Waters, Wickliffe, Alleyway, Jones
12:00 NOON				SUSTAINABLE OYSTER AQUACULTURE, WATER QUALITY IMPROVEMENT, AND ECOSYSTEM SERVICE VALUE POTENTIAL IN MARYLAND, CHESAPEAKE BAY Parker, Bricker
12:15 PM				USING SATELLITES TO AID CHESAPEAKE BAY RESOURCE MANAGERS IN THE DETECTION OF POOR WATER QUALITY Schollaert Uz, McKay, McDonnell, Blough
12:30-2:00 PM	<b>NSA BUSINESS LUNCHEON</b> International A, B, C			

\* denotes student presenter

<sup>p</sup> denotes non first-author presenter

WEDNESDAY April 1 <sup>st</sup> 2020				
ROOM	Fayette	Carroll	Hall of Fame	Mencken
SESSION TITLE	OshV-1 Tim Green, Colleen Burge & Kimberly Reece	SCALLOPS Richard Snyder & Michael Acquafredda	COASTAL ACIDIFICATION Bill Fisher, Jason Grear & Shannon Meseck	SHELLFISH MODELING: POPULATION DYNAMICS AND SUSTAINABLE MANAGEMENT Tom Soniat & Eric Powell
2:00 PM	THE BATHYMETRIC LEVEL INDUCES A METABOLIC RESPONSE IN <i>CRASSOSTREA GIGAS</i> THAT PROTECTS FROM DEATH INDUCED BY THE MARINE VIRUS OshV-1 Corporeau, Pernet, Petton, Quéré, Le Roy, Dubreuil, Vilaça, Langlois, Artigaud, Pichereau, Laca-Gervais	OPTIMIZING PRODUCTION AND PRODUCTS FOR SCALLOP AQUACULTURE Morse, Brady, Coleman, and Cowperthwaite	A SLOW GROWING PERSPECTIVE ON MULTI-GENERATIONAL RESPONSES TO FUTURE CHANGE Suckling, Clark, Peck, Davies	APPLYING SHELL-BUDGET MODELING TO DECLINING OYSTER POPULATIONS OF THE NORTHERN GULF OF MEXICO Soniat, Powell, Cooper, Rajendra
2:15 PM	IDENTIFICATION OF MOLECULAR MARKERS ASSOCIATED TO OshV-1 RESISTANCE IN <i>CRASSOSTREA GIGAS</i> Prado-Alvarez, Carlsson, Cao, Culloty, Gestal, Villalba, Carlsson	SEA SCALLOP NEMATODE TRANSMISSION, TEMPORAL VARIATION, AND THERMAL TOLERANCE McGurk, Bushek, Munroe, Bochenek, Borsetti, Rudders, Roman	THRESHOLDS OF INTERGENERATIONAL pCO <sub>2</sub> CONDITIONING ON METABOLISM AND OXIDATIVE STATUS OF JUVENILE PACIFIC GEODUCK, <i>PANOPEA GENEROSA</i> Gurr*, Trigg, Vadopalas, Roberts, Putnam	USING SHELL SURFACE AREA TO INFORM SUSTAINABLE FISHING PRACTICES OF THE EASTERN OYSTER IN THE PRESENCE OF DISEASE Solinger*, Powell, Alcox, Soniat, Hemeon, Poussard, Pace
2:30 PM	DIFFERENTIAL RESPONSE OF VARIOUS STOCKS OF THREE OYSTER SPECIES TO EXPERIMENTAL CHALLENGES BY FRENCH AND AUSTRALIAN OSTREID HERPESVIRUS 1 VARIANTS Reece, Burge, Wippel, Dégremont, Dhar, Kirkland, MacIntyre, Morga, Agnew, Robison, Friedman	NON-INVASIVE HIGH-FREQUENCY SENSORS TO STUDY SHELLFISH ECOPHYSIOLOGY IN DYNAMIC COASTAL ENVIRONMENTS Volkenborn, Dwyer, Chester, Gurr, Tomasetti, Tettelbach, Gobler	EFFECTS OF BRIEF COASTAL ACIDIFICATION EXPOSURE ON WILD AND TRANSLOCATED BIVALVE POPULATIONS Grear, Pimenta, Booth, Horowitz, Mendoza, Liebman, Nye, O'Leary, Tettelbach, Gobler	OYSTER REEF ACCRETION RATES ESTIMATED FROM FOSSIL SHELL COLLECTIONS Mann, Southworth, Lockwood
2:45 PM	HOW DO OshV-1 MICROVARIANTS MEASURE UP? A LAB-BASED COMPARISON AMONG MICROVARIANTS AND COMMON USA OYSTER SPECIES Burge, Agnew, Dayal, Kachmar, Friedman, Dhar, Dégremont, Morga, Kirkland, Langdon, Schoolfield, Divilov, Dumbauld	EVALUATION OF THE RECREATIONAL HARVEST OF BAY SCALLOPS, ( <i>ARGOPECTEN IRRADIANS</i> ) IN STEINHATCHEE, FLORIDA, USA Granneman, Baxley, Bollinger, Heil, LaGanke, Levine, Pearson, Pudlak, Williams	EFFECTS OF BUFFERING MUDS WITH CALCIUM CARBONATE ON GROWTH AND SURVIVAL OF THE NORTHERN QUAHOG (=HARD CLAM) ( <i>MERCENARIA MERCENARIA</i> ) Curtin*, Volkenborn, Dwyer, Gobler	THE 'MIRACLE' OF DEPLETION: WHY THE OYSTER FISHERY IS NOT SELF-REGULATING Powell, Klinck, Poussard
3:00 PM	DISCUSSION: STRATEGIES TO LIMIT DISEASE IMPACT AND RANGE EXPANSION	STRATEGIES TO ENHANCE BAY SCALLOP POPULATIONS ON MARTHA'S VINEYARD Karney	STUDYING COASTAL ACIDIFICATION EFFECT ON THE ATLANTIC SURFLAM, <i>SPISULA SOLIDISSIMA</i> , THROUGH AN EXPERIMENTAL AND MODELING SURVEY Pousse, Poach, Redman, Sennfelder, Veilleux, Krisak, Dixon, Li, Munroe, Hart, Hennen, Wikfors, Meseck <sup>p</sup>	OYSTER METAPOPOPULATIONAL DYNAMICS Theuerkauf, Eggleston <sup>p</sup> , Puckett
3:15 PM		BAY SCALLOP, <i>ARGOPECTEN IRRADIANS</i> , CULTURE IN WACHAPREAGUE, VIRGINIA, USA Turner-Smith, Kelley, Turner, Orlando, Smith, Snyder <sup>p</sup>	COASTAL ACIDIFICATION EFFECT ON THE PHYSIOLOGY OF THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> : AN EXPERIMENTAL AND MODELING SURVEY Pousse, Redman, Sennfelder, Krisak, Li, Dixon, Poach, Veilleux, Milke, Wikfors, Hofmann, Klinck, Munroe, Meseck	ENVIRONMENTAL CONTROLS ON WITHERING SYNDROME IN ABALONE: A MODELING STUDY Hofmann, Friedman, Powell, Klinck, Neuman, Moore, Taniguchi, Kushner, Miner, Hemeon, Poussard, Solinger
3:00 PM		DIVERSIFICATION OF BIVALVE AQUACULTURE IN THE NORTHEAST: TESTING SURVIVAL AND GROWTH OF BAY SCALLOPS ( <i>ARGOPECTEN IRRADIANS</i> ) IN NEW JERSEY Acquafredda, Deck <sup>*,</sup> Whiteside, Munroe, Calvo, Bushek, De Luca, Guo	INTERACTING ACIDIFICATION AND SALINITY EFFECTS ON JUVENILE CRAB ARMOR AND CLAW STRENGTH Longmire*, Seitz, Seebo	PACIFIC NORTHWEST CRAB RESEARCH GROUP: CLOSING CRITICAL DUNGENESS CRAB DATA GAPS IN WASHINGTON WATERS Cruz, Barber, Harrington, Tobin, Bosley
3:45 PM		GENETICS AND BREEDING FOR SCALLOP AQUACULTURE Guo		INTEGRATION OF DIFFERENT DATA SOURCES FOR MANAGEMENT OF OFFSHORE BIVALVE AQUACULTURE IN SAGRES, PORTUGAL Icely, Cristina, Fragoso, Goela, Gomes-Ferreira, Gormally, Lopes, Moore, and O'Donncha
4:00 – 5:00 PM		DONAL MANAHAN, Division Director, Division of Integrative Organismal Systems, National Science Foundation <i>NSF Opportunities in Integrative Biology: Organismal Responses to Environment</i> Carroll		
5:00 - 7:00 PM	POSTER SESSION AND HAPPY HOUR International D & E			

\* denotes student presenter

<sup>p</sup> denotes non first-author presenter

THURSDAY April 2 <sup>nd</sup> 2020				
6:30 AM	Scallop Gallop – Hotel Lobby			
8:00-8:50 AM	PLENARY: João Ferreira – <i>The coming of age of precision aquaculture – how models are changing the way we grow shellfish</i> International A, B, C			
ROOM	International A	International B	International C	Carroll
SESSION TITLE	<i>VIBRIO</i> Steve Jones & Cheryl Whistler	HATCHERIES Don Webster	NITROGEN REMOVAL CAPACITY OF OYSTER HABITATS VIA DENITRIFICATION WORKSHOP Nick Ray, Suzy Ayyazian, Boze Hancock & Wally Fulweiler	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders
9:00 AM	PHAGE-HOST INTERACTIONS SHAPED THE NATIVE ST36 POPULATION SUCCESSION IN THE PACIFIC AND MULTIPLE INVASIONS INTO THE NORTH ATLANTIC <b>Whistler, Means, Foxall, Hartwick, Jones</b>	NORTHERN QUAHOG (= HARD CLAM) HATCHERY DEVELOPMENT: IN THE BEGINNING <b>Krauter</b>	MEASUREMENT OF BIOGEOCHEMICAL FLUXES IN OYSTER REEF ENVIRONMENTS <b>Kellogg, Cornwell, Owens</b>	ESTIMATING CATCH EFFICIENCIES FOR THE NORTHERN QUAHOG ( <i>MERCENARIA MERCENARIA</i> ) POPULATION OF NARRAGANSETT BAY, RHODE ISLAND, USA <b>McManus, Leavitt, Griffin, Erkan, Mercer, Heimann</b>
9:15 AM	BACTERIOPHAGE AND PREDATORY BACTERIA AS POTENTIAL INTERVENTIONS AGAINST <i>VIBRIO</i> IN SHELLFISH <b>Richards, Watson</b>	SOFTSHELL CLAM AND ARCTIC SURFLAM HATCHERY DEVELOPMENT IN MAINE <b>Beal, Pepperman</b>	OYSTER DENITRIFICATION AS A BEST MANAGEMENT PRACTICE <b>Cornwell, Owens, Kellogg, Reichert-Nguyen</b>	OCEAN QUAHOGS: A GLIMPSE INTO POPULATION STRUCTURE OF THE LONGEST-LIVED, NON-COLONIAL ANIMAL ON EARTH USING ONE OF THE LARGEST AGE DATASETS IN THE WORLD <b>Hemeon*, Powell, Mann, Redmond, Pace, Long</b>
9:30 AM	IMPROVING QUANTIFICATION OF PATHOGENIC FORMS OF <i>VIBRIO</i> SP. THROUGH MOLECULAR DIAGNOSTICS <b>Noble, Blackwood, Clerkin, Froelich</b>	SEA URCHIN HATCHERY TECHNOLOGY <b>Pearce</b>	EVALUATION OF THE POTENTIAL FOR OYSTER MEDIATED NITROGEN REDUCTION IN A COASTAL SALT POND: YEAR THREE FINDINGS <b>Labrie*, Schlezinger, Sundermeyer, Howes</b>	ANALYSIS OF DREDGE EFFICIENCY FOR OCEAN QUAHOG AND SURFLAM COMMERCIAL DREDGES <b>Poussard*, Powell, Hennen</b>
9:45 AM	APPLICATION OF MULTIPLE METHODS FOR THE DETECTION AND ENUMERATION OF PATHOGENIC <i>VIBRIO</i> SP. IN MID-ATLANTIC SEAWATER AND OYSTERS <b>Parveen, Jacobs, Ozbay, Chintapenta, Almuhaideb, Meredith, Ossai, Grant, Abbott, Chigbu, Brohawn, Richards</b>	EVOLUTION OF OYSTER HATCHERIES FOR LARGE-SCALE RESTORATION AND COMMERCIAL AQUACULTURE DEVELOPMENT IN THE CHESAPEAKE BAY, USA <b>Meritt</b>	SEDIMENT DENITRIFICATION IN OYSTER HABITATS AND THE FUTURE OF COASTAL BIOGEOCHEMICAL SUSTAINABILITY <b>Ray*, Fulweiler</b>	RESPONSE OF THE NORTHERN QUAHOG (= HARD CLAM)( <i>MERCENARIA MERCENARIA</i> ) POPULATIONS TO THE BANNING OF MECHANICAL HARVESTING IN THE MARYLAND COASTAL BAYS <b>Tarnowski, Bussell</b>
10:00 AM	PREVALENCE OF PATHOGENIC <i>VIBRIO PARAHAEMOLYTICUS</i> AND <i>VIBRIO VULNIFICUS</i> IN OYSTERS HARVESTED IN NEWPORT BAY, CALIFORNIA, USA <b>Cooksey*, Zimmer-Faust, Diner, Steel, Griffith, Verhoughstraete</b>	HATCHERY OPERATIONS IN THE CHESAPEAKE BAY: BENDING WITH THE TIDE AT HORN POINT OYSTER HATCHERY, MARYLAND, USA <b>Alexander, Alexander, Carey, Golding, Klages, Trommutter, Weschler, Willey</b>	ENVIRONMENTAL VARIABILITY AND OYSTER-ASSOCIATED MICROBIAL DENITRIFICATION IN NARRAGANSETT BAY, RHODE ISLAND, USA <b>Stevick, Hamilton, Moseman-Valtierra, Post, Gomez-Chiarri<sup>p</sup></b>	USING DREDGE-MOUNTED CAMERAS TO MAP BOTTOM HABITAT IN ACTIVE SURFLAM FISHING GROUNDS <b>Davies</b>
10:15-10:45 AM	<b>MORNING BREAK</b>			
SESSION TITLE	<i>VIBRIO</i> Steve Jones & Cheryl Whistler	HATCHERIES Don Webster	NITROGEN REMOVAL CAPACITY OF OYSTER HABITATS VIA DENITRIFICATION WORKSHOP Nick Ray, Suzy Ayyazian, Boze Hancock & Wally Fulweiler	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders
10:45 AM	EMERGING PACIFIC OYSTER SUMMER MORTALITY IN BRITISH COLUMBIA, CANADA, IS ASSOCIATED WITH <i>VIBRIO</i> SPP., TEMPERATURE, AND REPRODUCTIVE DEVELOPMENT <b>Cowan*, Green, de la Bastide, Finston, Meyer, McAmmond, Van Hamme, Bottos, Hintz, Marshall, Pearce</b>	A NEW SHELLFISH HATCHERY TO INCREASE PRODUCTION FOR THE LONG ISLAND SHELLFISH RESTORATION PROJECT (LISRP) IN NEW YORK STATE <b>Rivara</b>	BEYOND BIOEXTRACTION: THE ROLE OF OYSTER-MEDIATED DENITRIFICATION IN NUTRIENT MANAGEMENT <b>Zarnoch, Mulvaney, Ayyazian, Palta, McNally, Reichert-Nguyen, Jones, Pilaro, McCarthy, Terry, Fulweiler</b>	AMERICAN LOBSTER ( <i>HOMARUS AMERICANUS</i> ) AND JONAH CRAB ( <i>CANCER BOREALIS</i> ) RELATIVE ABUNDANCE AND SIZE STRUCTURE IN THE VINEYARD WIND LEASE AREA <b>Zygmunt*, Cassidy, Stokesbury</b>
11:00 AM	REDUCING <i>VIBRIO PARAHAEMOLYTICUS</i> RISKS ASSOCIATED WITH OYSTER AQUACULTURE PRACTICES IN CONNECTICUT, USA <b>DeRosia-Banick, Jones, Schillaci, Nash, Howell, Howell, Foxall, Hartwick, Whistler</b>	HATCHERY OPERATIONS FOR GENETIC IMPROVEMENT OF SHELLFISH <b>Allen, Jr.</b>	ADDING OYSTER-MEDIATED DENITRIFICATION ENHANCEMENT TO THE SUITE OF TOOLS USED TO ADDRESS EUTROPHICATION <b>Gosnell, Rose, Bricker, Brush, Colden, Harris, Karplus, Laferriere, Merrill, Murphy, Reitsma, Shockley, Stephenson, Theuerkauf, Ward, Fulweiler</b>	ASSESSING LARVAL LOBSTER DENSITY IN BOTH INSHORE AND OFFSHORE ENVIRONMENTS <b>Cassidy, Zygmunt, Stokesbury</b>
11:15 AM	A HIERARCHICAL, TIME-SERIES MODEL OF THE RELATIONSHIP BETWEEN ENVIRONMENTAL CONDITIONS AND <i>VIBRIO PARAHAEMOLYTICUS</i> GENETIC MARKERS IN WASHINGTON STATE PACIFIC OYSTERS FROM 2005-2019 <b>Fries, Davis, Atherly, Olson, Bowers, De Paola, Curriero</b>	DESIGN AND MANAGEMENT CRITERIA OF HATCHERIES SPECIALIZED FOR SHELLFISH BREEDING <b>Davis</b>	<b>DISCUSSION</b>	LARVAL SPILLOVER OF SEA SCALLOPS ( <i>PLACOPECTEN MAGELLANICUS</i> ) FROM A ROTATIONAL CLOSED AREA IN THE MID-ATLANTIC BIGHT <b>Munroe, Hart, Haidvogel, Caracappa, Klink, Hofmann, Shank, Powell</b>
11:30 AM	THE SEASONAL ECOLOGY OF <i>VIBRIO PARAHAEMOLYTICUS</i> IN A NEW ENGLAND ESTUARY <b>Hartwick*, Berenson, Whistler, Naumova, Jones</b>	HETEROTROPHICALLY CONDITIONED RECIRCULATION SYSTEM FOR BIVALVE LARVAL CULTURE <b>Bentley, Snyder, Ovissipour, Schwarz, Shiroodi, Urick, van Senten</b>		CAN CUTTING BAR MODIFICATIONS REDUCE BYCATCH AND INCREASE CATCH EFFICIENCY IN THE ATLANTIC SEA SCALLOP DREDGE FISHERY? <b>Morson, Bochenek, Zemeckis, Gius, Lin, O'Brien, Silady</b>
11:45 AM		BREAKTHROUGH OF ALGAL TOXINS INTO SHELLFISH HATCHERIES – NEW LINES OF RESEARCH ARE NEEDED TO SUPPORT PRODUCTION <b>Smith, Carnegie, Reece, Hudson, Sanderson, Onofrio</b>		THE EFFECT OF DENSITY ON THE GROWTH, YIELD, AND REPRODUCTION OF THE SEA SCALLOP, <i>PLACOPECTEN MAGELLANICUS</i> <b>Clark*, Roman, Mann, Redmond, Rudders</b>
12:00-1:00 PM	<b>LUNCH BREAK</b>			

\* denotes student presenter

<sup>p</sup> denotes non first-author presenter

**THURSDAY**  
**April 2<sup>nd</sup> 2020**

<b>ROOM</b>	<b>International A</b>	<b>International B</b>	<b>International C</b>	<b>Carroll</b>
<b>SESSION TITLE</b>	<b>SHELLFISH DISEASES Roxanna Smolowitz &amp; Ryan Carnegie</b>	<b>HATCHERIES Don Webster</b>	<b>SPATIAL PLANNING Ken Riley &amp; Robert Isdell</b>	<b>COMMERCIAL SHELLFISHERIES Kevin Stokesbury &amp; David Rudders</b>
1:00 PM	AN UPDATE CONCERNING THE ONGOING RESEARCH AND OCCURRENCE OF NEOPLASIA AND QPX IN NORTHERN QUAAHOGS (= HARD CLAMS) OF MASSACHUSETTS IN 2019 <b>Smolowitz, Gourlay, Reitsma, Murphy</b>	OPTIMIZING NITROGEN IN MICROALGAL MEDIA FOR USE AS LIVE FEEDS <b>Mitchell, Nunez, Rhyne</b>	ATLANTIC AND GULF SHELLFISH SEED BIOSECURITY COLLABORATIVE: SHELLFISH DISEASE HEALTH DATABASE <b>Marxen, Rowe, Bushek, Carnegie, Walton, Calvo, Hudson, Rheault, La Peyre, Pollack, Sturmer, Gustafson</b>	THE SCALLOP FISHERY AND THE DEVELOPING WINDFARM INDUSTRY ON THE NORTH EAST CONTINENTAL SHELF OF NORTH AMERICA <b>Stokesbury, Bethoney</b>
1:15 PM	COMPLETING THE LIFE CYCLE OF QPX: EVIDENCE OF ZOOSPORES AND DESCRIPTION OF A NEW REPLICATION PATHWAY <b>Brianik*, Geraci-Yee, Allam</b>	HATCHERIES DON'T HAVE TO BE COMPLICATED: KEEPING IT SIMPLE <b>Karney</b>	A SCIENCE-BASED MODEL TO ESTIMATE WATER QUALITY BENEFITS OF SHELLFISH BEDS TO INFORM RESTORATION PRIORITIZATION AND PROJECT DESIGN <b>Moody, Kreeger, Beal, Bouboulis</b>	THE DISAPPEARANCE OF NEARLY 2 BILLION SCALLOPS <b>Bethoney, Stokesbury</b>
1:30 PM	TAKING THE "X" OUT OF QPX (QUAAHOG PARASITE UNKNOWN), A PARASITE OF THE NORTHERN QUAAHOG (= HARD CLAM) <i>MERCENARIA MERCENARIA</i> <b>Geraci-Yee*, Collier, Allam</b>	HATCHERIES DON'T HAVE TO BE COMPLICATED: DEVELOPMENT FOR A NEW SPECIES <b>Scarpa, Sturmer</b>	SPATIAL DATA AND METHODS USED IN PLANNING LARGE-SCALE OYSTER RESTORATION IN THE CHESAPEAKE BAY <b>Bruce, Lazar, McGowan, Westby</b>	UTILIZING TIME-LAPSE IMAGERY TO QUANTIFY POST-TRANSPLANT SCALLOP BEHAVIOR <b>Alexander, Siemann, Smolowitz</b>
1:45 PM	ENVIRONMENTAL ABUNDANCE OF <i>PERKINSUS MARINUS</i> IN THE YORK RIVER, VIRGINIA, USA <b>Bienlien*, Carnegie</b>	HATCHERIES DON'T HAVE TO BE COMPLICATED: THE CEDAR KEY SEED MODEL <b>Sturmer</b>	A GEOSPATIAL ASSESSMENT OF PRODUCTIVITY TO DESIGNATE ALTERNATIVE USES OF PUBLIC BAYLOR GROUNDS IN SUPPORT OF AQUACULTURE EXPANSION IN VIRGINIA, USA <b>Berman, Mann, Wesson, Southworth, Rudnick</b>	SELECTIVITY OF TWO COMMERCIAL DREDGES FISHED IN THE NORTHWEST ATLANTIC SEA SCALLOP FISHERY <b>Roman, Rudders</b>
2:00 PM	THE DISEASE DIAGNOSTIC DILEMMA: THE USE OF A NOVEL TESTING METHOD FOR DETERMINING <i>CRASSOSTREA VIRGINICA</i> DISEASE PREVALENCE AND INTENSITY <b>Gourlay, Scro, Neil, Lundgren, Smolowitz</b>	A HATCHERY CERTIFICATION PROGRAM FOR THE INTERSTATE TRANSFER OF SHELLFISH SEED <b>Calvo, Hudson, Bushek, Carnegie, Gustafson, Rheault, Marxen</b>	THE RISE OF SPATIAL INTELLIGENCE FOR PIONEERING AQUACULTURE DEVELOPMENT <b>Riley, Wickdiffe, Jossart, Guajardo, Morris, Jr.</b>	SHIFTING PHENOLOGY OF COMMERCIAL WHITE SHRIMP LANDINGS IN SOUTH CAROLINA, U.S.A: THE ROLES OF SHRIMP MIGRATION AND CLIMATE <b>Kendrick, Brunson, Dukes, Kingsley-Smith</b>
2:15 PM	PREVALENCE AND INTENSITY OF THREE OYSTER PARASITES ( <i>PERKINSUS MARINUS</i> , <i>HAPLOSPORIUM NELSON</i> , AND <i>BONAMIA</i> SP.) IN WILD AND CULTURED OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) ON AN OYSTER FARM IN SOUTHEASTERN NORTH CAROLINA, USA <b>Varney, Wilbur</b>		PALAUAN AQUACULTURE: SPATIAL ANALYSIS INFORMS SITING, DEVELOPMENT, AND MANAGEMENT IN A SMALL ISLAND DEVELOPING STATE <b>Theuerkauf, Victor, Waters, Aulerio, Cuertos-Bueno, Jones</b>	REFINING REPRODUCTIVE ASSESSMENT PROTOCOLS TO BETTER INFORM MANAGEMENT OF THE SOUTH CAROLINA WHITE SHRIMP ( <i>PENAEUS SETIFERUS</i> ) FISHERY <b>Brunson, Wagner, Gooding, Kendrick, Kingsley-Smith</b>
2:30 PM	FINDING A FOCUS ON SUMMER MORTALITY IN OYSTERS <b>Carnegie</b>		LARGE-SCALE PLANNING OF FISH AND SHELLFISH FARMING IN NOVA SCOTIA <b>Grant, Filgueira, Ferreira, Koepke</b>	EVALUATION OF LIFE HISTORY AND REPRODUCTIVE TIMING OF WAVED WHELK ( <i>BUCCINUM UNDATUM</i> ) ON THE U.S. MID-ATLANTIC CONTINENTAL SHELF <b>Borsetti*, Bochenck, Rudders, Dobson, Chang, Munroe</b>
<b>SESSION TITLE</b>	<b>SHELLFISH DISEASES Roxanna Smolowitz &amp; Ryan Carnegie</b>		<b>PLANNING INITIATIVES TO GROW AQUACULTURE Kim Thompson</b>	
2:45 PM	MECHANISMS OF EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , HEMOCYTES APOPTOSIS IN RESPONSE TO INFECTION WITH <i>PERKINSUS MARINUS</i> <b>Roberts*, Wikfors, Proestou, Markey-Lundgren, Sullivan, Gomez-Chiarri</b>		ALASKA MARICULTURE INITIATIVE – PHASE 2: IMPLEMENTATION OF THE 20-YEAR COMPREHENSIVE PLAN AND BUILDING INDUSTRY MOMENTUM <b>Decker</b>	
3:00 PM	REVISITING THE ROLE OF COPPER AND ZINC IN ANTIMICROBIAL DEFENSES OF EASTERN OYSTERS <b>Fisher</b>		THE MASSACHUSETTS SHELLFISH INITIATIVE: THE PROCESS OF DEVELOPING A HOLISTIC STATE-WIDE SHELLFISH MANAGEMENT PLAN <b>Kirk, Sanderson, Soares, Schillaci, McNally, Sherman</b>	
3:15 PM	DEVELOPMENT OF GENOMIC TOOLS TO STUDY THE RESISTANCE OF <i>OSTREA EDULIS</i> TO ITS PARASITES IN THE CONTEXT OF GENETIC SELECTION AND OYSTER RESTORATION <b>Boutet, Lallier, Toullec, Andersen, Bonnivard, Salaun, Gonzales-Araya, Chevalier, Farhat, Espinosa, Allam, Guo, Takeuchi, Koszul, Marbouty, Baudry, Tanguy<sup>P</sup></b>		RELATIONSHIPS BETWEEN SCIENCE, POLICY, AND POLITICS IN THE EFFECTIVE DEVELOPMENT OF SHELLFISH AQUACULTURE <b>Webster</b>	
3:30 PM			PUBLIC PRESENTATIONS AND THEIR INFLUENCE ON AQUACULTURE OPINIONS <b>Scarpa</b>	
3:45 PM			COLLABORATIVE COMMUNICATION STRATEGIES TO SUPPORT GROWTH AND DEVELOPMENT OF US MARINE AQUACULTURE <b>Thompson</b>	
4:00 – 5:00 PM	<b>CLOSING HAPPY HOUR International D &amp; E</b>			

\* denotes student presenter

<sup>P</sup> denotes non first-author presenter