

MONDAY March 18, 2024					
6:30-7:45AM	STUDENT MENTOR-MENTEE BREAKFAST (NSA STUDENT MEMBERS ONLY – <i>Advanced sign up will be required</i>) Symphony Foyer				
8:00-9:10AM	PLENARY: Dianna Padilla (Stony Brook University) - <i>Gastropods - the other shellfish</i> Symphony V-VI-VII				
NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Symphony I					
ROOM	Symphony II	Symphony III	Symphony V	Symphony VI	Symphony VII
SESSION TITLE	UNDERGRADUATE RESEARCH COLLOQUIUM Ed Catapane & Margaret Carroll	GENETICS, GENOMICS & BREEDING Louis Plough	OYSTERS Bill Fisher	SHELLFISH AQUACULTURE ECONOMICS, RISKS & INSURANCE REFORM Nicole Kirchhoff & Angela Collins	SHRIMP ENCODE Acacia Alcivar-Warren & Kathy Tang-Nelson
9:15AM	PRESENCE OF GLUTAMATE NEURONS AND GLUTAMATE RECEPTORS IN GANGLIA OF THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> Pierre* , Wallach , Foster , Catapane , Carroll	SITE-SPECIFIC DIFFERENCES IN UPPER THERMAL TOLERANCE AND TRANSCRIPTOMIC RESPONSES OF ATLANTIC CANADIAN BLUE MUSSELS (<i>MYTILUS EDULIS</i>) Ignatz , Clarke , Hori , Comeau , Filgueira	EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , POPULATION GENOMICS IN A WELL-MIXED ESTUARINE SYSTEM (GREAT BAY ESTUARY, NEW HAMPSHIRE, USA) Stasse* , Brown	THIS WORKSHOP WILL INTRODUCE THE CONCEPT OF ENTERPRISE BUDGETS, EVALUATE RISKS THE INDUSTRY FACES WHEN DOING BUSINESS, AND DISCUSS WAYS THE INDUSTRY MAY BE SUPPORTED TO ENSURE THEIR FINANCIAL SUCCESS IN THE FUTURE.	SHRIMP GENOMICS AND EPIGENOMES (SHRIMPENCODE): RECOGNITION TO STUDENTS AND "2024 YOUNG OUTSTANDING ONE HEALTH RESEARCHERS IN AQUACULTURE AND FISHERIES" AWARDS Alcivar-Warren , Tang-Nelson
9:30AM	A NEUROPHYSIOLOGICAL ROLE OF GLUTAMATE IN GANGLIA OF THE BIVALVE <i>CRASSOSTREA VIRGINICA</i> Obianke* , Myrbel , Carroll , Catapane	TRANSGRESSIVE GENE EXPRESSION AND EXPRESSION PLASTICITY UNDER THERMAL STRESS IN HYBRID <i>MYTILUS</i> MUSSELS Schwartz , González , Strong , Truebano , Hilbish	ONTOGENETIC STAGE INFLUENCES ON SURVIVORSHIP DISPARITY BETWEEN DIPLOID AND TRIPLOID EASTERN OYSTERS Brianik* , Rivara , Patricio , Proestou , Liu , Topping , Jamieson , Ratcliff , Guo , Pales Espinosa , Allam		PUTATIVE ENDOGENOUS VIRAL ELEMENTS (EVE) IDENTIFIED IN THREE WHOLE REFERENCE GENOME ASSEMBLIES AVAILABLE FOR THE PACIFIC WHITELEG SHRIMP, <i>PENAEUS VANNAMEI</i> Yuan , Alcivar-Warren
9:45AM	6-HYDROXYDOPAMINE TREATMENT CAUSES SUPERSENSITIVITY OF DOPAMINE D2R RECEPTORS IN GILL LATERAL CELLS OF <i>CRASSOSTREA VIRGINICA</i> Cayemitte* , Saqib , Carroll , Catapane	SIGNATURES OF POSITIVE SELECTION TO OCEAN ACIDIFICATION RESILIENCE IN LARVAL MEDITERRANEAN MUSSELS <i>MYTILUS GALLOPROVINCIALIS</i> Chancellor* , Churches , Kim , Jacobson , Nuzhdin	GROWTH AND SURVIVAL OF TETRAPLOID EASTERN OYSTERS, <i>CRASSOSTREA VIRGINICA</i> , IN DIFFERENT SALINITY ENVIRONMENTS IN THE GULF OF MEXICO Capps , Rikard , Spellman , Chaplin		FIC DOMAIN-CONTAINING ENZYME GENES IN INVERTEBRATES: A TALE OF TRANSPOSONS, PATHOGENIC, AND INTEGRATED VIRUSES Kawato , De Felice , Frizzo , Wegner , Rosani
10:00AM	COMPARISON OF THE NEUROTOXIC ACTIONS OF 6-HYDROXYDOPAMINE AND MANGANESE ON GILL LATERAL CELL DOPAMINE D2R RECEPTORS OF <i>CRASSOSTREA VIRGINICA</i> Small* , Wilson , Joseph , Carroll , Catapane	THE HOLOGENOME OF THE CHILEAN BLUE MUSSEL, <i>MYTILUS CHILENSIS</i> , EXPOSED TO HYPOXIA Gallardo-Escárate , Valenzuela-Muñoz , Roberts	THE EFFECTS OF WATER CHEMISTRY ON THE SURVIVAL AND GROWTH OF EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , LARVAE IN CULTURE Hall* , Gima , Hu , Blaylock		ISSUES RELATED TO THE DELISTING OF INFECTIOUS HYPODERMAL AND HEMATOPOIETIC NECROSIS (IHNN) AS A NOTIFIABLE DISEASE BY THE WORLD HEALTH ORGANIZATION FOR ANIMAL HEALTH (WHO) Tang , Alcivar-Warren
10:15AM	WESTERN BLOT STUDY OF THE NEUROTOXIC EFFECTS OF MANGANISM AND PARKINSON'S DISEASES Mansfield* , Acheampong , Foster , Carroll , Catapane	GENOME SEQUENCING REVEALS GENOMIC BASIS FOR DOMESTICATION AND ENVIRONMENTAL ADAPTATION IN KUMAMOTO OYSTERS, <i>CRASSOSTREA SIKAMEA</i> Liu , Liu , Guo , Itoh , Chang , Lin , Xue	ECOLOGICAL ASSESSMENT OF ENVIRONMENTAL HEALTH AND OYSTER AQUACULTURE GROW-OUT CONDITIONS IN REHOBOTH BAY, DELAWARE Andrade* , Attarwala , Ramos , Parsaeimehr , Ozbay		ENDOGENOUS VIRUS ELEMENTS (EVE) OF INFECTIOUS HYPODERMAL AND HEMATOPOIETIC NECROSIS VIRUS (IHNNV-EVE) IN THE GENOMES OF <i>PENAEUS VANNAMEI</i> AND <i>P. MONODON</i> : INTERACTIONS WITH TRANSPOSABLE ELEMENTS Asuncion* , Alday-Sanz , Tang , Galindo , Alcivar-Warren
10:30-11:00AM	MORNING BREAK				
SESSION TITLE	SHELLFISH & CARBON SEQUESTRATION WORKSHOP Max Zavell & Ramon Filgueria	GENETICS, GENOMICS & BREEDING Louis Plough	OYSTERS Bill Fisher	SHELLFISH AQUACULTURE ECONOMICS, RISKS & INSURANCE REFORM Nicole Kirchhoff & Angela Collins	SHRIMP ENCODE Acacia Alcivar-Warren & Kathy Tang-Nelson
11:00 AM		ASSESSING THE EVOLUTIONARY RESPONSE OF THE EASTERN OYSTER TO EXPOSURE TO COASTAL ACIDIFICATION AND SEWAGE EFFLUENT: A CASE STUDY Puritz , Zyck , Harvey , Lotterhos	ACUTE AND LONG-TERM RESPONSES OF JUVENILE OYSTERS TO DYNAMIC MULTIPLE COASTAL STRESSORS Guidry* , Randall , Puritz		REPETITIVE ELEMENTS FROM THE FIRST SPECIFIC PATHOGEN-FREE (SPF) SHRIMP, <i>PENAEUS VANNAMEI</i> , PRODUCED IN THE UNITED STATES Alcivar-Warren , Bao , Yuan , Guo , Karoonuthaisiri , Uengwetwanit , Sittikankaew , Asunción , Alcivar-Arteaga
11:15 AM		COMPREHENSIVE GENOMIC ANALYSIS OF <i>ARGOPECTEN IRRADIANS</i> ACROSS THE UNITED STATES: REVEALING POPULATION DIVERSITY AND EVOLUTIONARY HISTORY Grouzdev , Pales Espinosa , Tettelbach , Tobi , Goodheart , Hollenbeck , Wilbur , Allam	INTERACTING CLIMATE CHANGE STRESSORS AND CARRYOVER EFFECTS IN OYSTERS McDonough* , Donelan , Miller , Gignoux-Wolfsohn		DNA TRANSPOSONS FROM THE FIRST SPECIFIC PATHOGEN-FREE (SPF) SHRIMP, <i>PENAEUS VANNAMEI</i> , PRODUCED IN THE UNITED STATES Bao , Alcivar-Warren , Yuan , Guo
SESSION TITLE		SHELLFISH & CARBON SEQUESTRATION WORKSHOP Max Zavell & Ramon Filgueria	GENETICS, GENOMICS & BREEDING Louis Plough		OYSTERS Bill Fisher
11:30 AM		EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) CIS-DEFENSIN ANTIMICROBIAL PEPTIDES: GENE STRUCTURE, EXPRESSION, AND DIVERSITY Hanna* , Flora , Kuldell , Drawec , Krause	THE PROS AND CONS OF LONG-TERM DATASETS: A CASE STUDY OF EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) REPRODUCTION IN SOUTH FLORIDA ESTUARIES Levine , Geiger , Kirby		MANGROVE SHELLFISH: FROM CARBON STORAGE TO EPIGENETICS: RECOGNITION TO STUDENTS AND "2024 OUTSTANDING ONE HEALTH RESEARCHERS IN AQUACULTURE AND FISHERIES" AWARDS Alcivar-Warren , Tome
11:45 AM		IMMORTALIZED MARINE INVERTEBRATE CELL LINES FOR BIOMEDICINE AND BIOTECHNOLOGY Davis	A CONTROLLED FLOW-THROUGH SYSTEM FOR STUDYING THE EFFECTS OF OCEAN ACIDIFICATION ON BIVALVE LARVAE Hainey* , Zinck , Jennings , Fleener , Langdon		WHAT IS ROTARY AND HOW DOES ROTARY WORK FOR SHELLFISH? Puttock
12:00 NOON		DIRECT MEASUREMENT AND GENETIC PARAMETER ESTIMATION OF DERMAL RESISTANCE TRAITS IN AN EASTERN OYSTER BREEDING POPULATION Proestou , Delomas , Small	<i>IN SITU</i> VALVE OPENING RESPONSE OF EASTERN OYSTERS TO ESTUARINE CONDITIONS Lavaud , Archer , La Peyre , Campanino , Casas , La Peyre		
12:15 PM	SELECTION RESPONSE OF GULF OF MEXICO EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) BRED FOR PERFORMANCE IN LOW SALINITY ENVIRONMENTS King* , Yang , Sturmer , Hollenbeck , Stoeckel , Rikard , Gima , Stannard , Lucas , Buckmaster , Akter , Tarnecki , Saillant	MACHINE LEARNING AND COMPUTER VISION TECHNIQUES TO IDENTIFY AND MONITOR OSTREIDAE NONDISRUPTIVELY Mekovsky* , Emmert , Rudy			
12:30-1:30 PM	LUNCH BREAK				

* denotes student presenter

^p denotes non first-author presenter

**MONDAY
March 18, 2024**

**NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY
Symphony I**

ROOM	Symphony II	Symphony III	Symphony V	Symphony VI	Symphony VII
SESSION TITLE	SHELLFISH MICROBOMES Rachel Diner & Tyler Griffin	GENETICS, GENOMICS & BREEDING Louis Plough	OYSTERS Bill Fisher	SHELLFISH AQUACULTURE ECONOMICS, RISKS & INSURANCE REFORM Nicole Kirchoff & Angela Collins	MANGROVE SHELLFISH Acacia Alcivar-Warren & Karin Tome
1:30 PM	SHELLFISH MICROBIOMES: CHALLENGES AND OPPORTUNITIES FOR AQUACULTURE AND ECOLOGY Diner, Griffin	SUMMER MORTALITY IN 2N AND 3N VIRGINIA- AND NORTH CAROLINA-DERIVED OYSTER LINES Small, Audemard, Ciesielski, Noble, Reece, Wilbur, Ben-Horin	A COMPARISON OF SETTLEMENT PLATE MATERIAL FOR MONITORING OYSTER SPAT RECRUITMENT Capps, Rikard	THIS WORKSHOP WILL INTRODUCE THE CONCEPT OF ENTERPRISE BUDGETS, EVALUATE RISKS THE INDUSTRY FACES WHEN DOING BUSINESS, AND DISCUSS WAYS THE INDUSTRY MAY BE SUPPORTED TO ENSURE THEIR FINANCIAL SUCCESS IN THE FUTURE.	THE MANGROVE EPIGENOME (MANGROVEENCODE) PROJECT: A ONE HEALTH APPROACH TO CONSERVING MANGROVE BIODIVERSITY Alcivar-Arteaga, Lopez, Galindo, Asunción, Hernandez, Espinoza, Figueroa, Alcivar-Marcillo, Alcivar-Marcillo, Alemán, Alcivar-Parrales, Alcivar-Parrales, Alcivar-Loor, Alarcon-Mieles, Alcivar-Herrera, Calvo, Alcivar-Loor, Ortega, Alcivar-Arteaga, Nicolalde, Echevarria, Mishra, Chinniah, Ikeogu, Aveiga, Henry, McClennen, Mejia, Aveiga, Hall, Alejandro-Tigrero, Alejandro-Rosales, Alcivar-Warren
1:45 PM	A BIOINFORMATIC SEARCH FOR VIRUSES IN THE BLUE CRAB, <i>CALLINECTES SAPIDUS</i> , ACROSS THE U.S. GEOGRAPHICAL RANGE OF THE SPECIES Herrera*, Bachvaroff, Geba, Schott	COMPARATIVE PERFORMANCE OF TRIPLOID OYSTERS, PRODUCED BY CHEMICAL INDUCTION AND MATED TRIPLOID TECHNIQUES, TO THEIR DIPLOID COUNTERPARTS Vignier, Reardon, Exton, Rolton, Delisle, Malpot, Scholtens, Welford, Zamora, Ragg, Dunphy, Adams	ADVANCES IN OYSTER PRIMARY CELL AND ORGAN CULTURES Sullivan*, Morrison, Steketee, Regan, Bean		AN ESTIMATE OF CARBON STORAGE CAPABILITIES OF WILD AND CULTURED SHELLFISH IN THE NORTHWEST ATLANTIC AND THEIR POTENTIAL INCLUSION IN A CARBON ECONOMY Zavell*, Lindahl, Filgueira, Shumway
2:00 PM	SELECTIVE CAPTURE OF PROKARYOTES BY MUSSELS AND ASCIDIANS AS DETERMINED THROUGH MICROBIOME SEQUENCING IN INHALANT AND EXHALANT WATERS Griffin*, Capriotti, Dadon-Pilosof, Holohan, Yahel, Shumway, Ward	EVALUATION OF THE 2022-YEAR CLASS EASTERN OYSTERS SELECTED FOR DISEASE RESISTANCE AND FAST GROWTH Ratcliff, Jamieson, Wang, Chriss, Tyburski, Abrams, Luu, Martindale, Huntzinger, Sabol, Gabris, O'Hala, Stucki, Coyne, Guo	THE OYSTER CONSERVATIONIST PROGRAM: A COMMUNITY SCIENCE EFFORT IN GREAT BAY, NEW HAMPSHIRE Arlen		IDENTIFICATION OF NEW <i>VIBRIO CAMPBELLII</i> STRAINS HARBORING THE PVA1 PLASMID ISOLATED FROM <i>PENAEUS VANNAMEI</i> POST-LARVAE AFFECTED BY OUTBREAKS OF ACUTE HEPATOPANCREATIC NECROSIS DISEASE (AHPND) IN MEXICO Soto-Rodriguez, Gomez-Gil, Lozano-Olvera, Aguilar-Rendón, González-Gómez*^P
2:15 PM	CHARACTERIZING THE TISSUE-SPECIFIC RESIDENT AND TRANSIENT MICROBIAL COMMUNITIES OF THE QUAGGA MUSSEL, <i>DREISSENA BUGENSIS</i> Collins*, Griffin, Ward	GENOMIC SELECTION FOR GROWTH TRAITS OF THE EASTERN OYSTER IN EAST MAINE Beal, Liu*, Pepperman, Wolfe-Bryant	USING THE DRIVER-PRESSURE-STATE-IMPACT-RESPONSE (DPSIR) FRAMEWORK TO SUPPORT SUSTAINABLE AND HEALTHY OYSTER PRODUCTION IN MISSISSIPPI Pruett, Fisher, Bernard, Darnell		PROTECTING FRESHWATER ECOSYSTEMS: A ROTARY INTERNATIONAL PARTNERSHIP WITH THE UNITED NATIONS ENVIRONMENT PROGRAMME Rico
2:30 PM	VARIABLE TO THEIR CORE: BIVALVE MICROBIOMES HAVE CORE BACTERIA BUT ARE ALTERED BY ENVIRONMENT Gignoux-Wolfsohn, Ruiz, Barron, Ruiz, Lohan	GENOMIC SELECTION FOR DERMO RESISTANCE IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> Wang*, Casas, La Peyre, Williams, Tarnecki, Rikard, Bushek, Guo	USING AN OBJECTIVES HIERARCHY TO SUPPORT SUSTAINABLE AND HEALTHY OYSTER PRODUCTION IN MISSISSIPPI Fisher, Pruett, Bernard, Darnell		TIME TO INTEGRATE THE "ONE HEALTH APPROACH" INTO ENDOCRINE DISRUPTING CHEMICALS (EDC) RESEARCH Alcivar-Marcillo*, Alcivar-Parrales, Figueroa-Alemán, Alcivar-Marcillo, Galindo, Hernandez, Asunción, Ortega, Lopez-Zavala, Alcivar-Arteaga, Nicolalde, Alcivar-Loor, Alcivar-Warren
2:45 PM	CAN MICROBIOME DATA BE USED TO IMPROVE PREDICTIVE MODELS OF CRITICAL ESTUARINE HABITATS? A CASE STUDY IN CHESAPEAKE BAY Gnanadesikan, Arora-Williams, Holder, Jin, Yisrael, Zhang, Preheim	OYSTER SURVIVAL IN RESPONSE TO A LABORATORY CHALLENGE WITH <i>PERKINSUS MARINUS</i> IS A POLYGENIC TRAIT Delomas, Proestou, Small	OYSTER INSURANCE OPTIONS FROM USDA RISK MANAGEMENT AGENCY Sereno, Olive, Wilkin, Place, White		
3:00 – 3:30 PM	AFTERNOON BREAK				
SESSION TITLE	NORTHEAST BIVALVE HATCHERY HEALTH CONSORTIUM Marta Gomez-Chiarri & Rob Hudson	GENETICS, GENOMICS & BREEDING Louis Plough		DIVERSITY, EQUITY & INCLUSION Aswani Volety & Angela Caporelli	MANGROVE SHELLFISH Acacia Alcivar-Warren & Karin Tome
3:30 PM	THE OBJECTIVES FOR THIS CONSORTIUM ARE: (1) IDENTIFY THE CAUSES OF BIVALVE HATCHERY LARVAL MORTALITIES AND CRASHES ALONG THE EAST COAST OF THE U.S. THROUGH AN INTEGRATED, COLLABORATIVE, AND PROACTIVE APPROACH TO SAMPLE COLLECTION AND ANALYSIS; AND (2) DEVELOP STRATEGIES AND PROTOCOLS TO MANAGE AND MINIMIZE LARVAL CRASHES IN HATCHERIES.	GENETIC IMPROVEMENT OF THE EASTERN OYSTER AND PROSPECTS OF GENOMIC SELECTION Guo, Ratcliff, Wang, Jamieson, Liu, Chriss, McGurk, Burt, Bushek		PRIMING THE PUMP AND CREATING PIPELINES: EXAMPLE OF INCREASING UNDER-REPRESENTED STUDENTS TO STEM AREAS AT A STATE UNIVERSITY Volety, Roseboro, Loh	TRACE METAL CONCENTRATIONS IN <i>PENAEUS VANNAMEI</i> FROM ECUADOR AND EL SALVADOR, AND A REVIEW OF METALS AND PESTICIDES CONTAMINATING MANGROVE SEDIMENT AND RED MANGROVE CRABS (<i>UCIDES OCCIDENTALIS</i>) AT THE GUAYAS ESTUARY OF ECUADOR Aveiga*, De Cock, Alcivar-Arteaga, Henry, Astrofsky, Alcivar, McClennen, Figueroa, Espinosa, Alcivar-Warren
3:45 PM		SINGLE NUCLEOTIDE POLYMORPHISMS (SNP) GENOTYPING TOOLS AND THEIR APPLICATION IN SHELLFISH BREEDING PROGRAMS: PEDIGREE MANAGEMENT TO GENOMIC SELECTION Allen, Verbyla, Stannard, Plouffe, Cerezo^P		AQUACULTURE IN THE MIDST OF SOCIAL CHANGE Caporelli	
4:00 PM		TIME FOR A CHECK-UP: COMPARING LEVELS OF GENETIC DIVERSITY AND INBREEDING AMONG HATCHERY LINES WITH OFFSPRING FROM WILD POPULATIONS OF EASTERN OYSTERS (<i>CRASSOSTREA VIRGINICA</i>) Varney, Katsuki, Lotterhos, Small			THE ROLE OF PROBIOTICS IN SHRIMP AQUACULTURE: A COMPREHENSIVE REVIEW IN THE ECUADORIAN CONTEXT López-Zavala*, Asuncion, Galindo, Alcivar-Arteaga, Alcivar-Warren
4:15 PM		DEVELOPMENT OF A MICROHAPLOTYPE-BASED GENOTYPING PANEL FOR AQUACULTURE, RESTORATION, AND FISHERIES MANAGEMENT FOR <i>CRASSOSTREA VIRGINICA</i> Weber*, Matt, Delomas, Portnoy, Hollenbeck		DIVERSITY, EQUITY, AND INCLUSION IN THE OYSTER AQUACULTURE AND RESTORATION SPACE Foster, Altagracia, Waters, Greenberg	SHRIMP SCAMPI: A CITIZEN SCIENCE PROJECT - EDUCATING ABOUT MICROBES AND HORMONE DISRUPTORS LIKE METALS AND GLYPHOSATE IN SHRIMP USING FOLDSCOPIES Hernandez*, Warren, Alcivar-Arteaga, Warren, Diaz, Figueroa-Zambrano, Reyes, Alcivar-Warren
4:30 PM		MICROHAPLOTYPES BOOST POWER FOR RELATEDNESS ANALYSIS FROM SNP-BASED AMPLICON SEQUENCE PANELS IN THE PACIFIC OYSTER Thompson, Sutherland, Green, Delomas			CITIZEN SCIENCE APPROACH TO MITIGATE THE EFFECTS OF HARMFUL ALGAL BLOOMS IN COSTA RICA Morton, Vanopdenbosch, Shumway
4:45 PM		OPTIMIZATION OF LOW-DENSITY SNP PANELS FOR GENOTYPE IMPUTATION IN OYSTERS Hollenbeck			
5:00 PM		METHODS AND RESULTS OF APPLYING LOW-COST GENOMIC TOOLS FOR SELECTIVE BREEDING OF <i>CRASSOSTREA VIRGINICA</i> IN TEXAS Matt, Weber, Portnoy, Hollenbeck			WORKSHOP: HOW TO WRITE EFFECTIVE GLOBAL GRANTS FOR FUNDING BY ROTARY INTERNATIONAL Puttock, Tome
5:15 PM					
5:30 PM					

* denotes student presenter

^P denotes non first-author presenter

TUESDAY
March 19, 2024

PLENARY: – Jeanne Serb (Iowa State University) - *Seeing the light, tasting the ocean: how bivalves sense their environment*
Symphony V-VI-VII

NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY
Symphony I

ROOM	Symphony II	Symphony III	Symphony V	Symphony VI	Symphony VII
SESSION TITLE	DISEASE David Bushek, Ryan Carnegie & Tal Ben-horin	ROBOTICS & EMERGING TECHNOLOGY Allen Pattillo & Yang Tao	CLIMATE CHANGE, OCEAN ACIDIFICATION & MODELLING Eric Powell & Roger Mann	SHELLFISH REPRODUCTION Kaitlyn Kowaleski	GENERAL CONTRIBUTED I Paul Rawson
9:15AM	NEW INSIGHTS INTO THE LIFE HISTORY OF <i>HEMATODINIUM PEREZI</i> (DINOFLAGELLATA: SYNDINIALES) IN JUVENILE BLUE CRABS (<i>CALLINECTES SAPIDUS</i>) Chen*, Reece, Shields	STREAM – A SATELLITE-BASED WATER-QUALITY MONITORING SYSTEM FOR EFFECTIVE ASSESSMENT OF AQUACULTURE OPERATIONS Pahlevan, Wainwright, Ashapure, Golpayegani, Ashapure, Smith, O’Shea, Kabir, Saranathan	PROJECTED RANGE SHIFT OF THE ATLANTIC SURFLAM, <i>SPISULA SOLIDISSIMA</i> , FROM CLIMATE-INDUCED BENTHIC WARMING: FORECASTING FISHERY INFLUENCE IN THE MID-ATLANTIC BIGHT THROUGHOUT THE 21 ST CENTURY Spencer*, Powell, Klinck, Munroe, LeClair, Scheld, Hofmann, Borsetti, Curchitser	GONADS AND GOURMET: UNVEILING FARMED SCALLOP’S PLUMP TREASURES AND AQUACULTURE’S BOUNTY POTENTIAL Jekielek*, Williams, Maier, Martin, Leslie, Price, Hopple	RAZOR CLAM GROWTH RATES IN RELATION TO SEDIMENT TYPE Harris*, Morse, St. Gelais, Rawson
9:30AM	DYNAMICS OF BAY SCALLOP MAROSPORIDA (BSM) IN THE HOST AND ENVIRONMENTAL SAMPLES FROM THE PECONIC BAYS, NEW YORK Cacot, Pales Espinosa, Mannino, Trainer, Snyder, Tettelbach, Tobi, Allam	ASSESSING THE FEASIBILITY OF RENTING SMART SUSTAINABLE SHELLFISH AQUACULTURE MANAGEMENT (S ³ AM) AS A SERVICE FOR SMALL OYSTER FARMS Ojha*, van Senten	THE FUTURE OF FISHERIES AND RENEWABLE ENERGY: MODELING POTENTIAL IMPACTS OF U.S. OFFSHORE WIND ENERGY DEVELOPMENT ON THE ATLANTIC SURFLAM, <i>SPISULA SOLIDISSIMA</i> , FISHERY IN THE MID-ATLANTIC BIGHT Moya*, Powell, Munroe, Scheld, Klinck, Hofmann, Borsetti, Curchitser, Spencer	EXTREME POPULATION DENSITIES IMPACT OOCYTE PRODUCTION IN ATLANTIC SEA SCALLOPS, <i>PLACOPECTEN MAGELLANICUS</i> Kowaleski*, Roman, Mann, Rudders	GROWTH AND SURVIVAL OF TRANSPLANTED SOFTSHELL CLAMS (<i>MYA ARENARIA</i>) DURING A WINTER GROW-OUT PERIOD IN THE YORK RIVER, VIRGINIA Schoenberg*, Knick, Seebo, Seitz
9:45AM	EFFECT OF CHRONIC TEMPERATURE ALTERATIONS ON DISEASE DEVELOPMENT AND MORTALITY IN THE NORTHERN BAY SCALLOP, <i>ARGOPECTEN IRRADIANS</i> Trainer*, Tobi, Dominguez, Cacot, Pales Espinosa, Tettelbach, Allam	HIGH-PRESSURE PROCESSING (HPP) AS AN EMERGING TECHNOLOGY: MICROBIAL AND PHYSICO-CHEMICAL EFFECTS ON PRECOOKED BLUE CRAB MEAT Liu, Bhetwal, Min, Nindo	CROSS-GENERATIONAL EFFECTS OF OCEAN ACIDIFICATION ON A THIRD GENERATION OF BAY SCALLOPS McFarland, Gurr, Padilla, Bernatchez, Dixon, Guy, Milke, Poach, Hart, Plough, Redman, Sennfelder, Stiles, Veilleux, Wikfors, Meseck	UNDERSTANDING REPRODUCTIVE DEVELOPMENT IN FEMALE WHITE SHRIMP, <i>PENAEUS SETIFERUS</i> , IN SUPPORT OF SUSTAINABLE FISHERIES MANAGEMENT IN SOUTH CAROLINA, USA Mitchell*, Wagner, Brunson, Kingsley-Smith, Kendrick	THERMAL TOLERANCE OF <i>MERCENARIA</i> SPP. DURING A SIMULATED MARINE HEATWAVE IN SOUTHWEST FLORIDA, USA Hutchins, Sea, Hesterberg
10:00AM	COMPARISON OF <i>PERKINSUS MARINUS</i> AND <i>HAPLOSPORIUM NELSONI</i> PREVALENCE AND INTENSITY IN OYSTERS ACROSS FOUR SITES ON SAPELO ISLAND, GEORGIA Atencio*, Ziegler, Carroll	EFFECTS OF HIGH-PRESSURE PROCESSING (HPP) ON THE SENSORY QUALITY AND CONSUMER ACCEPTABILITY OF PRECOOKED READY-TO-EAT (RTE) ATLANTIC BLUE CRAB MEAT Liu, Nash, Watts, Takacs, Feng, Nindo	MULTISTRESSOR LABORATORY EXPERIMENTS WITH THE ATLANTIC SURFLAM (<i>SPISULA SOLIDISSIMA</i>): OCEAN WARMING AND ACIDIFICATION Steeves, Honecker, Meseck, Guo, Towers, Munroe	SALINITY AND FOOD SUPPLY INFLUENCE OYSTER LARVAL PERFORMANCE AND RECRUITMENT LIMITATION IN THE WESTERN MISSISSIPPI SOUND: A MODELING STUDY Klein*, Powell, Kreeger, Zhang, Pace, Kuykendall, Thomas, Wissing	
10:15AM	PHENOLOGY OF <i>PERKINSUS MARINUS</i> AND CLIMATE CHANGE Scott*, Bushek	A PANEL DISCUSSION ON HIGH-PRESSURE PROCESSING (HPP) TECHNOLOGY: CHALLENGES AND OPPORTUNITIES FOR BETTER QUALITY AND CLEAN LABEL SEAFOOD PRODUCTS Liu, Phan, Feng, Pattillo	OCEAN ACIDIFICATION AND OCEAN DUMPING: COMPARING PAST AND PRESENT CARBONATE CHEMISTRY AND DISSOLVED OXYGEN CONDITIONS OF SEA SCALLOP AND SURFLAM HABITAT ALONG A COASTAL SHELF Tomasetti, Kraemer, Jr., Gobler	INVESTIGATING THE INFLUENCE OF PHYTOPLANKTON SIZE DISTRIBUTION ON THE SUCCESS OF EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) LARVAE IN THE MISSISSIPPI SOUND: A MODELING STUDY Coltman*, Powell, Zhang, Mojica, Kreeger, Klein	
10:30-11:00AM	MORNING BREAK				
SESSION TITLE	DISEASE David Bushek, Ryan Carnegie & Tal Ben-horin	ROBOTICS & EMERGING TECHNOLOGY Allen Pattillo & Yang Tao	CLIMATE CHANGE, OCEAN ACIDIFICATION & MODELLING Eric Powell & Roger Mann	GENERAL CONTRIBUTED II Gulnihal Ozbay	GENERAL CONTRIBUTED III Shirley Baker
11:00 AM	NON-ZOONOTIC TISSUE PARASITES IN THE EASTERN OYSTER Gaona-Hernandez, Jurgens, Quigg		IMPROVING RESILIENCE OF HATCHERY-REARED BLUE MUSSELS (<i>MYTILUS EDULIS</i>) TO OCEAN ACIDIFICATION WITH DIET AND SEAWATER BUFFERING Holmberg, Tripler, Young, Moretti, John, Root, Smith, Sun, Pepperman, Beal	MONITORING TEMPORAL TRENDS IN THE DISTRIBUTION OF THE RANGE EXPANDING BLUE CRAB (<i>CALLINECTES SAPIDUS</i>) IN SOUTHERN MAINE ESTUARIES Crane, Gutzler, Burke, Goldstein	GROWTH AND PHYSIOLOGICAL RESPONSES OF FRESHWATER MUSSELS (<i>UTTERBACKIANA IMPLICATA</i> AND <i>SAGITTUNIO NASUTUS</i>) RECIPROCALLY TRANSPLANTED BETWEEN A POND AND STREAM SITE Gentry*, Kreeger
11:15 AM	EXPANDING THE PHYLOGEOGRAPHY AND CONNECTIVITY OF <i>PERKINSUS</i> SPECIES ACROSS NORTH AND CENTRAL AMERICA Yisrael, DiMaria, Ciminera, Aguirre-Macedo, Martinez, Ruiz, Torchin, Hill-Spanik, Gnanadesikan, Lohan	DISCUSSION	PREDICTING RESTORATION AND AQUACULTURE POTENTIAL OF EASTERN OYSTERS THROUGH AN ECO-PHYSIOLOGICAL MECHANISTIC MODEL Lavaud, La Peyre, Couvillion, Pollack, Brown, Palmer, Keim	A MULTIFACETED APPROACH TO STUDY THE NORTHERN RANGE EXPANSION OF ATLANTIC BLUE CRABS, <i>CALLINECTES SAPIDUS</i> , IN THE GULF OF MAINE Batchelder, McMahan, Bratt	CREATING A HISTOLOGICAL ATLAS FOR MARYLAND FRESHWATER MUSSELS Preziosi, McCollough
11:30 AM	UPDATE ON THE CONNECTICUT OYSTER DISEASE MONITORING PROGRAM Bienlien, Carey		PREDICTING LARVAL DISPERSAL AND POPULATION CONNECTIVITY OF SEA SCALLOPS, <i>PLACOPECTEN MAGELLANICUS</i> , ALONG THE COAST OF DOWNEAST MAINE Ward, Xue, Kingston, Rawson^P	BLUE CRAB (<i>CALLINECTES SAPIDUS</i>) POPULATION CHARACTERISTICS AND <i>CALLINECTES SAPIDUS</i> REOVIRUS 1 (CSRV1) IDENTIFICATION Ramos*, Attarwala, Andrade, Parsaeimehr, Ozbay	COMPARING RIBBED MUSSEL SETTLEMENT IN NATURAL FRINGING MARSHES VERSUS LIVING SHORELINES IN THE CHESAPEAKE BAY Rose*, Bilkovic, Isdell
SESSION TITLE	DISEASE David Bushek, Ryan Carnegie & Tal Ben-horin	GENERAL CONTRIBUTED IV Allen Pattillo	AQUACULTURE AS A TOOL FOR RESTORATION Angela Collins, Charles Weirich & Mark Rath	GENERAL CONTRIBUTED II Gulnihal Ozbay	GENERAL CONTRIBUTED III Shirley Baker
11:45 AM	DEVELOPMENT OF NOVEL MOLECULAR TECHNIQUE TO DIAGNOSE PRESENCE AND SEVERITY OF HEMOCYTIC NEOPLASIA IN NORTHERN QUAHOGS (= HARD CLAM) (<i>MERCENARIA MERCENARIA</i>) Torselli, Scro, Gast, Sharon, Smolowitz	TIDES OUT: WASHINGTON SHELLFISH CREW AND MANAGER TRAINING PROGRAM Epps, Naar, Poe	RESTORING NATIVE SHELLFISH COMMUNITIES FOR IMPROVED WATER QUALITY AND ECONOMIC RESILIENCY IN THE INDIAN RIVER LAGOON, FLORIDA Osborne, Ibarra-Castro, Sturmer	SCIENCE TO SUPPORT MANAGEMENT OF INVASIVE GREEN CRAB: A WASHINGTON STATE CASE STUDY McDonald, Grason, Tepolt, Little, Rubinoff, Stote	SETTLEMENT AND METAMORPHOSIS OF THE RIBBED MUSSEL, <i>GEUKENSIA DEMISSA</i> , IN RESPONSE TO ENVIRONMENTAL CUES Anderson*, Padilla
12:00 NOON	APPLYING NOVEL MOLECULAR WORKFLOWS TO MONITOR POTENTIAL AGENTS OF DISEASE Ciesielski*, Smith, Ben-Horin, Noble	A YEAR IN REVIEW: THE COMMERCIAL OYSTER AQUACULTURE SECTOR TRAINING (COAST) PROGRAM Tarnecki, Grice	ASSISTED SEAGRASS RECOVERY USING CO-PLANTINGS OF THE NATIVE SOUTHERN HARD CLAM (<i>MERCENARIA CAMPECHIENSIS</i>) IN SOUTHWEST FLORIDA, USA Hesterberg, Hutchins, Sea, Furman, Patranela, Congdon, Smyth, Laws	ASSESSING SHORT-TERM EFFECTS OF MARINE HEAT WAVES AND HYPOXIA ON JONAH CRAB (<i>CANCER BOREALIS</i>) FEEDING BEHAVIOR AND SURVIVAL Mabaka*, Kraemer, Tracy, Tomasetti, Doall, Gobler	WHY MUSSELS CAN SURVIVE WITHOUT OXYGEN, BUT ARE SENSITIVE TO ANOXIA Foekema, Keur, Peterson, Peck, Murk
12:15 PM	ANALYSIS OF GENETIC DIVERSITY OF A NEWLY DISCOVERED TREMATODE PARASITE OF THE BAY SCALLOP (<i>ARGOPECTEN IRRADIANS</i>) IN NORTH CAROLINA Brainard*, Buck, Varney, Ben-Horin, Wilbur	REMOVAL OF NOCTURNAL HYPOXIA INCREASES JUVENILE BIVALVE GROWTH Kraemer, Jr.*, Gobler	CALLING ALL CLAMS: COORDINATING PARTNERS TO MAXIMIZE PROJECT IMPACT AND PRIORITIZE RESEARCH OBJECTIVES FOR CLAM RESTORATION INITIATIVES IN FLORIDA Collins, Ryan, Chiles, Hurt, Osborne, Smyth, Williams	AEROBIC SCOPE AND THERMAL TOLERANCE: CONTRASTING RESPONSES IN SHRIMP, CRAYFISH, AND MUSSELS Abdelrahman, Hussain, Fogelman, Roy, Stoeckel	CYTOCHROME P450-DEPENDENT MIXED FUNCTION OXIDASES (MFO) SYSTEM DYNAMICS DURING THE POLY AROMATIC HYDROCARBON (PAH) METABOLISM IN GREEN MUSSEL <i>PERNA VIRIDIS</i> (LINNAEUS, 1758) Chinnaiah
12:30-1:30 PM	LUNCH BREAK				

* denotes student presenter

^P denotes non first-author presenter

**TUESDAY
March 19, 2024**

**NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY
Symphony I**

ROOM	Symphony II	Symphony III	Symphony V	Symphony VI	Symphony VII
SESSION TITLE	DISEASE David Bushek, Ryan Carnegie & Tal Ben-horin	SOCIAL DIMENSIONS OF SHELLFISHERIES Adriane Michaelis & Don Webster	AQUACULTURE AS A TOOL FOR RESTORATION Chuck Weirich, Mark Rath & Angela Collins	eDNA APPLICATIONS FOR SHELLFISH Phoebe Jekielek	SCIENCE & PUBLIC ENGAGEMENT WORKSHOP David Shiffman
1:30 PM	INFECTION WITH <i>SACCULARINA</i> SP. REDUCES EGG QUANTITY BUT NOT EGG QUALITY OF THE BAY SCALLOP, <i>ARGOPECTEN IRRADIANS</i> Buck, Boggess, Andrade, Ben-Horin, Wilbur	HOW REPRESENTATIVE IS YOUR SAMPLE? DEMOGRAPHIC DATA IN THE US SHELLFISH AQUACULTURE INDUSTRY Michaelis, Walton	STREAMLINING REGULATION TO FACILITATE SEAGRASS AND NATIVE CLAM RESTORATION AQUACULTURE Williams*, Ankersen, DePaolis, Collins	MULTIFACETED STUDY OF AN ONGOING RANGE EXPANSION OF BLUE CRABS (<i>CALLINECTES SAPIDUS</i>) Henry*, Grey, Goldstein, Crane, Miller, McMahan, Batchelder	THIS HANDS-ON WORKSHOP WILL TEACH THE BASIC PRINCIPLES AND ADVANCED TIPS AND TRICKS FOR PUBLIC SCIENCE ENGAGEMENT, FOCUSING ON CRAFTING YOUR MESSAGE AND USING SOME SOCIAL MEDIA TOOLS TO SHARE IT WITH THE WORLD.
1:45 PM	POTENTIAL IMPACTS OF THE PARASITIC TREMATODE, <i>BUCEPHALUS CUCULUS</i> , IN A COLLAPSED OYSTER FISHERY Kirby, Geiger, Levine, Davis	ADOPTING PRINCIPLES OF FOOD JUSTICE FOR EQUITABLE OYSTER AQUACULTURE INDUSTRY DEVELOPMENT Sandolo, St. Gelais, Costa-Pierce, Miller-Hope, Hood, Hale, Black, Young	THE EFFECTS OF BIVALVE SHELLFISH AQUACULTURE ON SEDIMENT DENITRIFICATION IN FLORIDA Foursa, Collins, Sturmer, Gassen, Anderson, Smyth	USING DNA METABARCODING TO UNDERSTAND THE FEEDING ECOLOGY OF THE ATLANTIC SEA SCALLOP, <i>PLACOPECTEN MAGELLANICUS</i> Munoz*, McDowell, Rudders	
2:00 PM	IMPROVED RESISTANCE TO <i>VIBRIO CORALLILYTICUS</i> AND OSTREID HERPESVIRUS 1 MORTALITY IN JUVENILE PACIFIC OYSTERS (<i>CRASSOSTREA GIGAS</i>) SELECTED FOR A SINGLE NUCLEOTIDE POLYMORPHISM ON CHROMOSOME 8 Lunda*, Divilov, Green, Sutherland, Jennings, Mandour, Mueller, Wang, Jin, Langdon	IMPACTS OF GENTRIFICATION, LOSS OF ACCESS, AND A CHANGING COASTAL ENVIRONMENT ON THE SOFTSHELL CLAM FISHERY IN MAINE Farr, McMahan, Batchelder	OYSTER ENHANCEMENT FOR NEW HAMPSHIRE OYSTER GROWERS AND ESTUARIES Jones, Grizzle, Ward, Gross	EDNA METABARCODING TO SURVEY SHELLFISH IN THE GULF OF MAINE Bolton Jr.*, Grey-Avis, Peters	
2:15 PM	MAXIMIZING OYSTER AQUACULTURE YIELD ACROSS DIVERSE DISEASE DEFENSE TRAITS Bulmer*, Gomez-Chiarri, Proestou, Ben-Horin	EXPLORING RESILIENCE IN THE OYSTER FARMING INDUSTRY OF NORTH CAROLINA Eimers*, Murray, Noble	THREE-DIMENSIONAL REEFS: MOVING OYSTER RESTORATION OUT OF THE STONE AGE DePaola	EDNA: CASTING A NEW NET FOR MONITORING SEA SCALLOP (<i>PLACOPECTEN MAGELLANICUS</i>) FISHERIES Jekielek*, Leslie, Price	
SESSION TITLE	OshV1 NOROVIRUS Kimberly Reece	SOCIAL DIMENSIONS OF SHELLFISHERIES Adriane Michaelis & Don Webster	AQUACULTURE AS A TOOL FOR RESTORATION Chuck Weirich, Mark Rath & Angela Collins	eDNA APPLICATIONS FOR SHELLFISH Phoebe Jekielek	SCIENCE & PUBLIC ENGAGEMENT WORKSHOP David Shiffman
2:30 PM	MULTIPLE OMICS TO DISENTANGLE NEW FACETS OF THE ENIGMATIC FAMILY OF MOLLUSC HERPESVIRUSES Rosani, Bortoletto, Bai, Krupovic	INCREASING SHELLFISH AQUACULTURE INTERSECTIONS WITH OYSTER RESTORATION: IMPLICATIONS FOR SHELLFISH HEALTH MANAGEMENT Carnegie	ADAPTING AQUACULTURE TECHNIQUES TO ENHANCE OYSTER POPULATIONS, <i>CRASSOSTREA VIRGINICA</i> , IN REEF RESTORATION LoBuglio, Capps, Golightly, Rikard	ENVIRONMENTAL DNA EARLY-WARNING SYSTEMS FOR BIOFOULING: PROMISES AND PITFALLS Grey, Moline, Havener, Noren, Pierce, Brady	
2:45 PM	KNOWLEDGE IS POWER: RESOLVING THE GEOGRAPHIC DISTRIBUTION AND HOST RANGE OF OSHV-1 ON THE EAST AND GULF COASTS TO MITIGATE IMPEDIMENTS ON SHELLFISH AQUACULTURE COMMERCE Burge, Prado-Zapata, MacIntyre, Hudson, Webster, Carnegie, Reece	SURVEY OF SHELLFISH AQUACULTURE MANAGEMENT PRIORITIES IN MAINE, NORTH CAROLINA, AND FLORIDA Arthur*, Murray	QUANTIFYING HABITAT PROVISION SERVICES OF OYSTER (<i>CRASSOSTREA VIRGINICA</i>) AQUACULTURE AND PERFORMANCE AMONG TWO FARMED STRAINS GROWN ALONG A TIDAL GRADIENT Campbell, Hudock, Motz, Carlisle, Hale	ENHANCING BLUE MUSSEL SEED COLLECTION THROUGH LARVAL-SPECIFIC ENVIRONMENTAL RNA (ERNA) TOOLS Ernst, Beal, Grey, Salter, Whitney, Price	
3:00 PM	UPDATE ON LABORATORY CHALLENGES TO <i>CRASSOSTREA VIRGINICA</i> FAMILIES AND LINES WITH OSHV-1 MICROVARIANTS Reece, Small, Agnew, MacIntyre, Scott, Burge	VALUES, PROBLEM DEFINITIONS, AND POLICY PREFERENCES IN MAINE AQUACULTURE Fail*, Murray	CONCERNED OYSTERMEN RESTORING ESTUARIES Grice, Swann	ENVIRONMENTAL DEOXYRIBONUCLEIC ACID (EDNA): DOES THE SCIENCE MAKE SENSE? Zajicek, Stone	
3:15PM	IMPACT OF BACTERIAL COMMUNITY AND ACCLIMATION ON MORTALITY OF JUVENILE PACIFIC OYSTERS (<i>CRASSOSTREA GIGAS</i>) CAUSED BY OSHV-1 INFECTION Day, Sarowar, Lunda, Zanuzzo^p, Langdon	A ROADMAP FOR ADVANCING SOCIAL LICENSE TO OPERATE FOR AQUACULTURE: EAST AND WEST COAST USA Whitmore, Noll, Davis, Avena	LEVERAGING AQUACULTURE FOR RESTORATION: AN OVERVIEW OF THE SUPPORTING OYSTER AQUACULTURE AND RESTORATION PROGRAM Foster, Hancock, Jones, Greenberg, Borgert	ASSESSING EASTERN OYSTER <i>CRASSOSTREA VIRGINICA</i> PREDATION UTILIZING REAL-TIME MONITORING AND EDNA ANALYSIS IN DELAWARE INLAND BAYS Attarwala*, Ramos, Andrade, Riggi, Boukari, Venello, Parsaeimehr, Ozbay	
3:30 PM	DISCUSSION	BEST PRACTICES HELP GROWERS IMPROVE SOCIAL LICENSE Rheault	FEASIBILITY OF USING SHELLFISH AQUACULTURE FOR WATER QUALITY IMPROVEMENT INITIATIVES IN FLORIDA Smyth, Ankersen, Baker, Collins, Foursa, Grogan, Lovestrand, Patterson, Sturmer		
3:45 PM		EMPOWERING SEAFOOD SERVERS TO TELL THE STORIES OF AQUACULTURED OYSTERS: 2024 UPDATE ON THE OYSTER ESSENTIALS TRAINING PROGRAM Walton, Bliss, Marquez, Michaelis, Petrolia, Rider, Sturmer, Walton	THE NEW JERSEY SHELLFISH AQUACULTURE EXCHANGE — A CROSS-CUTTING APPROACH TO HABITAT RESTORATION AND RESILIENCY Rowe, Calvo, DeLuca, Munroe, Babb, Normant, Steuber, Evert, Thompson		
4:00 – 6:00 PM	POSTER SESSION AND HAPPY HOUR Symphony IV				
7:00 - 10:00 PM	STUDENT ENDOWMENT FUND AUCTION Symphony Foyer				

* denotes student presenter

^p denotes non first-author presenter

WEDNESDAY March 20, 2024					
8:00-8:50AM	PLENARY: Eileen Hofmann (Old Dominion University) – <i>Models in shellfish biology - what can they tell us?</i> Symphony V-VI-VII				
	NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Symphony I				
ROOM	Symphony II	Symphony III	Symphony V	Symphony VI	Symphony VII
SESSION TITLE	HATCHING A PLAN FOR AQUACULTURE COMMUNICATIONS: STRATEGIES, RESOURCES & PARTNERSHIPS Brianna Shaughnessy	BIRDS & SHELLFISH SANITATION Bob Rheault	MACROALGAE-SHELLFISH CO-CULTURE Michael Doall	ANTHROPOGENIC POLLUTANTS AND THEIR IMPACTS ON SHELLFISH BIOLOGY AND ECOLOGY Evan Ward & Kayla Mladinich	ART & DESIGN OF EFFECTIVE SCIENCE PRESENTATIONS Eric Heupel
9:15AM	A SNAPSHOT OF NOAA RESOURCES FOR SEAFOOD COMMUNICATIONS AND ENGAGEMENT Shaughnessy	MANAGEMENT OF BIRD-RELATED PATHOGEN RISK IN SHELLFISH AQUACULTURE Rheault	SHELLFISH AND SEAWEED AQUACULTURE ECOSYSTEM SERVICES HORIZON SCAN: PROJECT UPDATE Michaelis, Bricker ^P , Hollarsmith, Rose, Theuerkauf	INVESTIGATING THE INTERACTIONS BETWEEN MICROPLASTICS AND FRESHWATER BIVALVES Olaturji*, Collins, Holohan, Ward	THIS WORKSHOP WILL DISCUSS A NUMBER OF CORE IDEAS AND TECHNIQUES THAT CAN HELP SCIENTISTS AND RESEARCHERS CREATE MORE ENGAGING POWER POINT SLIDES AND POSTERS RESULTING IN A MORE EFFECTIVE WAY TO COMMUNICATE SCIENCE TO ALL AUDIENCES.
9:30AM	FISHERMEN OR SCIENTISTS? HOW IDEOLOGY SHAPES WHO THE PUBLIC TRUSTS FOR INFORMATION ON AQUACULTURE Whitmore, Noll, Davis, Safford, Hamilton	HIGH-RESOLUTION MONITORING OF AVIAN COMMUNITIES AT MARICULTURE OPERATIONS YIELDS INSIGHTS INTO COMMUNITY DYNAMICS, BIOGEOCHEMISTRY, AND SANITATION RISKS O'Keefe*, Fodrie	STRATEGIES FOR CO-CULTURING SEAWEED AND BIVALVES: SCIENTIFIC AND INDUSTRY PERSPECTIVES Bailey, Olsen, Barberly	INVESTIGATING SUSPENSION-FEEDING INVERTEBRATES AS BIOINDICATORS OF MICROPLASTICS Mladinich*, Holohan, Shumway, Ward	
9:45AM	WINDOW TO AN UNDERWATER WORLD: SHARING THE HABITAT VALUE OF SHELLFISH FARMS WITH A BROAD AUDIENCE Jabanoski, Rose, Phillips, Clark, Dixon, Redman, Smith, Mercado-Allen	SEABIRDS, <i>CAMPYLOBACTER</i> , AND OFF-BOTTOM OYSTER AQUACULTURE Matvey*, Tarnecki, Rikard	EXPANDING THE ECOSYSTEM SERVICES OF OYSTER FARMS WITH THE CO-CULTIVATION OF SUGAR KELP, <i>SACCHARINA LATISSIMA</i> : MAXIMIZING NITROGEN BIOEXTRACTION Doall, Curtin, Morrell, Eckstein, Chen, Meichenbaum, Gobler	EXTREME HEAT EVENT INFLUENCES THE TOXIC IMPACTS OF TiO ₂ NANOPARTICLES WITH DIFFERENT CRYSTAL STRUCTURES ON THE MUSSEL, <i>MYTILUS CORUSCUS</i> Li*, Li, Wei, Mao, Hu, Wang	
10:00AM	AQUACULTURE COMMUNICATIONS RESOURCES AND INITIATIVES PROVIDED BY NOAA NATIONAL SEA GRANT Rath, Weirich, Shaughnessy, Davis, Meltzer, Dupree, Garber	ASSESSING THE RISK OF PATHOGEN CONTAMINATION FROM ROOSTING BIRDS ON AQUACULTURE GEAR Richard, Muller, Paton, Lavoie, Gomez-Chiarri, McWilliams	NUTRIENT REMEDIATION CAPACITY OF THREE NEW ZEALAND KELP SPECIES: CONSIDERATIONS FOR IMTA APPLICATIONS WITH <i>PERNA CANALICULUS</i> McCarthy*, Wing	EFFECTS OF PERFLUOROOCTANOATE AND NANO TITANIUM DIOXIDE ON MALE GONADS OF THE THICK-SHELL MUSSEL, <i>MYTILUS CORUSCUS</i> Pan*, Sun, Hu, Wang	
10:15AM	DISCUSSION	ESTABLISHING A FRAMEWORK FOR UNDERSTANDING RISKS ASSOCIATED WITH BIRDS ON SHELLFISH AND CO-CULTURE OPERATIONS Noble, Blackwood, Bennett, Clerkin, Smith, Eimers, O' Keefe, Ciesielski	ACHIEVING CARBON NEUTRAL BIVALVE AQUACULTURE VIA THE CULTIVATION OF SEAWEEDES Gobler, Tomasetti, Doall	OCEAN ACIDIFICATION MAY INCREASE THE BIOLOGICAL IMPACT OF METAL POLLUTION ON COMMERCIAL BIVALVES, A CASE STUDY FROM MINE WASTE DEPOSITS IN ARCTIC NORWAY Rastrick, Jiang, Brown, Aguera, Bank, van der Meeren, Jiang, Rastrick ^P	
10:30-11:00AM	MORNING BREAK				
SESSION TITLE	THE FUTURE OF AQUACULTURE AT THE NOAA FISHERIES SERVICE Danielle Blacklock	BIRDS & SHELLFISH SANITATION Bob Rheault	MACROALGAE-SHELLFISH CO-CULTURE Michael Doall	ANTHROPOGENIC POLLUTANTS AND THEIR IMPACTS ON SHELLFISH BIOLOGY AND ECOLOGY Evan Ward & Kayla Mladinich	ART & DESIGN OF EFFECTIVE SCIENCE PRESENTATIONS Eric Heupel
11:00 AM	IN THIS WORKSHOP, PARTICIPANTS WILL USE INSTANT RESPONSE TECHNOLOGY TO TAKE PART IN PRIORITIZATION DISCUSSIONS OF EXISTING AQUACULTURE RELATED SERVICES THE NOAA FISHERIES SERVICE PROVIDES	RISK OF PATHOGEN TRANSFER FROM BIRDS IS UNKNOWN Hudson	THE IMPACTS OF TWO MACROALGAL SPECIES, <i>ULVA</i> SP. AND <i>GRACILARIA</i> SP. ON THE GROWTH AND SURVIVORSHIP OF EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> Eckstein, Doall, Gobler, McGuire, Chen, Sylvers	MAPPING IMPACT RISKS ASSESSMENT OF NAVIGATION NOISE ON GIANT SCALLOP BEDS IN THE GULF OF ST. LAWRENCE, CANADA Poitevin, Aulanier, Olivier, Jezequel, Archambault, Chauvaud, Tremblay	
11:15 AM		DISCUSSION	GREENING AQUACULTURE: CULTIVATION OF NATIVE SEA LETTUCE (<i>ULVA</i> SPP.) FOR POLYCULTURE RESEARCH Mundy*, Carroll	EXPOSURE TO PLASTIC DEBRIS ALTERS EXPRESSION OF BIOMINERALIZATION, IMMUNE, AND STRESS-RELATED GENES IN THE EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) Eierman, Landis	
11:30 AM			THE MITIGATION OF HARMFUL ALGAL BLOOMS (<i>ALEXANDRIUM CATENELLA</i> , <i>PSEUDO-NITZSCHIA</i> SPP., <i>DINOPHYSIS ACUMINATA</i> , <i>MARGALEFIDINIUM POLYKRIKOIDES</i>) BY CULTIVABLE SEAWEEDES Sylvers*, Gobler	IDENTIFICATION OF MOLECULAR BIOMARKERS AGAINST XENOBIOTICS IN THE MARINE GREEN MUSSEL, <i>PERNA VIRIDIS</i> Chinnaiah	
11:45 AM					
12:00 NOON					
12:15 PM					
12:30-2:00 PM	NSA BUSINESS LUNCHEON Symphony Foyer				
2:00 - 4:30 PM	SCALLOP GALLOP EXPLORE CHARLOTTE!!				
4:30 - 6:00 PM	POSTER SESSION AND HAPPY HOUR Symphony IV				

* denotes student presenter

^P denotes non first-author presenter

THURSDAY
March 21, 2024

8:00-8:50AM	PLENARY: Gregory Dietl (Cornell University) – Conservation paleobiology: putting the dead to work Symphony V-VI-VII			
	NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Symphony I			
ROOM	Symphony II	Symphony III	Symphony V	Symphony VI
SESSION TITLE	DOWN ON THE FARM Leslie Sturmer & Bill Walton	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders	HARMFUL ALGAL BLOOMS Steve Morton	VIBRIO Steve Jones
9:15AM	COMPARING PERFORMANCE OF VARIOUS TRIPLOID OYSTER (<i>CRASSOSTREA VIRGINICA</i>) SEED LINES AND STOCKING DENSITIES IN NOVEL SUBTIDAL AQUACULTURE GEAR Klein*, Powell, Harman	USING THE INTERTIDAL ZONE AS A NURSERY FOR JUVENILE CULTURED SOFTSHELL CLAM: A COMPARATIVE EXPERIMENT FROM THREE MAINE COMMUNITIES Beal, Coffin, Randall, Houston	UPTAKE, DISTRIBUTION, AND DEPURATION OF PSP-INDUCING PHYCOTOXINS IN ARCTIC SURFLAMMS <i>MACTROMERIS POLYNYMA</i> (STIMPSON 1860) Sanders*, Beal, Leighfield, Morton, Shumway	HOST SPECIFICITY OF PREDATORY BACTERIA AGAINST HUMAN PATHOGENIC STRAINS OF <i>VIBRIO PARAHAEMOLYTICUS</i> : POTENTIAL INTERVENTION STRATEGIES FOR <i>VIBRIOS</i> IN MARKET OYSTERS Richards, Williams, Watson, Jones
9:30AM	DIFFERENCES IN TOLERANCE AND RESPONSES TO THERMAL STRESS BETWEEN DIPLOID AND TRIPLOID EASTERN OYSTERS (<i>CRASSOSTREA VIRGINICA</i>) FROM THE NORTHERN GULF OF MEXICO Boyd*, Abdelrahman, Rikard, Tarnecki, Stoeckel	DECADAL POPULATION VARIABILITY IN SUBTIDAL BAY CLAMS IN TILLAMOOK BAY, OREGON, USA: IMPLICATIONS FOR MANAGEMENT OF COMMERCIAL BAY CLAM DIVE FISHERY D'Andrea, Gellhaus, Swanson, Hansen	ANNUAL SPATIAL AND TEMPORAL DYNAMICS OF <i>MARGALEFIDINIUM POLYKRIKOIDES</i> IN RHODE ISLAND Whitney*, Scro, Osinski, Savastano, Sharon, Scott, Smolowitz	USE OF DIRECT-FED MICROBES TO ENHANCE SHRIMP RESISTANCE TO A <i>VIBRIO PARAHAEMOLYTICUS</i> STRAIN CAUSING EARLY MORALITY SYNDROME (EMS) Kuhn, Smith, Williams, Galagarza, Thompson, Drahos, Stevens^P
9:45AM	A FARMS APPROACH TO ADDRESS OYSTER MORTALITY IN THE OFF-BOTTOM OYSTER AQUACULTURE INDUSTRY IN FLORIDA Sturmer, Anderson, Roberts	INTERACTIVE EFFECTS OF SIZE AND INTRASPECIFIC DENSITY ON GROWTH AND SURVIVAL OF CULTURED JUVENILE ARCTIC SURFLAMM, <i>MACTROMERIS POLYNYMA</i> , IN TWO EASTERN MAINE INTERTIDAL FLATS Beal, Pepperman, Salter, Houston	INVESTIGATING THE RELATIONSHIP BETWEEN SEAWATER NUTRIENTS AND HARMFUL ALGAL BLOOMS AT RHODE ISLAND SHELLFISH FARMS Osinski, Savastano, Whitney, Scro, Scott, Sharon, Smolowitz	EXPANDING INDUSTRY APPLICATIONS OF BIPHASIC ASSAYS FOR <i>VIBRIO</i> ENUMERATION IN OYSTERS DePaola, Kim, Tarnecki, Dewey
10:00AM	ASSESSING THE EFFECTS OF HUSBANDRY DECISIONS ON MORTALITY, GROWTH, AND TIME-TO-MARKET IN OFF-BOTTOM OYSTER AQUACULTURE LaGanke*, Walton	A NUMERICAL INVESTIGATION OF SIZE SELECTIVITY IN A MODIFIED SCALLOP DREDGE Boisvert*, Cowles	ALGAL TOXINS IN CULTURED OYSTERS ACROSS DIVERSE COASTAL SITES Simpson*, Schnetzer, Ben-Horin	DEVELOPMENT OF IDENTIFICATION AND DETECTION METHODS FOR EMERGING CAUSES OF VIBRIOSIS Jones, Prunete, McGough, Hyde-Leard, Neil
10:15-10:45AM	MORNING BREAK			
SESSION TITLE	DOWN ON THE FARM Leslie Sturmer & Bill Walton	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders	HARMFUL ALGAL BLOOMS Steve Morton	VIBRIO Steve Jones
10:45AM	ANTIFOULING SURFACE TEXTURING OF EQUIPMENT AND BIOFOULING MONITORING BENEFITS FOR SHELLFISH AQUACULTURE Dürr, Shaw, Conlan, Sharp	MODIFICATIONS TO A SCALLOP DREDGE TWINE TOP TO REDUCE FLATFISH CATCH Roman, Rudders, Watson, Rossiter	THE SYNERGISTIC EFFECTS OF HARMFUL ALGAE AND OCEAN ACIDIFICATION ON LARVAL BIVALVE SURVIVAL Tracy*, Farrell, Tang, Callahan, Gobler	CLIMATE CHANGE AND INFECTIOUS DISEASES: THE <i>VIBRIO</i> MODEL Brumfield, Usmani, Jutla, Huq, Colwell
11:00 AM		THE UNITED STATES SEA SCALLOP RESOURCE: ITS HISTORIC SUCCESS AND PRESENT DECLINE Stokesbury	ASSESSING BEHAVIORAL CHANGES IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , WHEN EXPOSED TO <i>MARGALEFIDINIUM POLYKRIKOIDES</i> Brothers, Scro, Whitney, Brosnahan, Chamberlin, Sharon, Scott, Smolowitz	LONG-TERM SEASONAL ECOLOGY OF <i>VIBRIO PARAHAEMOLYTICUS</i> IN THE NORTHEAST US Jones, White, Foxall, Whistler
11:15 AM	RECOVERY MECHANISMS OF EELGRASS (<i>ZOSTERA MARINA</i>) FOLLOWING MECHANICAL HARVEST OF PACIFIC OYSTERS (<i>CRASSOSTREA GIGAS</i>) Boardman*, Ruesink	NOAA-SUPPORTED RESOURCES FOR COMMERCIAL SHELLFISHERIES RESEARCHERS, MANAGERS, AND OPERATORS Wright-Fairbanks, Perotti^P	PARTICIPATORY SCIENCE APPROACH TO MONITOR HARMFUL ALGAL BLOOMS, AND CHANGES IN ENVIRONMENTAL CONDITIONS WITH THE AQUACULTURE INDUSTRY Morton, Rene, Maucher-Fuquay, Shuler	EFFICACY OF REFRIGERATED WET STORAGE TO REDUCE <i>VIBRIO PARAHAEMOLYTICUS</i> AS DEMONSTRATED BY A NOVEL TEST KIT Dewey, Louma, Wood, DePaola, Kim
11:30 AM	OYSTER FARMING RESILIENCE INDEX Grice, Swann, Sempier, Sempier, Deal			RELATIONSHIP BETWEEN GAPING BEHAVIOR OF THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , AND <i>VIBRIO</i> SPP. LOAD Kleist*, Stoeckel, Tarnecki, Rikard
SESSION TITLE	DOWN ON THE FARM Leslie Sturmer & Bill Walton	SHELLFISH RESTORATION & CONSERVATION Dave Eggleston, Martin Posey & Peter Kingsley-Smith		VIBRIO Steve Jones
11:45 AM	DEVELOPMENT OF THE SOFTSHELL CLAM AQUACULTURE IN MARYLAND WATERS Liu, Wolfe-Bryant, Farrington, Wolfe-Bryant, Bhandari, Knoche	IMPACTS OF OYSTER AQUACULTURE ON ADJACENT NATURAL REEFS Posey, Alphin, Lytle, Darrow		INFLUENCE OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH) ON CONCENTRATIONS OF HUMAN-PATHOGENIC <i>VIBRIO</i> SPP. IN OYSTERS AND SEDIMENTS UNDER <i>IN SITU</i> CONDITIONS Audemard, Brown, MacIntyre, Prossner, Vogelbein, Mainor, Wargo, Reece, Unger
12:00-1:00 PM	LUNCH BREAK			

* denotes student presenter

^P denotes non first-author presenter

THURSDAY
March 21, 2024

NSA AT THE MOVIES – FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY
Symphony I

ROOM	Symphony II	Symphony III	Symphony V	Symphony VI
SESSION TITLE	HATCHERIES Don Webster	SHELLFISH RESTORATION & CONSERVATION Dave Eggleston, Martin Posey & Peter Kingsley-Smith	ADVANCING THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM David Bushek, Ryan Carnegie, Karen Hudson & Tal Ben-horin	VIBRIO Steve Jones
1:00 PM	EVALUATING ABIOTIC AND BIOTIC FACTORS INFLUENCING NORTHERN QUAHOG (= HARD CLAM) PRODUCTION IN FLORIDA, USA Anderson, Sturmer, Laramore, Getter, Collins, Philps, Baker	DISTRIBUTION OF OYSTER SETTLEMENT ON NOVEL REEFENSE MODULES AND IMPLICATIONS FOR ARTIFICIAL REEF COLONIZATION Shinn, Coli, Bushek, Holland, Ruzsala, Nassif	ADVANCING THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) Bushek, Carnegie, Hudson, Ben-Horin, Safi, Rheault, Gustafson, Walton, Pollack, Sturmer, Rowe	ASSESSING THE ABUNDANCE OF <i>VIBRIO PARAHAEMOLYTICUS</i> AND <i>V. VULNIFICUS</i> IN CULTURED OYSTERS ASSOCIATED WITH MACROALGAE FROM RHODE ISLAND Scro, Geisser, Smolowitz, Fulweiler
1:15 PM	DEVELOPING A PILOT SCALE SHELLFISH HATCHERY IN DELAWARE – FIRST YEAR PROGRESS UPDATE Campbell, McIntosh, Campbell, Hale	EXPLORING WHETHER CARBONATE CHEMISTRY SHOULD BE CONSIDERED FOR SITE SELECTION FOR EASTERN OYSTERS (<i>CRASSOSTREA VIRGINICA</i>) Lemaire*, Carroll, Hoskins-Brown, Hintz	INFECTION PREVALENCE AND INTENSITY OF <i>PERKINSUS MARINUS</i> IN HATCHERY OYSTER SEED FROM THE US EAST COAST Safi, Bushek, McGurk, Carnegie, Crockett	PHYLOGEOGRAPHY OF NORTH ATLANTIC POPULATIONS OF SEQUENCE TYPE 36 <i>VIBRIO PARAHAEMOLYTICUS</i> Whistler, Foxall, Means, Marcinkiewicz, Xu, Hall, Schillaci, DeRosia-Banick, Cooper, Jones
1:30 PM	PROBIOTIC-INDUCED PROTECTION OF PACIFIC OYSTER (<i>CRASSOSTREA GIGAS</i>) LARVAE FROM VIBRIOSIS IN HATCHERY SETTINGS Thorstenson, Schubiger, Lunda, Mueller, Langdon	TRACKING SOURCES AND SINKS OF EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) METAPOPULATIONS IN SHINNECOCK BAY, NEW YORK, USA Woodard*, Doall, Dana, Eckstein, Curtin, Morrell, Gobler	STATUS, PARTICIPATION, AND PROGRESS OF THE HATCHERY COMPLIANCE PROGRAM OF THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) Hudson, Bushek, Carnegie, Ben-Horin, Safi, Rheault, Gustafson, Marxen, Walton, Pollack, Sturmer, Rowe	
1:45 PM	IMPROVING SPAWNING SUCCESS OF THE SUNRAY VENUS CLAM, <i>MACROCALLISTA NIMBOSA</i> Laramore, Baptiste, Perri, Sturmer	ANALYSIS AND VARIABILITY OF METAPOPULATION CONNECTIVITY IN OYSTER RESTORATION Lipcius, Shen, Schulte	A COMPARISON OF SHELLFISH IMPORTATION REGULATIONS ACROSS EAST AND GULF COAST STATES Safi, Hudson, Sturmer, Bushek, Carnegie, Ben-Horin, Rheault, Gustafson, Marxen, Walton, Pollack, Rowe	
2:00 PM	PANGENOME ANALYSIS OF <i>PHAEOBACTER INHIBENS</i> , A MARINE PROBIONT FOR OYSTERS Coppersmith*, Nelson, Rowley, Gomez-Chiarri	OYSTERS AS AN ECOLOGICAL INDICATOR FOR EVERGLADES RESTORATION Geiger, Levine, Kirby	AN OVERVIEW AND DISCUSSION ON THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) DATABASE AND MAPPING TOOL Marxen, Safi, McGurk, Bushek, Carnegie, Hudson, Ben-Horin, Rheault, Gustafson, Walton, Pollack, Sturmer, Rowe	
2:15 PM		INCREASED MACROFAUNAL SECONDARY PRODUCTION WITH OYSTER ARTIFICIAL SUBSTRATES IN THE YORK RIVER, VIRGINIA Seitz, Patel, Knick, Saluta, Lipcius	EXPANDING THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) IN THE SOUTHEAST US AND ACROSS THE GULF OF MEXICO Ben-Horin, Walton, Pollack, Sturmer, Bushek, Carnegie, Hudson, Safi, Rheault, Gustafson, Marxen, Rowe	
2:30 PM		USING UNCREWED AERIAL SYSTEMS TO MAP INTERTIDAL EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) REEFS TO INFORM MANAGEMENT AND RESTORATION PRACTICES IN THE SOUTHEASTERN UNITED STATES Sánchez, Sundin, Faulk, Mitchell, Simpson, Kingsley-Smith	ADVANCING THE REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) Carnegie, Ben-Horin, Bushek, Hudson, Safi, Rheault, Gustafson, Marxen, Walton, Pollack, Sturmer, Rowe	
2:45PM		THE EVOLUTION OF CUSTOMIZABLE, WIRE-BASED REEF-BUILDING SUBSTRATE FOR OYSTER (<i>CRASSOSTREA VIRGINICA</i>) HABITAT RESTORATION IN COASTAL SOUTH CAROLINA, USA Kingsley-Smith, Sundin, Faulk, Mitchell, Hodges, Swain, Lambert	DISCUSSION	
3:00 PM		A LONG AND WINDING ROAD: 20 YEARS INTO HARD CLAM RESTORATION IN CENTRAL GREAT SOUTH BAY, NEW YORK Starke, LoBue		
3:15 PM		EXPLORING THE RECOVERY AND SPATIAL DISTRIBUTION OF PISMO CLAMS (<i>TIVELA STULTORUM</i>) ON PISMO BEACH, CALIFORNIA Bills*, Gianni, Ross, Bean, Ruttenberg		
3:30 – 6:00 PM	CLOSING HAPPY HOUR Symphony Foyer			

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^P denotes non first-author presenter