

MONDAY March 27, 2023					
6:30-8:00AM	STUDENT MENTOR-MENTEE BREAKFAST (STUDENTS ONLY - <i>Advanced sign up will be required</i> ) Chesapeake				
8:00-8:50AM	PLENARY: Marisa Bass (Yale University) - <i>More than just a shell: collecting and conchophilia in the Dutch Golden Age</i> Grand Ballroom				
	NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade				
ROOM	Grand D/E/F	Grand East	Grand West	Grand A/B/C	University 1/2
SESSION TITLE	ECOSYSTEM SERVICES Suzanne Bricker & Matt Parker	SHELLFISH GENETICS & GENOMICS Louis Plough	BLUE CRAB ECOLOGY & FISHERIES Rom Lipcius, Rochelle Seitz & Matt Ogburn	BIRDS & SHELLFISH SANITATION Bob Rheault	ONE HEALTH EPIGENOMICS Acacia Alcivar-Warren
9:00AM	DETERMINING FEEDING RATES IN EASTERN OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) USING NATURAL SESTON FLOW-THROUGH SYSTEM <b>Wiltsee*, Gray</b>	THE MOLLUSCAN BROODSTOCK PROGRAM: A RETROSPECTIVE ON 25+ YEARS OF IMPROVING WEST COAST OYSTER STOCKS <b>Langdon, Schoolfield, Durland, De Melo, Divilov</b>	PUTTING THE <i>CALLINECTES SAPIDUS</i> GENOME INTO THE CONTEXT OF DECAPOD GENOMICS <b>Bachvaroff, Chung</b>	BIRD INTERACTIONS WITH SHELLFISH AQUACULTURE <b>Rheault</b>	ONE HEALTH EPIGENOMICS: FROM <i>VIBRIOS</i> TO TRANSGENERATIONAL EPIGENETIC INHERITANCE - RECOGNITION OF STUDENTS AND 'OUTSTANDING ONE HEALTH RESEARCHERS' AWARDEES <b>Alcivar-Warren, Tang</b>
9:15AM	EXAMINING PHYTOPLANKTON-RELATED ECOSYSTEM SERVICES OF SESSILE SUSPENSION FEEDERS IN INNER HARBOR, BALTIMORE, MARYLAND <b>Kido*, Stewart, Adaranijo, Geba, Schott</b>	TOWARD UNDERSTANDING SEX-SPECIFIC GENE EXPRESSION PATTERNS DURING THE CONDITIONING PROCESS IN EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>Proestou, Sullivan, Delomas, Lundgren, Hart, Satkowski</b>	TESTOSTERONE AND STEROIDOGENIC GENES IN THE MALE BLUE CRAB <i>CALLINECTES SAPIDUS</i> AND THEIR RELATIONSHIP WITH INSULIN-LIKE ANDROGENIC GLAND FACTOR (IAG) AND CRUSTACEAN FEMALE SEX HORMONE (CFSH) <b>Wang*, He, Blaney, Chung</b>	SEASONAL PATTERNS OF DISTRIBUTION AND ABUNDANCE OF WATERBIRDS IN RELATION TO OYSTER AQUACULTURE IN COASTAL RHODE ISLAND <b>Muller, Paton, McWilliams<sup>P</sup></b>	TRACKING ECOSYSTEM CONTAMINANTS TO PROTECT PUBLIC HEALTH <b>Jones</b>
9:30AM	SPATIALLY-EXPLICIT OYSTER FILTRATION SERVICES IN THE HUDSON RIVER ESTUARY: RESEARCH TO HELP GUIDE RESTORATION AND PUBLIC UNDERSTANDING <b>Gray, Brady, Fraioli, Hare, Kramer, Schreiber</b>	POLYPLOID BREEDING STRATEGIES FOR <i>CRASSOSTREA VIRGINICA</i> <b>Small, Kube, Allen Jr.</b>	DEVELOPING AND VALIDATING NOVEL MICROSATELLITE MARKERS IN THE RED DEEP-SEA CRAB, <i>CHACEON QUINQUEDENS</i> <b>Green, Plough, Chung</b>	BIRDS AND SHELLFISH SANITATION - THE NEW YORK EXPERIENCE <b>Rivara, Byrnes, Carden, Finora</b>	
9:45AM	FISH PRODUCTION AND USE OF OYSTER AQUACULTURE GEAR IN COMPARISON TO NATURAL HABITATS NORTH AND SOUTH OF CAPE COD <b>Schultz*, Hughes, Kimbro, Kirk, Rose, Mercaldo-Allen, Clark, Phillips, Redman, Grabowski</b>	GENETIC PARAMETERS FOR HEAT AND SALINITY STRESS TOLERANCE IN NORTHERN GULF OF MEXICO EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>McDonald*, Saillant</b>	TRANSCRIPTOMIC ANALYSIS OF THE HEMOCYTE RESPONSE TO A VIRUS INFECTION <b>Chung, Bachvaroff</b>	OBSERVATIONS ON THE USE OF BIRD KITES AT AN OYSTER FARM IN SOUTHERN MOBILE BAY, ALABAMA <b>Supan, Wilson, Bradley</b>	ANALYSIS OF THE EXPRESSION AND INHIBITION OF THE PIRAB <sup>VP</sup> TOXIN IN <i>VIBRIO</i> AND NON- <i>VIBRIO</i> STRAINS: THE CASE OF THE PVA1 PLASMID <b>Victorio-De Los Santos*, Vázquez-Reyes, Ayón-Pérez, Zambrano-Zaragoza, Agraz-Cibrián, Gutiérrez-Franco</b>
10:00AM	INTEGRATING INFORMATION ON BENEFICIAL SERVICES PROVIDED BY SHELLFISH AQUACULTURE INTO THE AQUACULTURE PERMITTING AND REVIEW PROCESS <b>Schillaci, Rose, Mercaldo-Allen, Gordon, Clark, Kirk, Milke, Munroe, Phillips, Redman, Schultz, Shinn</b>	COMPARING GENOTYPING TECHNOLOGIES FOR ESTIMATING GENETIC DIVERSITY AND GENOMIC SELECTION IN EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) BROODSTOCK <b>Varney, Wilbur</b>	INVESTIGATING THE INTERSTATE MOVEMENT OF BLUE CRAB VIRUSES AND THE IMPLICATIONS FOR FISHERY BIOSECURITY <b>Herrera*, Zhao, Bachvaroff, Mohammed Geba, Schott</b>	SMALL-SCALE INVESTIGATIONS OF BIRD DETERRENT METHODS ON AND AROUND MASSACHUSETTS SHELLFISH FARMS USING FLOATING GEAR <b>Reitsma, Archer, Booth</b>	
10:15AM		SEGREGATION DISTORTION AND NULL ALLELES IN THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) <b>Wang*, Guo</b>	PARASITIC DINOFLAGELLATE <i>HEMATODINIUM PEREZI</i> PREVALENCE IN <i>CALLINECTES</i> SPP. IN A TROPICAL URBAN ESTUARY <b>Pares*, Schott</b>	COMPARING AVAILABLE DETERRENT METHODS TO REDUCE DOUBLE-CRESTED CORMORANT ATTEMPTS TO ROOST ON FLOATING OYSTER CAGES <b>Cunningham, Wang, Burr, Tappa, Redd, Glover, Dorr</b>	REPETITIVE SEQUENCE COMPOSITION IN TWO ASSEMBLIES OF PACIFIC OYSTER, <i>CRASSOSTREA GIGAS</i> <b>Alcivar-Warren, Bao</b>
10:30-11:00AM	MORNING BREAK				
SESSION TITLE	UNDERGRADUATE RESEARCH COLLOQUIUM Ed Catapane & Margaret Carroll	SHELLFISH GENETICS & GENOMICS Louis Plough	BLUE CRAB ECOLOGY & FISHERIES Rom Lipcius, Rochelle Seitz & Matt Ogburn	BIRDS & SHELLFISH SANITATION Bob Rheault	ONE HEALTH EPIGENOMICS Acacia Alcivar-Warren
11:00 AM	EFFECTS OF MANGANESE ON DOPAMINE D2R SIGNAL TRANSDUCTION PATHWAY L-TYPE CALCIUM CHANNELS AND CONTROL OF LATERAL CELL CILIA RESPONSE AND MEMBRANE POTENTIAL IN GILL OF <i>CRASSOSTREA VIRGINICA</i> <b>Small*, Ulumbelashvili, Catapane, Carroll</b>	THREE CRYPTIC SURFLAM TAXA IN SOUTHERN NEW ENGLAND: GENETIC DIFFERENCES, BIOGEOGRAPHY, AND RELEVANCE FOR AQUACULTURE <b>Hare, Hartung</b>	ECOLOGICAL ASPECTS OF THE TRANSMISSION OF <i>HEMATODINIUM PEREZI</i> TO BLUE CRABS <b>Shields, Chen</b>	A <i>CAMPYLOBACTER</i> ILLNESS OUTBREAK ASSOCIATED WITH OYSTERS CONTAMINATED BY SEABIRDS ROOSTING ON FLOATING AQUACULTURE GEAR <b>Borkman, Slaten, Miller, Goetsch</b>	OVERVIEW OF TRANSPOSABLE ELEMENT IDENTIFICATION, CLASSIFICATION, AND ANNOTATION FOR A BETTER EPIGENETIC LANDSCAPE GENERATION IN NON-MODEL EUKARYOTIC GENOMES <b>Rodriguez, Arkhipova</b>
11:15 AM	WESTERN BLOT STUDY OF GABA AND HISTAMINE RECEPTORS IN PERIPHERAL TISSUES OF <i>CRASSOSTREA VIRGINICA</i> <b>Mansfield*, Wallach, Foster, Pierce, Souffrant, Carroll, Catapane</b>	CHALLENGES AND OPPORTUNITIES FOR GENOMICS-INFORMED SELECTIVE BREEDING OF HIGHLY DIVERGENT EASTERN OYSTER POPULATIONS IN TEXAS <b>Hollenbeck, Matt, Portnoy</b>	ASPECTS OF THE FEEDING ECOLOGY OF <i>CARCINONEMERTES CARCINOPHILA</i> AND ITS EFFECT ON <i>CALLINECTES SAPIDUS</i> REPRODUCTIVE OUTPUT <b>Schneider, Pomroy*<sup>P</sup>, Shields</b>	THE PREVALENCE OF BIRDS AS SOURCES OF FECAL CONTAMINATION IN THE SHELLFISH WATERS OF THE NORTHEAST U.S. <b>Jones, Howell, Foxall, Howell</b>	
11:30 AM	EFFECTS OF STIMULATION OF MANTLE RIM SENSORY TENTACLES BY ALGAE ON GILL CILIA BEATING IN THE BIVALVE MOLLUSC, <i>CRASSOSTREA VIRGINICA</i> <b>Obianke*, McFarlane, Allam, Espinosa, Carroll, Catapane</b>	GENOMIC SELECTION MODELS FOR THE GROWTH AND SURVIVAL TRAITS OF THE EASTERN OYSTER IN LOW SALINITY WATER <b>Liu, Wolf-Bryant, Farrington</b>	BLUE CRAB, <i>CALLINECTES SAPIDUS</i> , REPRODUCTIVE PHENOLOGY IN CHESAPEAKE BAY <b>Schneider*, Fabrizio, Lipcius</b>	ADDRESSING DATA GAPS IN THE CONSIDERATION OF BIRD-BASED PATHOGEN INTRODUCTION IN SHELLFISH AQUACULTURE <b>Noble, Ciesielski</b>	PORTIONS OF A <i>HOMO SAPIENS</i> LINE 1 (L1) SEQUENCE ARE PRESENT IN PENAID SHRIMP GENOMES <b>Alcivar-Warren</b>
11:45 AM	GABA INHIBITS SEROTONERGIC INNERVATION TO THE GILL FROM THE VISCERAL GANGLIA IN THE BIVALVE MOLLUSC, <i>CRASSOSTREA VIRGINICA</i> <b>Chery*, Chery, Catapane, Carroll</b>	STRATEGIES FOR COST-EFFECTIVE GENOMIC BREEDING OF <i>CRASSOSTREA VIRGINICA</i> IN TEXAS <b>Matt, Portnoy, Hollenbeck</b>	RELATING CLIMATE CHANGE TO ABUNDANCE AND REPRODUCTIVE DYNAMICS OF ATLANTIC BLUE CRAB ( <i>CALLINECTES SAPIDUS</i> ) IN SOUTH CAROLINA, USA <b>Kendrick, Brunson</b>	DEVELOPING STRATEGIES FOR MANAGERS AND INDUSTRY TO ADDRESS PUBLIC HEALTH CONCERNS RELATED TO BIRD CONGREGATIONS ON FLOATING AQUACULTURE GEAR <b>Schillaci, Rheault</b>	ONE HEALTH APPROACH TO STUDY THE IMPACT OF ANTIMICROBIAL RESISTANCE IN SHRIMP AQUACULTURE <b>Rodulfo, De Donato<sup>P</sup>, Alcivar-Warren</b>
12:00 NOON		IMPROVING LOW SALINITY TOLERANCE IN LOUISIANA POPULATIONS OF THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , USING GENOMIC SELECTION <b>Schwartz, Plough, Lavaud, LaPeyre, Pandelides, Comba, Stauffer</b>	HABITAT-SPECIFIC ABUNDANCE AND MORTALITY OF JUVENILE BLUE CRAB, <i>CALLINECTES SAPIDUS</i> , WITH BAYESIAN INFERENCE: INFLUENCES OF POST-LARVAL ABUNDANCE, SEASONALITY, AND TURBIDITY <b>Hyman*, Chiu, Seebo, Saluta, Smith, Knick, Lipcius</b>	BIRDS ON FLOATING CULTURE, OH MY! <b>Hudson</b>	EPIGENETIC MECHANISMS REPORTED IN FISH AND SHELLFISH EXPOSED TO GLYPHOSATE-BASED HERBICIDES (GBH) <b>Alcivar-Warren, Warren</b>
12:15 PM		USING ONLY LOW-DENSITY MARKER PANELS FOR GENOMIC SELECTION CAN LEAD TO DECLINING GENOMIC ESTIMATED BREEDING VALUE ACCURACY OVER TIME <b>Delomas, Hollenbeck, Matt, Thompson</b>	TEST OF TREATMENT-SPECIFIC BIAS IN SIMULATED MARSH WITH JUVENILE BLUE CRAB, <i>CALLINECTES SAPIDUS</i> <b>Miller*, Hyman, Shi, Lipcius</b>		
12:30-1:30 PM	LUNCH BREAK				

\* denotes student presenter

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

**MONDAY  
March 27, 2023**

**NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY  
Promenade**

ROOM	Grand D/E/F	Grand East	Grand West	Grand A/B/C	University 1/2
<b>SESSION TITLE</b>	<b>DIVERSITY AND INCLUSION Angela Caporelli Aswani Voleyty</b>	<b>SHELLFISH GENETICS &amp; GENOMICS Louis Plough</b>	<b>BLUE CRAB ECOLOGY &amp; FISHERIES Rom Lipcius, Rochelle Seitz &amp; Matt Ogburn</b>	<b>ROBOTICS AND EMERGING TECHNOLOGY Yang Tao, Miao Yu &amp; Allen Patillo</b>	<b>ONE HEALTH EPIGENOMICS Acacia Alcivar-Warren</b>
1:30 PM	AQUACULTURE IN THE MIDST OF SOCIAL CHANGE <b>Caporelli</b>	EVALUATION OF THREE NON-LETHAL BIOPSY METHODS FOR SNP ARRAY GENOTYPING IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>Plough, Schwartz</b>	RELATIONSHIPS BETWEEN COMMUNITY STRUCTURE AND JUVENILE BLUE CRAB ABUNDANCE IN STRUCTURALLY COMPLEX NURSERY HABITATS IN THE YORK RIVER, CHESAPEAKE BAY <b>Guennouni*, Hyman, Smith, Seebo, Saluta, Lipcius</b>	SEABED CLASSIFICATION OF OYSTER FARMS USING A SINGLE BEAM SCANNING SONAR WITH MACHINE LEARNING <b>Xu*, Rajasekaran, William, Pattillo, Gray, Miao Yu</b>	REVERSE TRANSCRIPTASE-RELATED GENES AND THEIR POSSIBLE ROLE IN THE HOST CELL RESPONSE TO TRANSITION METAL POLLUTION <b>Yushenova, Rodriguez, Arkhipova</b>
1:45 PM		OPPORTUNITY FOR GENOMIC SELECTION TO INCREASE SURVIVAL AGAINST AN OSHV-1 MICROVARIANT FROM SAN DIEGO BAY (CALIFORNIA, USA) <b>Thompson, Agnew, Calla, Burge</b>	ONTOGENETIC VARIATION IN BLUE CRAB ( <i>CALLINECTES SAPIDUS</i> ) USE OF SEAGRASS NURSERIES: SURVIVAL AND ABUNDANCE VARY BY MICROHABITAT <b>Lipcius, Farrar, Bromilow, Orth</b>	MECHANIZED MANILA CLAM FARMING IN NORTHERN PUGET SOUND, WASHINGTON, USA <b>Dewey</b>	
2:00 PM	DOES THE PAST SHAPE THE FUTURE?: THE FUTURE OF INCREASING DIVERSITY IN AQUACULTURE <b>Black</b>	THE EFFECTS OF PROBE AND gDNA INSERT LENGTH ON THE DE NOVO ASSEMBLY AND CAPTURE EFFICIENCY OF EXPRESSED EXOME CAPTURE SEQUENCING (EecSeq) <b>Green*, Puritz</b>	SPATIAL VARIATION IN NURSERY HABITAT USE BY JUVENILE BLUE CRABS IN A SHALLOW, WIND-DRIVEN ESTUARY <b>Voigt, Eggleston<sup>P</sup></b>	AUTOMATING OYSTER AQUACULTURE WITH SOLAR ENERGY <b>Caffrey, Pattison, Rice, Summers</b>	ARE METALS ENDOCRINE-DISRUPTING CHEMICALS (EDC) IN SHELLFISH? <b>Warren*, Hernandez, Alcivar-Arteaga, Alcivar-Warren</b>
2:15 PM		INVESTIGATING THE EFFECTS OF COASTAL STRESSORS ON THE GENOMIC VARIATION OF OYSTER POPULATIONS IN NARRAGANSETT BAY, RHODE ISLAND <b>Zyck*, Stevick, Gomez-Chiarri, Puritz</b>	BLUE CRAB AND FORAGE FISH ABUNDANCES ARE REDUCED WITH SUBESTUARY SHORELINE AND UPLAND DEVELOPMENT <b>Seitz, Lipcius, Saluta, Kornis, Breitbart, Jordan, Weller</b>	DEVELOPING THE OYSTERBOT FOR OYSTER CAGE RETRIEVAL <b>Curran, Leavitt<sup>P</sup></b>	TAXONOMY OF SHELLFISH FOLLOWS THE CLASSIFICATION BY THE WORLD REGISTER OF MARINE SPECIES (WORMS): FOR <i>PENAEUS</i> SPECIES, ONLY <i>PENAEUS VANNAMEI</i> BOONE, 1931 IS ACCEPTED ( <i>LITOPENAEUS VANNAMEI</i> IS NOT ACCEPTED) <b>Alcivar-Warren</b>
2:30 PM	DISCUSSION: THIS SESSION WILL COVER DIFFERENT PERSPECTIVES FROM ORGANIZATIONS, BUSINESSES, AND INSTITUTIONS WADING THROUGH THE ISSUE OF DIVERSITY AND INCLUSION AND SOME INITIATIVES IN MOTION TO ADDRESS IT.	NUCLEOTIDE AND STRUCTURAL POLYMORPHISMS OF THE EASTERN OYSTER GENOME PAINT A MOSAIC OF DIVERGENCE, SELECTION, AND HUMAN IMPACTS <b>Puritz, Zhao, Guo, Hare, He, LaPeyre, Lotterhos, Lundgren, Modak, Proestou, Rawson, Robledo, Weedop, Witkop, Gomez-Chiarri</b>	FEMALE BLUE CRAB SPAWNING MIGRATION REVEALED BY CARAPACE BIOGEOCHEMISTRY <b>Ogburn, Gilmour, Aguilar, Johnson, Richie, Hines</b>	INCORPORATING A DECADE OF WATER QUALITY DATA AROUND WASHINGTON STATE WITHIN A REGIONAL SMART AQUACULTURE FRAMEWORK <b>Page, Booth, Suhrbier, Hudson</b>	
2:45 PM		GENOMIC AND GENETIC INVESTIGATIONS OF THE BAY SCALLOP POPULATION IN THE PECONIC BAY, NEW YORK <b>Grouzdev, Espinosa, Muehl, Farhat, Boutet, Tanguy, Tettelbach, Tobi, Allam</b>	IS THE HIGH EXPLOITATION RATE RESULTING IN THE DECLINING REPRODUCTIVE OUTPUT OF BLUE CRAB ( <i>CALLINECTES SAPIDUS</i> ) IN THE CHESAPEAKE BAY? <b>Fujaya, Aguilar, Bardelli, Richie, Ogburn<sup>P</sup></b>	SHELLEVATOR™: AUTOMATING OYSTER PRODUCTION ON SUBMERSIBLE AND MOBILE WATERCRAFT <b>DePaola</b>	IS GLYPHOSATE AND ENDOCRINE DISRUPTING CHEMICAL (EDC) IN PEOPLE AND SHRIMP? - A LITERATURE REVIEW <b>Warren*, Hernandez, Alcivar-Arteaga, Alcivar-Warren</b>
3:00 – 3:30 PM	<b>AFTERNOON BREAK</b>				
ROOM	University 3/4	Grand East	Grand West	Grand A/B/C	University 1/2
<b>SESSION TITLE</b>	<b>PUBLIC SCIENCE ENGAGEMENT WORKSHOP David Shiffman</b>	<b>SHELLFISH GENETICS &amp; GENOMICS Louis Plough</b>	<b>BLUE CRAB ECOLOGY &amp; FISHERIES Rom Lipcius, Rochelle Seitz &amp; Matt Ogburn</b>	<b>GENERAL CONTRIBUTED I Matt Parker</b>	<b>ONE HEALTH EPIGENOMICS Acacia Alcivar-Warren</b>
3:30 PM		COMBINING PHYSIOLOGICAL ASSAYS, HIGH-THROUGHPUT SEQUENCING, AND FUNCTIONAL GENOMICS TO UNDERSTAND COSTS AND MECHANISMS ASSOCIATED WITH RESILIENCE TO ACIDIFICATION IN MARINE BIVALVES <b>Schwanner*, Barbosa, Farhat, Boutet, Tanguy, Haley, Espinosa, Allam</b>	AN ECOLOGICAL THREAT AND AN ECONOMIC RESOURCE: THE ATLANTIC BLUE CRAB IN MEDITERRANEAN WATERS <b>Mancinelli</b>	AQUACULTURE REGULATIONS: WHY THE COMPLEXITY? <b>Zajicek</b>	FROM BPA TO PHTHALATES TO PFAS: HOW ENVIRONMENTAL CHEMICALS ARE HARMING SHELLFISH AND HUMAN HEALTH AND WHAT WE CAN DO ABOUT IT <b>Vandenberg</b>
3:45 PM		DENOVO TRANSCRIPTOME ASSEMBLY AND ANALYSIS OF THE FLAT OYSTER PATHOGENIC PROTOZOA, <i>BONAMIA OSTREAE</i> <b>Chevignon, Dotto-Maurel, Serpin, Chollet, Arzul</b>	EVIDENCE FOR A MALE BIAS IN BLUE CRAB ( <i>CALLINECTES SAPIDUS</i> ) POT-BASED SAMPLING <b>Brunson, Sitta, Kendrick, Kingsley-Smith</b>	COLLABORATIVELY TRACKING SHELLFISH AQUACULTURE PRODUCTION DATA IN WASHINGTON STATE <b>Hudson, Eardley, Toepelt, Butler</b>	
4:00 PM	HOW TO USE SOCIAL MEDIA TO COMMUNICATE YOUR SCIENCE TO THE PUBLIC, AND WHY YOU SHOULD  A HANDS-ON WORKSHOP TO LEARN 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	A NOVEL AND RAPID qPCR PROBE ASSAY FOR THE DETECTION OF THE ROSEOVARIUS OYSTER DISEASE (ROD) BACTERIUM, <i>ALIIROSEOVARIUS CRASSOSTREAE</i> , IN THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) <b>Yong, Carnegie, Kingsley-Smith, Darden</b>	ASSESSING NORTHEAST FLORIDA OFFSHORE BLUE CRAB FISHING EFFORT WITHIN FLORIDA STATE WATERS <b>Ehnert-Russo, Crowley, Becker</b>	MAINE NEARSHORE MARINE RESOURCES PROGRAM: A NEW NAME AND FOCUS <b>Leach, White, Kanwit</b>	
4:15 PM		GENETIC BASIS OF ABNORMAL MUSSEL MORTALITY IN FRANCE USING A FIELD AND EXPERIMENTAL INFECTION INVESTIGATIONS <b>Munusamy*, Lillehammer, Travers, Maurouard, Aslam, Dégremont</b>	DENSITY-DEPENDENT MATRIX-BASED MODELING OF BLUE CRAB, <i>CALLINECTES SAPIDUS</i> , POPULATION DYNAMICS IN THE CHESAPEAKE BAY <b>Li*, Hyman, Shi, Lipcius</b>	UNIVERSITY OF MARYLAND ONLINE ECONOMIC SPREADSHEET TOOL FOR OYSTER AQUACULTURE: A SHELLFISH ODYSSEY <b>Parker</b>	
4:30 PM			RANKING ECOSYSTEM IMPACTS OF THE CHESAPEAKE BAY BLUE CRAB ( <i>CALLINECTES SAPIDUS</i> ) USING EMPIRICAL GAUSSIAN GRAPHICAL MODELS <b>Liang, Miller, Nesslage, Wilberg</b>	DETECTING THE MULTIPLE STATES OF OYSTER ACTIVITY AND ORIENTATION USING DEEP LEARNING IMAGE PROCESSING AND COMPUTER VISION ALGORITHMS <b>Jin, Comfort, Rudy</b>	
4:45 PM					

\* denotes student presenter

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

TUESDAY March 28, 2023					
8:00-8:50AM	PLENARY: Patricia Glibert (University of Maryland) – <i>Harmful algal blooms and oysters: harm is multifaceted</i> Grand Ballroom				
	NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade				
ROOM	Grand D/E/F	Grand East	Grand West	Grand A/B/C	University 1/2
SESSION TITLE	ECHINODERMS Chris Pearce & Andrew Suhrbier	OshV-1 Norovirus Colleen Burge	NUTRIENTS & SHELLFISH Lisa Kellogg	MUSSELS Luc Comeau	SHRIMPENCODE Acacia-Alcivar Warren & Kathy Tang
9:00AM	EXPANDING NORTHEASTERN US GREEN SEA URCHIN AQUACULTURE PRODUCTION AND THEIR POTENTIAL TO REDUCE BIOFOULING OF SHELLFISH <b>Suckling, Plee, Morse, Eddy</b>	GENETIC DIVERSITY OF THE OSTREID HERPESVIRUS TYPE 1 <b>Pelletier*, Chevignon, Jacquot, Heurtebise, Faury, Degremont, Escoubas, Delmotte, Maurouard, Renault, Morga</b>	DEVELOPING DEFAULT DENITRIFICATION ENHANCEMENT ESTIMATES FOR RESTORED OYSTER REEFES: A CHESAPEAKE BAY EXAMPLE <b>Kellogg, Cornwell, Owens</b>	SEASONAL VARIABILITY OF <i>MYTILUS</i> SP. FEEDING ACTIVITY: THE ROLE OF ENVIRONMENTAL CONDITIONS AND FOOD CHARACTERISTICS <b>Aguera, Strohmeier, Krogness, Rastrick, Strand</b>	SHRIMP GENOMES AND EPIGENOMES (SHRIMPENCODE): RECOGNITION TO STUDENTS AND "OUTSTANDING ONE HEALTH RESEARCHERS" AWARDEES <b>Alcivar-Warren, Tang</b>
9:15AM	THERMAL PRIMING JUVENILE GREEN SEA URCHINS ( <i>STRONGYLOCENTROTUS DROEBACHIENSIS</i> ) TO INCREASE TOLERANCE TO EXTREME FIELD HETEROGENEITY <b>Plee*, Suckling</b>	EVALUATION OF TANGENTIAL FLOW FILTRATION COUPLED TO LONG-READ SEQUENCING FOR OSTREID HERPESVIRUS TYPE 1 GENOME ASSEMBLY <b>Dotto-Maurel*, Pelletier, Morga, Jacquot, Faury, Degremont, Bereszczynki, Delmotte, Escoubas, Chevignon</b>	CRYOPRESERVATION OF <i>TETRAELMIS STRIATA</i> THROUGH SYSTEMATIC EVALUATION OF MULTIPLE PARAMETERS <b>Yee*, Yang</b>	THE ROLE OF GALACTOSAMINE IN MEDIATING CAPTURE EFFICIENCY IN MUSSELS AND ASCIDIANS <b>Capriotti, Holohan, Rosa, Yahel, Shumway, Ward</b>	PENAEID SHRIMP GENOMICS AND POST-GENOMICS: WHOLE REFERENCE GENOMES NEEDED FOR THE ECONOMICALLY IMPORTANT <i>PENAEUS</i> SPECIES <b>Alcivar-Warren, Li</b>
9:30AM	BIOLOGICAL BIOFOULING CONTROL OF SALMON NET PENS USING THE GIANT RED SEA CUCUMBER, <i>APOSTICHOPUS CALIFORNICUS</i> <b>Montgomery, Cannon, Pearce</b>	VIRAL SHEDDING RATES OF TOLERANT AND SUSCEPTIBLE <i>CRASSOSTREA GIGAS</i> INFECTED WITH MULTIPLE OSHV-1 VARIANTS <b>Agnew*, Burge, Parikh</b>	ESTIMATING OYSTER LARVAL DEVELOPMENT AND SUCCESS AT METAMORPHOSIS IN THE WESTERN MISSISSIPPI SOUND <b>Klein*, Powell, Zhang, Kreeger, Wissing</b>	A MULTI-STUDY ANALYSIS OF GUT MICROBIOME DATA FROM THE BLUE MUSSEL ( <i>MYTILUS EDULIS</i> ) EMPHASIZES THE METHODOLOGICAL IMPACT OF GUT VOIDANCE ON BIOLOGICAL INTERPRETATION <b>Griffin*, Darsan, Collins, Holohan, Ward</b>	
9:45AM		SUSCEPTIBILITY OF SHELLFISH AQUACULTURE SPECIES IN THE CHESAPEAKE BAY AND MARYLAND COASTAL BAYS TO OSTREID HERPESVIRUS-1 MICROVARIANTS <b>Kachmar*, Reece, Agnew, Schreier, Burge</b>	QUANTIFYING FARM-SCALE ECOSYSTEM SERVICES ASSOCIATED WITH EASTERN OYSTER AQUACULTURE IN THE MID-ATLANTIC AND CREATING A REGIONAL OYSTER FARM FILTRATION CALCULATOR <b>Barr*, Munroe, Calvo, Steeves, Kreeger, Cheng, Rose, Bayer</b>	INITIATING MUSSEL ( <i>MYTILUS</i> SP.) MONITORING IN NORWAY AND BASELINE FOR 2021 AND 2022 <b>Strohmeier, Aguera, Strand</b>	MAKING SENSE OF THE TAXONOMY OF THE MOST COMMERCIALY IMPORTANT SHRIMP <i>PENAEUS FABRICIUS</i> , 1798 S.L. (CRUSTACEA: DECAPODA: PENAEIDAE): A WAY FORWARD <b>Yang, Ma, Chu, Chan<sup>P</sup></b>
		<b>OshV-1 Norovirus Colleen Burge</b>	<b>DOWN ON THE FARM Bill Walton &amp; Leslie Sturmer</b>	<b>MUSSELS Luc Comeau</b>	
10:00AM		MICROBIOME OF THE PACIFIC OYSTER BEFORE, DURING, AND AFTER AN OSHV-1 OUTBREAK <b>Burge, Chu, Grimm, Shen, Dayal, Prado-Zapata, Evans, Dumbauld</b>	GOT THE FUZZ?: A CONVERSATION ABOUT THE EFFECT OF STALKED CILIATES ON OYSTER NURSERY CULTURE <b>Congrove, Glover<sup>P</sup>, Allen Jr., Snyder</b>	IMPACT OF SOUND INTENSITY RELATED TO MARITIME TRANSPORT ON THE EMBRYOGENESIS AND METAMORPHOSIS OF THE BLUE MUSSEL, <i>MYTILUS EDULIS</i> <b>Veillard*, Beauclercq, Olivier, Laurent, Genard, Marcotte, Tremblay</b>	
10:15AM		LABORATORY STUDIES ON THE IMPACT OF AN OSHV-1 MICROVARIANT ON <i>CRASSOSTREA VIRGINICA</i> FAMILIES AND LINES <b>Burge, Small, Agnew, MacIntyre, Reece<sup>P</sup></b>	CAN A FISH FINDER FIND MORE THAN FISH? <b>Leavitt</b>	MUSSELS IN HOT WATER: THE BEHAVIOURAL ECOLOGY OF TEMPERATE MUSSELS UNDER OCEAN WARMING AND ACIDIFICATION <b>Clements, Ramesh, Nysveen, Dupont, Jutfelt, Hicks, Tremblay, Comeau</b>	USING GENOMES AND TRANSCRIPTOME DATASETS FOR FUNCTIONAL ANNOTATION OF THE IMMUNE RESPONSE OF PENAEID SHRIMP TO PATHOGENS <b>De Donato, Rodolfo, Fajardo, Alcivar-Warren</b>
10:30-11:00AM	MORNING BREAK				
	<b>SHELLFISH &amp; SEAGRASS INTERACTIONS Brett Dumbauld &amp; Kay McGraw</b>	<b>DISEASE Ryan Carnegie &amp; Tal Ben Horin</b>	<b>DOWN ON THE FARM Bill Walton &amp; Leslie Sturmer</b>	<b>MUSSELS Luc Comeau</b>	<b>SHRIMPENCODE Acacia-Alcivar Warren &amp; Kathy Tang</b>
11:00 AM	JUVENILE PACIFIC OYSTER GROWTH AND FOOD RESOURCES IN EELGRASS HABITAT OF VARIABLE SHOOT DENSITY IN A US WEST COAST ESTUARY <b>Merrill*, Dumbauld, McIntyre, Nash, Waldbusser</b>	PATHOLOGY ASSOCIATED WITH RECURRING SUMMER OYSTER MORTALITIES <b>Ben-Horin, Audemard, Ciesielski, Katsuki, Lucas, Noble, Reece, Small, Wilbur</b>	OYSTER FARMING RESILIENCE INDEX <b>Grice, Swann, Sempier, Sempier, Deal</b>	OCEAN ACIDIFICATION AND BIVALVE BYSSUS: EXPLAINING VARIABLE RESPONSES USING META-ANALYSIS <b>Clements, George</b>	A NOVEL VIRUS OF FLAVIVIRIDAE ASSOCIATED WITH SEXUAL PRECOCITY IN MACROBRACHIUM ROSENBERGII <b>Tang, Dong, Wang, Hu, Li, Li, Cao, Shi, Wang, Zou, Song, Gao, Meng, Yang, Li, Shi, Huang</b>
11:15 AM	ASSESSING INTERACTIONS BETWEEN SHELLFISH AND SEAGRASS BEDS AND MACROALGAE TO PROMOTE SUSTAINABLE AQUACULTURE IN THE DELAWARE INLAND BAYS <b>Ozbay, Attarwala, Parsaeimehr</b>	CHARACTERIZING DRIVERS OF OYSTER MORTALITY USING MOLECULAR TOOLS <b>Ciesielski*, Lucas, Ben-Horin, Noble</b>	BUILDING A BENCHMARKING PROGRAM FOR MARKET OYSTERS <b>Walton, Lynch</b>	OCEAN ACIDIFICATION, HYPOXIA, AND WARMING IMPAIR DIGESTIVE PARAMETERS AND ANTIOXIDANT RESPONSES OF MARINE MUSSELS <b>Pan*, Khan, Hu, Wang</b>	
11:30 AM	EFFECT OF OYSTER DENSITY ON THE BIOFILTRATION OF THE PATHOGEN, <i>LABYRINTHULA ZOSTERAE</i> <b>Bergman*, Groner, Schreier, Burge</b>	CO-OCCURRENCE PATTERNS OF OYSTER PARASITES ACROSS NATURAL AND ANTHROPOGENIC CONDITIONS IN CHESAPEAKE BAY <b>Tracy, Lohan, Carnegie, McCollough, Southworth, Ogburn</b>	THE AUBURN UNIVERSITY SHELLFISH LAB: TWENTY YEARS OF INDUSTRY-DRIVEN RESEARCH <b>Tarnecki, Rikard, Grice, Walton</b>	EXPLORING ADAPTATION AND PLASTICITY TO OCEAN WARMING IN BLUE MUSSELS ( <i>MYTILUS EDULIS</i> ) FROM ATLANTIC CANADA <b>Clarke*, Hori, Comeau, Filgueira</b>	ENDOGENOUS VIRUS ELEMENTS (EVE) OF INFECTIOUS HYPODERMAL AND HEMATOPOIETIC NECROSIS VIRUS (IHNV-EVE) IN THE GENOMES OF <i>PENAEUS VANNAMEI</i> AND <i>P. MONODON</i> : INTERACTIONS WITH TRANSPOSABLE ELEMENTS <b>Asuncion, Tang, Alcivar-Warren</b>
11:45 AM	MULTI-YEAR ASSESSMENT OF THE IMPACTS OF OYSTER AQUACULTURE ON SUBMERGED AQUATIC VEGETATION <b>Kellogg, Shields, Dreyer</b>	ARE TRIPLOID OYSTERS MORE TOLERANT TO <i>PERKINSUS MARINUS</i> THAN DIPLOIDS? <b>Brianik*, Lee, Allam</b>	THE COLLABORATIVE BENEFITS OF THE NEFSC SEA GRANT CONNECTION: AN EXAMPLE INVESTIGATING POOR GROWTH OF HARD CLAMS IN NEW JERSEY <b>Gordon, Parikh, Parsons, Robillard, Dacanay, Schuster, Wasserman, Wikfors</b>	MUSSEL FARMING IN GALICIA (NW IBERIAN PENINSULA): NEW PERSPECTIVES IN A GLOBAL CHANGE SCENARIO <b>Babarro, Silva, Padin, Gilcoto</b>	WHITE SPOT SYNDROME VIRUS (WSSV) GENOMES FROM CHINA, ECUADOR, MEXICO AND OTHER COUNTRIES ARE NOT INTEGRATED IN THE GENOMES OF FIVE PENAEID SHRIMP SPECIES, BUT ENDOGENOUS VIRAL ELEMENTS (EVE) OF WSSV (WSSV-EVE) ARE FOUND IN THE TRANSCRIPTOME OF THE FIRST SPECIFIC PATHOGEN-FREE (SPF) <i>PENAEUS VANNAMEI</i> DOMESTICATED IN THE UNITED STATES <b>Galindo*, Asuncion, Alday-Sanz, Alcivar-Warren</b>
12:00 NOON	NEKTON ASSOCIATIONS IN MOSAIC OF OYSTER AQUACULTURE, SEAGRASS, AND MUDFLAT HABITATS <b>Boardman*, Subbotin, Ruesink</b>	VISUALIZATION OF ENVIRONMENTAL <i>PERKINSUS MARINUS</i> CELL FORMS AND IMPLICATIONS FOR ITS TRANSMISSION DYNAMICS <b>Poslednik*, Carnegie</b>	NEW HAMPSHIRE SHELLFISH FARMERS INITIATIVE: THE IMPORTANCE OF OUTREACH IN THE AQUACULTURE INDUSTRY <b>Meyer*</b>	COMMERCIAL PERFORMANCE OF BLUE MUSSEL ( <i>MYTILUS EDULIS</i> ) STOCKS AT A MICROGEOGRAPHIC SCALE <b>Tremblay, Guillou, Cyr, Laplante, Bourque, Toupoint</b>	
12:15 PM	NEKTON USE OF OYSTER ( <i>CRASSOSTREA GIGAS</i> ) FLIP-BAG FARMS WITHIN AND ADJACENT TO NATIVE EELGRASS ( <i>ZOSTERA MARINA</i> ) HABITAT <b>Houle, Page, Boardman, Ruesink</b>	<i>PERKINSUS MARINUS</i> INFECTION OF <i>CRASSOSTREA VIRGINICA</i> WITH A CHANGING CLIMATE IN THE CHESAPEAKE BAY: A META-ANALYSIS <b>Kachmar*, Bergman, Gignoux-Wolfsohn, Feild, Schreier, Lohan, Carnegie, Burge</b>	OUTCOMES AND FUTURE DIRECTIONS OF THE SUPPORTING OYSTER AQUACULTURE AND RESTORATION PROGRAM <b>Hancock, Jones, Kornbluth, Greenberg, Rheault, Barley*<sup>P</sup>, Borgert, Popolizio</b>	A FULLY-PHASED GENOME ASSEMBLY FOR <i>MYTILUS EDULIS</i> UNVEILS A HIGH DEGREE OF PRESENCE-ABSENCE VARIANCE BETWEEN MUSSEL POPULATIONS <b>Hori</b>	A RETROTRANSPON PUTATIVELY ASSOCIATED WITH ABDOMINAL SEGMENT DEFORMITY DISEASE (ASDD) OF FARMED <i>PENAEUS VANNAMEI</i> FROM THAILAND IS PART OF NONLTR-1_LVA RETROTRANSPON ISOLATED FROM THE FIRST SPECIFIC PATHOGEN-FREE SHRIMP DOMESTICATED IN THE UNITED STATES <b>Alcivar-Warren, Yuan, Karoonuthaisiri, Uengwetwanit, Sittikankaw, Asuncion<sup>P</sup></b>
12:30 PM		THE ROLE OF TROPODITHIETIC ACID (TDA) IN PHAEOBACTER INHIBENS (S4) ROLE AS PROBIONT <b>Coppersmith*, Charette, Ovalles, Bernabe, Nelson, Rowley, Gomez-Chiarri</b>	THE TOUGH PEOPLE BEHIND THE TENDER SHELLFISH: NON-FATAL INJURIES ASSOCIATED WITH OYSTER AND CLAM AQUACULTURE IN PANACEA AND CEDAR KEY, FLORIDA <b>Kane, Brooks, Myers, Durborow, Dunleavy</b>	TRIPOID MUSSELS WITH BETTER ATTACHMENT MAY ACT AS IMPROVED EXTRACTIVE SPECIES <b>Osterheld*, Davidson, Comeau, Audet, Hori, Tremblay</b>	
12:30-1:30 PM	LUNCH BREAK				

\* denotes student presenter

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

TUESDAY March 28, 2023						
NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade						
ROOM	Grand D/E/F	Grand East	Grand West	Grand A/B/C	University 3/4	University 1/2
SESSION TITLE	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders	DISEASE Ryan Carnegie & Tal Ben Horin	HARMFUL ALGAL BLOOMS Steve Morton	REMOTE SENSING & SHELLFISH Michelle Tomlinson & Suzanne Bricker	MEET THE AGENCIES Sandra Shumway	ShrimpENCODE Acacia-Alcivar Warren & Kathy Tang
1:30 PM	BRIDGING RESEARCH AND PRACTICE TO IMPROVE THE FUTURE SUSTAINABILITY AND GROWTH OF THE IRISH BIVALVE INDUSTRY (BIVALVE PROJECT) <b>Hlordzi, Lynch<sup>p</sup>, Culloty</b>	THE EFFECT OF PLOIDY ON THE FORMATION AND ANTIMICROBIAL EFFICACY OF EXTRACELLULAR TRAPS IN THE EASTERN OYSTER <b>Brianik*, Bouallagui, Allam</b>	APPLYING ENVIRONMENTAL DNA TECHNIQUES FOR EARLY DETECTION OF RUST TIDE CAUSED BY <i>MARGALEFIDINIUM POLYKRIKOIDES</i> AROUND AQUACULTURE FARMS <b>Scro, Pilate, Osinski, Bayer, Smolowitz</b>	THE NOAA AQUACULTURE PROGRAM – ECOLOGICAL FORECASTING DATA NEEDS <b>Schillaci, Otoshi, Wesyby</b>	AN OPPORTUNITY TO MEET THE LEADERS OF AGENCIES AND ORGANIZATIONS (PSI, ECSGA, NOAA, NAA, USDA, NRAC, PCSGA, APHIS, SEA GRANT) THAT SUPPORT SHELLFISH RESEARCH AND INDUSTRY – AND TO ASK QUESTIONS!	GENOMIC SELECTION OF HEALTHY SHRIMP: A NEW, CONTINUOUS, WHOLE REFERENCE GENOME FOR SPECIFIC PATHOGEN-FREE (SPF) <i>PENAEUS VANNAMEI</i> IS NEEDED <b>Alcivar-Warren</b>
1:45 PM	IMPROVING SHELLFISH HARVEST DATA IN MARYLAND THROUGH DAILY ELECTRONIC REPORTING <b>Amrhein, Walters, Caretti, Slacum Jr., Coleman, Baxter, Richards, Kennedy, Stevenson, Mole, Corbin</b>	LIFE HISTORY AND IMPACTS OF AN UNDESCRIBED PARASITE ON ITS FIRST INTERMEDIATE HOST, THE BAY SCALLOP <b>Espinosa, Bouallegui, Grouzdev, Brianik, Czaja, Geraci-Yee, Kristmundsson, Muehl, Schwaner, Tettelbach, Tobi, Allam</b>	DIFFERENTIAL ACTIVATION OF SUBCELLULAR AND MOLECULAR MECHANISMS BY THE AMNESIC SHELLFISH POISONING TOXIN, DOMOIC ACID, BETWEEN THE SLOW-DEPURATOR <i>PECTEN MAXIMUS</i> AND THE FAST-DEPURATOR <i>MYTILUS EDULIS</i> <b>Garcia-Corona<sup>p</sup>, Blanco, Hegaret, Fleury, Bidault, Calvo, Fabioux</b>	EXTENDING THE REACH OF QUASI-OPERATIONAL HARMFUL ALGAL BLOOM FORECASTS TO ESTUARINE SHELLFISH HARVESTING IN COASTAL CALIFORNIA <b>Anderson, Kudela, Bjorkstedt, Free</b>		GENOMIC ASSISTED BREEDING: PERSPECTIVES FOR GENOMIC SELECTION IN SHRIMP <b>Isidro y Sanchez</b>
2:00 PM	A COMPARISON OF SURVEY DESIGN TECHNIQUES FOR SCALLOP, <i>PLACOPECTEN MAGELLANICUS</i> , CAMERA SAMPLING <b>Delargy, Cassidy, Stokesbury</b>	AN UNDESCRIBED APICOMPLEXAN PARASITE AS A MAJOR DRIVER OF THE COLLAPSE OF THE BAY SCALLOP POPULATION IN NEW YORK: A SIDE EFFECT OF CLIMATE CHANGE? <b>Espinosa, Bouallegui, Grouzdev, Brianik, Czaja, Geraci-Yee, Kristmundsson, Muehl, Schwaner, Tettelbach, Tobi, Allam</b>	BUOYS AND AUTONOMOUS SURFACE VEHICLES FOR AQUACULTURE: AN INEXPENSIVE HARMFUL ALGAL BLOOM MONITORING APPROACH <b>Levin, Morton, Lantham</b>	PHYTO-ARM, AN OPEN SOURCE/OPEN DESIGN TOOLKIT FOR AUTOMATED AND ADAPTIVE HAB MONITORING AND RESPONSE <b>Brosnahan, Govostes, Lucke, Batchelder, Pathare, Pettitt, Ward, Villac, Hubbard, Anderson, Doucette</b>		PRELIMINARY SURVEY OF TRANSPOSABLE ELEMENTS FROM SPECIFIC PATHOGEN-FREE (SPF) SHRIMP, <i>PENAEUS VANNAMEI</i> , DOMESTICATED IN THE UNITED STATES <b>Alcivar-Warren, Bao</b>
2:15 PM	EVALUATING WHETHER A MODIFICATION TO COMMERCIAL SEA SCALLOP DREDGES CAN REDUCE BYCATCH AND INCREASE CATCH EFFICIENCY <b>Gius, Morson, Bochenek, Zemeckis, O'Brien</b>	TIME SERIES ANALYSIS OF ABALONE WITHERING SYNDROME: TRACKING RESPONSES IN MICROBIOME AND HOST HEALTH <b>Kunselman*, Marshman, Souza, Moore, Aquilino, Allard, Gilbert</b>	NANOBUBBLE OZONE TECHNOLOGY (NBOT) FOR SCALABLE EMERGING ALGAE/TOXIN MITIGATION AND REMEDIATION <b>Moeller, Lee, Janech, Beauchesne, Bland, Schanke</b>	REMOTE SENSING FOR SHELLFISH MANAGEMENT: EFFORTS TOWARD EARLY WARNING, TOOL DEVELOPMENT AND TRAINING FOR HARMFUL ALGAL BLOOMS IN CHESAPEAKE BAY <b>Tomlinson, Yu, Staugler, Abecassis, Wilson, Morton, Fuquay, Stumpf</b>		THE GENOME OF <i>PENAEUS VANNAMEI</i> SOLINVIVIRUS (PVSV) IDENTIFIED IN DISEASED SHRIMP FROM BRAZIL IS IDENTICAL TO WENZHOU SHRIMP VIRUS 8 AND <i>P. VANNAMEI</i> PICORNAVIRUS IN WILD SHRIMP FROM CHINA - PORTIONS OF THESE VIRUSES ARE PRESENT IN ONE (ASM373033v1) OF THE TWO GENOME ASSEMBLIES AVAILABLE FOR <i>P. VANNAMEI</i> <b>Zuniga, Alcivar-Warren</b>
2:30 PM	MONITORING SURFCLAMS AT OFFSHORE WIND ENERGY PROJECTS <b>Munroe, Morson, Saba</b>	INVASIVE CRAYFISH AS POTENTIAL VECTORS OF WHITE SPOT SYNDROME VIRUS (WSSV) TO NATIVE CRUSTACEANS OF SOUTH CAROLINA, USA <b>Rothman*, Allen, Kingsley-Smith, Beers, Welch, Kendrick</b>	MOBILE LAB UTILIZED IN MONITORING PHYTOPLANKTON DYNAMICS FOR SAFE SHELLFISH HARVEST IN SOUTHCENTRAL ALASKA <b>Jarosz*, DeMaster, Branson</b>	SATELLITE SEA SURFACE TEMPERATURE GUIDANCE FOR REDUCING <i>VIBRIO PARAHAEMOLYTICUS</i> IN SHELLFISH <b>Daniels, Ransibrahmanakul, Ellett, Jacobs</b>		
2:45 PM	ECONOMIC IMPACTS OF OFFSHORE WIND ENERGY DEVELOPMENT ON THE COMMERCIAL SEA SCALLOP FISHERY <b>Borsetti, Scheld, Rudders, Munroe, Powell, Hofmann, Klinck</b>	NATURAL TRANSMISSION OF <i>HEMATODINIUM PEREZI</i> IN JUVENILE BLUE CRABS ( <i>CALLINECTES SAPIDUS</i> ) IN THE LABORATORY <b>Chen*, Reece, Shields</b>	AQUACULTURE PHYTOPLANKTON MONITORING NETWORK: A CITIZEN SCIENCE APPROACH TO MONITOR HARMFUL ALGAL BLOOMS AND CHANGES IN ENVIRONMENTAL CONDITIONS WITH THE AQUACULTURE INDUSTRY <b>Rene, Maucher-Fuquay, Shuler, Morton</b>	CAN SATELLITE PRODUCTS OR STATE MONITORING DATA SUBSTITUTE FOR ON-FARM DATA FOR OYSTER AQUACULTURE MODELING? <b>Bricker, Ransibrahmanakul, Okada, Davenport, Karrh, Vogel, Briggs, Tomlinson</b>		
SESSION TITLE	COMMERCIAL SHELLFISHERIES Kevin Stokesbury & David Rudders	DISEASE Ryan Carnegie & Tal Ben Horin	GENERAL CONTRIBUTED II Cathy Liu	REMOTE SENSING & SHELLFISH Michelle Tomlinson & Suzanne Bricker	MEET THE AGENCIES Sandra Shumway	
3:00 PM	UNDERSTANDING REPRODUCTIVE DEVELOPMENT IN FEMALE WHITE SHRIMP, <i>PENAEUS SETIFERUS</i> IN SUPPORT OF SUSTAINABLE FISHERIES MANAGEMENT <b>Mitchell*, Kingsley-Smith, Brunson, Wagner, Kendrick</b>	REGIONAL SHELLFISH SEED BIOSECURITY PROGRAM (RSSBP) FORUM:  THE RSSBP WAS ESTABLISHED TO IMPROVE SHELLFISH HEALTH MANAGEMENT IN THE CONTEXT OF INTERSTATE COMMERCE IN AQUACULTURE PRODUCTS ALONG US COASTS. THIS OPEN FORUM WILL INCLUDE AN UPDATE ON PROGRESS TOWARD RSSBP DEVELOPMENT AND DISCUSSION OF EMERGING ISSUES OF CONCERN TO THE SHELLFISH AQUACULTURE INDUSTRY AND REGULATORY COMMUNITY.	STAGING OF CHANNELED WHELK ( <i>BUSYCYTYPUS CANALICULATUS</i> ) FEMALE GONADS USING GROSS AND HISTOLOGICAL ANALYSES <b>Towne, Cameron, Scro, Angell, Smolowitz</b>	IMPROVING OYSTER AQUACULTURE SITE SELECTION WITH HIGH RESOLUTION SATELLITE IMAGERY <b>Kiffney*, Jiang, Hesketh, Lavaud, Boss, Brady</b>	AN OPPORTUNITY TO MEET THE LEADERS OF AGENCIES AND ORGANIZATIONS (PSI, ECSGA, NOAA, NAA, USDA, NRAC, PCSGA, APHIS, SEA GRANT) THAT SUPPORT SHELLFISH RESEARCH AND INDUSTRY – AND TO ASK QUESTIONS!	
3:15 PM	ROTATIONAL MANAGEMENT OF OYSTER HARVEST IN THE RAPPAHANNOCK RIVER, VIRGINIA: 15 YEARS ONWARD <b>Southworth, Wesson, Button, Mann, Marquardt, Scheld</b>		RECOVERY FROM ESTIVATION IN THE APPLE SNAIL, <i>POMACEA MACULATA</i> : NITROGEN EXCRETION <b>Deaton</b>			
3:30 PM	A VIGNETTE ON THE EVOLUTION OF OYSTER MANAGEMENT: THE SEARCH FOR A TRIUMVIRATE OF REFERENCE POINTS SIMULTANEOUSLY DEFINING BIOMASS-MAXIMUM-SUSTAINABLE YIELD (BMSY), FISHING MORTALITY RATE AT MSY (FMSY), AND CULTCH CONTENT AT MSY <b>Powell, Solinger, Hemeon, Pace</b>		GROWTH OF THE BANDED TULIP ( <i>CINCTURA HUNTERIA</i> ) IN TAMPA BAY, FLORIDA <b>Levine, Geiger</b>			
3:45 PM	HOW ACCURATELY CAN SEA SCALLOPS BE AGED? <b>Roman, Rudders, Clark, Southworth, Mann</b>		COMPARISONS OF WILD AND FARMED SEAFOOD: NUTRITION PROFILES AND SAFETY ATTRIBUTES <b>Liu</b>			
4:00 PM	ATLANTIC SURFCLAM ( <i>SPISULA SOLIDISSIMA</i> ) POPULATION DEMOGRAPHICS THROUGH THE DECADES <b>Diaz*, Hofmann, Klinck, Munroe, Powell, Scheld</b>					
4:15 PM						
4:30 – 6:00 PM	POSTER SESSION AND HAPPY HOUR Stadium Ballroom – 2 <sup>nd</sup> floor					
7:00 -10:00 PM	STUDENT ENDOWMENT FUND AUCTION Grand Ballroom					

\* denotes student presenter

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

WEDNESDAY March 29, 2023					
8:00-8:50AM	PLENARY: Vic Kennedy ( <i>Emeritus</i> , University of Maryland) – <i>Depleting the immense protein factory that was Chesapeake Bay</i> Grand Ballroom				
	NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade				
ROOM	University 1/2	University 3/4	Grand A/B/C	Harbor I	Chesapeake
SESSION TITLE	FRESHWATER MUSSELS Dee Kreeger	SHELLFISH RESTORATION & CONSERVATION Peter Kingsley-Smith	VIBRIO Steve Jones	EDNA APPLICATIONS FOR SHELLFISH Phoebe Jekielek	CLAM SELECTIVE BREEDING: RESEARCH ADVANCEMENT & OPERATIONALIZING GENOMIC RESEARCH Dina Proestou & Rebecca Shuford
9:00AM	REEFENSE: DARPA AND A MULTI-DISCIPLINARY TEAM OF SCIENTISTS JOIN FORCES TO DEVELOP OYSTER REEFS FOR COASTAL PROTECTION <b>Bushek, Cebrian, Goad, Guo, Jin, Kibler, Kreeger, La Peyre, Lowe, Moody, Morris, Nassif, Rikard, Riman, San Nicolas, Sparks, Temple</b>	ESTUARINE SHORELINE CONSERVATION AND RESTORATION IN THE URBANIZED WATERSHED OF CHARLESTON COUNTY, SOUTH CAROLINA, USA <b>Kingsley-Smith, Sundin, Wagner, Dyar, Hodges, Bell, Prochaska, Morganello</b>	<i>VIBRIO PARAHAEMOLYTICUS</i> POPULATION IN NATIVE AND CULTURED OYSTERS IN NEW HAMPSHIRE <b>Whistler, Foxall, Wasson, Jones</b>	ENVIRONMENTAL DNA (eDNA): WHAT IS IT AND HOW DOES IT WORK? <b>Jekielek*</b>	AN OVERVIEW OF THE SEA GRANT HARD CLAM SELECTIVE BREEDING COLLABORATIVE (HUB) <b>Clemetson</b>
9:15AM	IMPLEMENTATION OF A REGIONAL "MUSSELS FOR CLEAN WATER INITIATIVE" FOR THE UPPER MID-ATLANTIC REGION <b>Morgan, Kreeger, Cheng, Gentry</b>	LOCATION AND REEF SIZE DRIVE OYSTER RESTORATION SUCCESS <b>Caretti*, Eggleston, Bohnenstiehl, Puckett</b>	UNDERSTANDING THE INFLUENCE OF THE OYSTER ON LEVELS OF HUMAN-PATHOGENIC <i>VIBRIO</i> SPP. <b>Audemard, Reece, Latour, Bienlien, Carnegie</b>	DEVELOPING EDNA AS A TOOL FOR MONITORING CULTURED AND WILD POPULATIONS OF SEA SCALLOPS ( <i>PLACOPECTEN MAGELLANICUS</i> ) IN MAINE, USA <b>Jekielek*, Leslie, Price</b>	UPDATES FROM THE EAST COAST HARD CLAM SELECTIVE BREEDING COLLABORATIVE <b>Allam, Espinosa, Grouzdev, Tanguy, Reece, Yang, Rivara, Reitsma, Clemetson, Guo</b>
9:30AM	INCIDENCE AND RESTORATION PRIORITIZATION OF RARE AND COMMON SPECIES OF FRESHWATER MUSSELS IN THE TIDAL DELAWARE RIVER, USA <b>Kreeger, Cheng, Gentry, Morgan</b>	COMPARISON OF ARTIFICIAL SUBSTRATES WITH OYSTER SHELL FOR OYSTER RECRUITMENT AND BIOMASS IN THE YORK RIVER, VIRGINIA <b>Patel*, Knick, Saluta, Lipcius, Seitz</b>	STUDYING <i>VIBRIO PARAHAEMOLYTICUS</i> -EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) INTERACTIONS, INCLUDING THE OYSTER-ASSOCIATED BACTERIAL COMMUNITY <b>Stevens, Hines, Madanick, Smith, Kuhn</b>	PROACTIVE AND NON-INVASIVE PATHOGEN DIAGNOSTICS TO PREVENT THE SPREAD OF <i>BONAMIA OSTREAE</i> <b>Regan, Vythalingam, Bean<sup>P</sup></b>	POPULATION GENETIC STRUCTURE AND TRANSCRIPTOMIC RESPONSE TO LOW SALINITY IN <i>MERCENARIA MERCENARIA</i> <b>McDowell, Youtsey, Ropp, Snyder, Biesack, Reece</b>
9:45AM	FRESHWATER MUSSEL GROW OUT TECHNIQUES: LINKING MODERN AQUACULTURE PRACTICES WITH RESTORATION GOALS <b>Cheng, Gentry, Kreeger, Butler, Thomas</b>	SUCCESSFUL EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) RECRUITMENT ON TWO ALTERNATIVE SETTLEMENT SUBSTRATES IN VIRGINIA TRIBUTARIES <b>Seitz, Knick, Pysher, Suchonic</b>	HITCHING A RIDE OR TAKING ADVANTAGE? HOW PHYTOPLANKTON AND HOST MICROBIOMES INFLUENCE <i>VIBRIO</i> SPP. ACCUMULATION IN OYSTERS <b>Diner, Zimmer-Faust, Griffith, Gilbert</b>	ENVIRONMENTAL DNA BASED DETECTION OF <i>POLYDORA</i> SPECIES ON OYSTER BEDS IN CHESAPEAKE BAY <b>Biesack, Hudson, Fisher, McDowell</b>	CHALLENGE OF HEAT SHOCK ON NORTHERN QUAHOGS FOR GENOME-WIDE ASSOCIATION STUDY <b>Yang, Yee, Zeng, Bently, Bell</b>
SESSION TITLE	HATCHERIES Don Webster	SHELLFISH RESTORATION & CONSERVATION Peter Kingsley-Smith	VIBRIO Steve Jones	EDNA APPLICATIONS FOR SHELLFISH Phoebe Jekielek	CLAM SELECTIVE BREEDING: RESEARCH ADVANCEMENT & OPERATIONALIZING GENOMIC RESEARCH Dina Proestou & Rebecca Shuford
10:00AM	CHINESE "NATURE AND GROWER-CENTERED" OYSTER HATCHERY TECHNOLOGY: IS IT SUSTAINABLE? <b>Thiyagarajan, Yu, Xiao, Li, You, Wang, Chung</b>	ADVANCING ALTERNATIVES TO SHELL FOR OYSTER RESTORATION <b>Moffat, Slacum Jr., Caretti</b>	PROBIOTIC-INDUCED DISEASE RESISTANCE OF PACIFIC OYSTER LARVAE <b>Hesser*, Mueller, Langdon, Schubiger</b>	DEVELOPING LARVA-SPECIFIC ENVIRONMENTAL RNA (eRNA) TOOLS FOR THE BLUE MUSSEL AQUACULTURE INDUSTRY <b>Ernst, Beal, Grey, Pepperman, Whitney, Price</b>	SELECTION FOR GROWTH IN HATCHERY-REARED SOFT-SHELL CLAMS, <i>MYA ARENARIA</i> L.: A SERIES OF FIELD INVESTIGATIONS <b>Beal</b>
10:15AM		SEVEN YEARS OF MONITORING SHELLFISH ON A CONSTRUCTED, INTERTIDAL REEF IN THE DELAWARE BAY, NEW JERSEY <b>Shinn, Bushek</b>	PREVALENCE OF <i>VIBRIO PARAHAEMOLYTICUS</i> AND <i>V. VULNIFICUS</i> IN BLUE CRABS ( <i>CALLINECTES SAPIDUS</i> ) AND SEAWATER COLLECTED FROM THE MARYLAND COASTAL BAYS <b>Smalls*, Jacobs, Townsend, Chigbu, Parveen</b>		A COASTWIDE PERSPECTIVE ON PRODUCTION, CHALLENGES AND NEEDS IN STOCK IMPROVEMENT OF <i>MERCENARIA MERCENARIA</i> <b>Rheault, Reitsma, Sturmer, Clemetson</b>
10:30-11:00AM	MORNING BREAK				
SESSION TITLE	HATCHERIES Don Webster	SHELLFISH RESTORATION & CONSERVATION Peter Kingsley-Smith	VIBRIO Steve Jones	MODELLING & CLIMATE CHANGE Eric Powell	CLAM SELECTIVE BREEDING: RESEARCH ADVANCEMENT & OPERATIONALIZING GENOMIC RESEARCH Dina Proestou & Rebecca Shuford
11:00 AM	LOW TEMPERATURE STORAGE OF BIVALVE LARVAE - A NEW MANAGEMENT TOOL FOR SHELLFISH HATCHERIES <b>Rivara, Patricio, Allen</b>	THE IMPACT OF VESSEL NOISE POLLUTION ON THE EARLY RECRUITMENT OF BENTHIC INVERTEBRATES IN TWO DISTINCT SITES IN SAINT-PIERRE AND MIQUELON, FRANCE <b>Gauthier*, Uboldi, Tremblay, Meziane, Olivier, Chauvaud, Winkler</b>	NESTED SPATIAL AND TEMPORAL MODELING OF ENVIRONMENTAL CONDITIONS ASSOCIATED WITH GENETIC MARKERS OF <i>VIBRIO PARAHAEMOLYTICUS</i> IN <i>CRASSOSTREA GIGAS</i> IN WASHINGTON STATE <b>Fries, Davis<sup>P</sup>, Corrigan, DePaola, Curriero</b>	TEMPORAL AND SPATIAL COMPARISONS OF OCEAN QUAHOG ( <i>ARCTICA ISLANDICA</i> ) GROWTH ON THE MID-ATLANTIC CONTINENTAL SHELF: FROM THE NEOGLACIAL THROUGH THE TWENTIETH CENTURY <b>LeClaire, Powell<sup>P</sup>, Mann, Hemeon, Pace, Saba, du Pontavice, Sower</b>	
11:15 AM	ON TRACK TO OPTIMIZE THE BOTTLE UPWELLER SYSTEM (BUPSY): TESTING FOUR BOTTLE CONFIGURATIONS <b>Benitz, Leavitt<sup>P</sup></b>	REBUILDING A COLLAPSED <i>MERCENARIA MERCENARIA</i> POPULATION, RESTORING SEAGRASS MEADOWS, AND ERADICATING HARMFUL ALGAL BLOOMS IN A TEMPERATE LAGOON USING SPAWNER SANCTUARIES <b>Doall, Peterson, Gobler</b>	IN-HOUSE <i>VIBRIO PARAHAEMOLYTICUS</i> ENUMERATION IN OYSTERS BY INDUSTRY TO MANAGE RISK <b>DePaola, Kim, Tarnecki, Dewey</b>	PHYSIOLOGICAL AND BEHAVIOURAL RESPONSE OF EASTERN OYSTERS ( <i>CRASSOSTREA VIRGINICA</i> ) AND SOFT-SHELL CLAMS ( <i>MYA ARENARIA</i> ) TO HYPOXIA AND HEATWAVES <b>Talevi*, Clarke, Coffin, Comeau, Sakamaki, Filgueira</b>	
11:30 AM	OPTIMIZING A LOW-VOLUME FLOW-THROUGH SYSTEM FOR REARING PACIFIC OYSTER ( <i>CRASSOSTREA GIGAS</i> ) LARVAE <b>Fleener, Thompson, Langdon<sup>P</sup></b>	RESTORATION OYSTER REEFS DO NOT PROVIDE SETTLEMENT AND EARLY NURSERY HABITAT FOR THE BLUE CRAB, <i>CALLINECTES SAPIDUS</i> <b>Lipcius</b>	PILOT-SCALE DEPURATION DEMONSTRATES THE SUITABILITY OF NON-PATHOGENIC <i>VIBRIO PARAHAEMOLYTICUS</i> AS A SURROGATE FOR COMMERCIAL-SCALE VALIDATION STUDIES <b>Lunda*, Kilgore, Hesser, Waite-Cusic, Schubiger</b>	EVALUATION OF THE DEGREE OF CO-OCCURRENCE OF SURFCLAMS AND OCEAN QUAHOGS AT FISHABLE CONCENTRATIONS <b>Stromp*, Powell, Mann</b>	PANEL DISCUSSION: PERSPECTIVES AND EXPERIENCES IN THE DEVELOPMENT OF GENOMIC TECHNOLOGY AND APPLICATION IN BROODSTOCK PROGRAMS
11:45 AM	EVALUATING ABIOTIC AND BIOTIC FACTORS INFLUENCING HARD CLAM PRODUCTION IN FLORIDA, USA <b>Laramore, Getter<sup>P*</sup>, Sturmer, Anderson, Collins, Philps, Baker</b>	OYSTER REEF CONTROL OF CARBONATE CHEMISTRY – IMPLICATIONS FOR RESTORATION IN ESTUARIES SUBJECT TO COASTAL OCEAN ACIDIFICATION <b>Tomasetti, Doall, Kraemer Jr., Hallinan, Gobler</b>	EFFECTS OF AQUACULTURE PRACTICES ON <i>VIBRIO</i> AND THE MICROBIOME OF THE EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) <b>Parveen, Almuhaideb, Rashed, Hassan</b>	CLIMATE-INDUCED WARMING ON THE MAB SEAFLOOR: MODELING FUTURE DISTRIBUTIONS OF THE ATLANTIC SURFCLAM ( <i>SPISULA SOLIDISSIMA</i> ) <b>Spencer*, Powell, Klinck, Munroe, LeClair, Scheld, Hofmann, Curchitser, Alexander</b>	MODERATOR: REBECCA SHUFORD
12:00 NOON	COMMERCIAL TRIALS WITH RAS FOR OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) LARVAE <b>Congrove, Glover<sup>P</sup>, Ovissipour, van Senten, Bentley, Snyder, Schwarz</b>	SUPPORTING OYSTER AQUACULTURE AND RESTORATION (SOAR) IN MARYLAND: AN ADAPTIVE STRATEGY TO SUPPORT OYSTER FARMERS AND RESTORE OYSTER REEFS DURING COVID-19 <b>Walters, Slacum Jr., Bryer, Hancock, Caretti, Wills, Amrhein</b>	THE RESPONSES OF TOTAL AND POTENTIALLY PATHOGENIC <i>VIBRIO PARAHAEMOLYTICUS</i> IN RESUBMERGED OYSTERS IN THE NORTHEAST U.S. <b>Jones, Howell, Petitpas, Whistler, Foxall, Regan, Madden, Howell, Shanks, Nash</b>	WHAT SHELLFISH FARMERS WANT THE GOVERNMENT TO DO TO REDUCE CLIMATE IMPACTS ON THEIR BUSINESSES <b>McGee, Dewey</b>	
12:15 PM	INDUSTRY UPDATE: DEVELOPING A PILOT SCALE HATCHERY IN DELAWARE <b>Campbell, Hale, McIntosh, Blank</b>	INTEGRATING A RAPID ASSESSMENT PROTOCOL (RAP) INTO MONITORING OF SUBTIDAL OYSTER REEFS <b>Tracy, Aguilar, Ritter, Ogburn</b>		TAKING AN ENERGETIC APPROACH TO PREDICTING HABITAT SUITABILITY: THE INTERACTIVE ROLES OF TEMPERATURE AND FOOD AVAILABILITY IN BIVALVE DEVELOPMENT <b>Czaja*, Jr, Allam, Espinosa, Beal, Pepperman</b>	
12:30-2:00 PM	NSA BUSINESS LUNCHEON Grand Ballroom				
2:00 - 4:30 PM	SCALLOP GALLOP EXPLORE BALTIMORE!! Solar Oyster Production System Tour (advance sign-up required)				CLAM HUB TEAM PROJECT MEETING
4:30 - 6:00 PM	POSTER SESSION AND HAPPY HOUR Stadium Ballroom – 2 <sup>nd</sup> floor				

\* denotes student presenter

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

THURSDAY March 30, 2023					
8:00-8:50AM	PLENARY: Ximing Guo (Rutgers University) – <i>Shellfish aquaculture in the genome era</i> Grand Ballroom				
	NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade				
ROOM	Grand A/B/C	Grand D/E/F	Grand East	Grand West	University 1/2
SESSION TITLE	OYSTERS Bill Fisher	SCALLOPS Steve Geiger	CLAMS Brian Beal	CONTAMINANTS OF EMERGING CONCERN Kayla Mladinich & J. Evan Ward	MANGROVE SHELLFISH Acacia Alcivar-Warren & Kathy Tang
9:00AM	TRIPLOID PACIFIC OYSTERS EXPERIENCE ENHANCED MORTALITY FOLLOWING MARINE HEATWAVES <b>George, Cattau, Middleton, Lawson, Vadopalas, Gavery, Roberts</b>	WILD SCALLOP POPULATION RESILIENCE: USING MULTIGENERATIONAL STUDIES TO ESTIMATE ROBUSTNESS AND ADAPTIVE POTENTIAL TO RAPIDLY CHANGING OCEAN ACIDIFICATION <b>McFarland, Gurr, Bernatchez, Padilla, Dixon, Guy, Milke, Poach, Novara, Hart, Plough, Redman, Sennefelder, Stiles, Wikfors, Meseck</b>	EVALUATION OF IMMUNOLOGICAL RESPONSES TO ENVIRONMENTAL SALINITY CHANGE IN NORTHERN QUAHOGS, <i>MERCENARIA MERCENARIA</i> , USING FLOW CYTOMETRY <b>Zeng*, Yang</b>	SEX-DEPENDENT TOXICITY OF AQUATIC CONTAMINANTS AND THEIR IMPACT ON BLUE MUSSELS, <i>MYTILUS EDULIS</i> <b>Ciocan, Koagouw, Minier, Bucca, Hesketh, Stewart</b>	MANGROVE SHELLFISH: POLLUTANTS, ONE HEALTH, AND EPIGENETICS – RECOGNITION OF STUDENTS AND OUTSTANDING RESEARCHERS <b>Alcivar-Warren, Tang</b>
9:15AM	CITRATE-SYNTHASE RESPONSE AND MULTIPLE-STRESS IN PACIFIC OYSTERS, <i>CRASSOSTREA GIGAS</i> <b>Cattau, George, Roberts</b>	A DYNAMIC PATHWAY TO TRANSITION FROM VULNERABLE TO RESILIENT FISHERIES SOCIAL ECOLOGICAL SYSTEMS: A TRANSDISCIPLINARY CASE STUDY OF THE U.S. ATLANTIC SEA SCALLOP FISHERY <b>Berger*, Colburn, Meseck, Siedlecki, Matassa, Hart, Bethoney, Inglis, Alves</b>	OPTIMIZING HATCHERY CONDITIONING FOR SUNRAY VENUS CLAM SPAWNING <b>Cerino, Ben-Horin<sup>P</sup>, Lucas, Synder, Wilbur</b>	UNDERSTANDING AND LEVERAGING THE RESPONSE OF SHELLFISH MICROBIOMES TO COASTAL POLLUTION <b>Diner, Wiggan, Gilbert</b>	MOLLUSCS, MICROPLASTICS, AND THE MISINFORMATION HIGHWAY <b>Shumway, Mladinich, Ward, Holohan, Blaschik</b>
9:30AM	CAN WE EAT THEM TO SAVE THEM? FARMING THE WEST COAST NATIVE OYSTER, <i>OSTREA LURIDA</i> , FOR MARKET AND RESTORATION VALUES IN TOMALES BAY, CALIFORNIA <b>Fleener, Rintoul, Maguire</b>	PREDICTING LARVAL DISPERSAL AND POPULATION CONNECTIVITY OF SEA SCALLOPS ( <i>PLACOPECTEN MAGELLANICUS</i> ) IN COASTAL MAINE THROUGH COMPUTER MODELING AND POPULATION GENOMICS <b>Ward*, Rawson, Xue</b>	A SOFT-SHELL CLAM RECRUITMENT MONITORING NETWORK: A TOOL FOR THE COASTAL COMMUNITIES OF MAINE <b>Beal, Randall</b>	EFFECTS OF ELEVATED TEMPERATURE AND TiO <sub>2</sub> NANOPARTICLES ON THE GUT MICROBIOTA AND BYSSUS PERFORMANCE OF THE THICK SHELL MUSSEL, <i>MYTILUS CORUSCUS</i> <b>Gao*, Li, Li, Wang</b>	
9:45AM	INVESTIGATION OF THE <i>OSTREA EDULIS</i> LARVAL MICROBIOME THROUGHOUT A NATURAL SPAWNING EVENT <b>Farley, Regan, Warr, Batista, Bass, Bean</b>	BRANT POINT SHELLFISH HATCHERY: A MUNICIPAL SHELLFISH RESTORATION INITIATIVE STRIVING TO SAVE ONE OF THE LAST COMMERCIAL BAY SCALLOP FISHERIES ON NANTUCKET ISLAND, MASSACHUSETTS <b>Riley, Hill, Minella, Berry</b>	INTERTIDAL MUDFLATS AS NURSERY SITES FOR CULTURED, JUVENILE SOFT-SHELL CLAMS, <i>MYA ARENARIA</i> L. <b>Beal, Coffin</b>	FUTURE OCEAN ACIDIFICATION AND WARMING WILL INCREASE THE PHYSIOLOGICAL IMPACT AND BIOAVAILABILITY OF METALS FROM HISTORIC MINE DEPOSITS ON COMMERCIAL BIVALVE SPECIES <b>Rastrick, Bank, Garcia, Krogness, Kutti, van der Meeren, Rastrick</b>	ENVIRONMENTAL EPIGENOMICS AND TRANSGENERATIONAL EPIGENETIC INHERITANCE IN LIVESTOCK AND SHELLFISH SPECIES <b>Khatib</b>
10:00AM	A COMPARATIVE STUDY OF THE BIODIVERSITY ASSOCIATED WITH FALLOW, ACTIVELY FISHED AND NON-FISHED EUROPEAN OYSTER ( <i>OSTREA EDULIS</i> ) BEDS <b>Medlar, Graves, Culloty, Lynch<sup>P</sup></b>	PATTERNS AND PROCESSES UNDERLYING SPATIOTEMPORAL VARIATION IN BAY SCALLOP DENSITY AND SIZE-STRUCTURE WITHIN AND AMONG THREE SOUNDS OF NORTH CAROLINA <b>LaCroce, Brooks, Eggleston</b>	PILOT-SCALE STUDIES TO EXAMINE REPRODUCTIVE OUTPUT IN SOFT-SHELL CLAMS, <i>MYA ARENARIA</i> L. <b>Beal, Randall</b>	EFFECTS OF UNDERWATER NOISE ASSOCIATED WITH THE INSTALLATION OF OFFSHORE WIND TURBINES ON THE LARVAL DEVELOPMENT OF EASTERN NORTH ATLANTIC COMMERCIAL BIVALVES <b>Olivier, Gigot, Bonnel, Mathias, Meziane, Tremblay, Chauvaud</b>	
10:15AM			THREE CENTURIES OF INCREASING GROWTH RATES OF A LONG-LIVED CLAM ( <i>ARCTICA ISLANDICA</i> ) ON THE WESTERN MID-ATLANTIC CONTINENTAL SHELF (US) <b>Hemeon, Powell, Klinck, Mann<sup>P</sup>, Pace</b>	MICROPLASTIC ACCUMULATION KINETICS AND EFFECTS ON THE ENERGY CONDITION OF GIANT SCALLOP ( <i>PLACOPECTEN MAGELLANICUS</i> ) <b>Faraut*, Soubaneh, Tremblay, Rouleau, Pelletier</b>	STATUS OF MANGROVE FORESTS IN ECUADOR <b>Galindo, Alcivar-Arteaga<sup>P</sup>, Hernández, Díaz, Asunción, Saltos, Figueroa, Espinoza, Villota, Calvache, Jaen, Valarezo, Romero, Mejía, Aveiga, Mendoza, Alcivar-Warren</b>
10:15-10:45AM	MORNING BREAK				
SESSION TITLE	OYSTERS Bill Fisher	SCALLOPS Steve Geiger		CONTAMINANTS OF EMERGING CONCERN Kayla Mladinich & J. Evan Ward	MANGROVE SHELLFISH Acacia Alcivar-Warren & Kathy Tang
10:45AM	ASSESSING DREDGE GEAR VERSUS DIVER-BASED SURVEYS IN SUPPORT OF A FISHERY-INDEPENDENT MONITORING PROGRAM FOR SUB-TIDAL OYSTER REEFS <b>Bowling, Eggleston, Boutin</b>	THE EFFECT OF POPULATION DENSITY ON OOCYTE DEVELOPMENT IN ATLANTIC SEA SCALLOPS ( <i>PLACOPECTEN MAGELLANICUS</i> ) <b>Clark*, Roman, Mann, Rudders</b>		DETERMINATION OF THE UPPER SIZE LIMIT OF MICROPLASTIC PARTICLES THAT CAN BE INGESTED BY THE QUAGGA MUSSEL, <i>DREISSENA BUGENSIS</i> <b>Collins*, Holohan, Ward</b>	CYTOCHROME P450-DEPENDENT MIXED FUNCTION OXIDASES (MFO) SYSTEM DYNAMICS DURING THE POLYAROMATIC HYDROCARBON (PAH) METABOLISM IN THE GREEN MUSSEL, <i>PERNA VIRIDIS</i> (LINNAEUS, 1758) <b>Amutha</b>
11:00 AM	DOSE-DEPENDENT EFFECTS OF EXPOSURE TO POLYUNSATURATED ALDEHYDES ON EMBRYOS OF EARLY LARVAL STAGES OF THE BIVALVES, <i>CRASSOSTREA VIRGINICA</i> AND <i>MYTILUS EDULIS</i> <b>Peterson, Rawson</b>	TESTING THE TRANSFER OF FECAL AND DIGESTIVE GLAND MICROBIOTAS BETWEEN MUSSELS ( <i>MYTILUS EDULIS</i> ) AND THE KING SCALLOP ( <i>PECTEN MAXIMUS</i> ) FOR ACCELERATED DEPURATION OF DOMOIC ACID <b>Deléglise*, Noël, Barnouin, Corona, Offret, Lassudrie, Hegaret, Bidault, Fabioux</b>		SMALLER MICROPLASTICS ACCUMULATE WITH AGE IN THE PHILIPPINE COCKLE, <i>ANADARA ANTIQUATA</i> <b>Bucol*, Vasig, Watanabe, Kataoka</b>	THE MANGROVE EPIGENOME (MANGROVEENCODE) PROJECT OF THE FUCOBI FOUNDATION OF ECUADOR: A ONE HEALTH APPROACH TO CONSERVATION OF HEALTHY MANGROVES, TO PRODUCE HEALTHY SHELLFISH, AND PROTECT PEOPLE'S LONG-TERM HEALTH <b>Alcivar-Arteaga, Warren, Galindo, Hernandez, Díaz, Espinoza, Figueroa, Mejia, Romero, Asunción, Zuniga, Aveiga, Mendoza, Alcivar-Warren</b>
11:15 AM	ENERGETIC PHYSIOLOGY OF <i>CRASSOSTREA VIRGINICA</i> OYSTER SPAT FROM THE ACCLIMATION PERIOD TO THE DORMANCY PHASE: IMPLICATIONS FOR THEIR SURVIVAL DURING COLD WINTERS <b>Bridier, Clements, Comeau, Mallet, Mallet, Carver, Tremblay</b>	OBSERVATION OF BORING CLAMS IN CALICO SCALLOPS FROM CAPE CANAVERAL, FLORIDA, USA <b>Geiger, Adams, Kiryu, Luba, Leal</b>		ECOTOXICOLOGICAL EFFECTS OF MICROPLASTICS ON MUSSELS: INSIGHTS FROM IMMUNE DEFENSE, OXIDATIVE STRESS, AND ENERGY METABOLISM <b>Wei*, Gu, Wang</b>	FUTURE DIRECTION OF THE FUCOBI MANGROVE SHELLFISH RESEARCH PROJECT IN ECUADOR THROUGH A ROTARY FOUNDATION GLOBAL GRANT - INTERESTED IN JOINING US? <b>Alcivar-Arteaga, Alcivar-Warren<sup>P</sup></b>
11:30 AM	REVISITING THE NEWELL NUMBER: ESTIMATING PRE-COLONIAL OYSTER ABUNDANCE AND ECOLOGICAL SERVICES IN THE CHESAPEAKE BAY <b>Mann, Southworth, Tarnowski, Wesson, Marquardt, Harding, Rudnicki</b>			MICROPLASTICS AS VECTORS OF <i>VIBRIO PARAHAEMOLYTICUS</i> TO THE PACIFIC OYSTER <b>Wiggan*, Allard, Gilbert</b>	
11:45 AM	ANALYSIS OF STRESS ASSOCIATED TO INTER-SITE TRANSPORT OF THE EASTERN OYSTER PRODUCTION <b>Gravel-Brunet, Gilmore-Solomon, Tremblay</b>			MICROPLASTICS AND OYSTER AQUACULTURE <b>Mladinich*, Holohan, Ward, Shumway</b>	
12:00-1:00 PM	LUNCH BREAK				

\* denotes student presenter

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

THURSDAY March 30, 2023				
NSA AT THE MOVIES - FILM FESTIVAL – CONTINUOUS SHOWINGS ALL DAY Promenade				
ROOM	Grand A/B/C	Grand D/E/F	Grand East	Grand West
SESSION TITLE	OYSTERS Bill Fisher	MACROALGAE-SHELLFISH CO-CULTURE Michael Doall	HORSESHOE CRABS Elizabeth Bouchard & Daniel Sasson	GENERAL CONTRIBUTED III Daphne Munroe & Emily Fuqua
1:00 PM	GENDER RATIOS OF OYSTERS IN STRESSED ESTUARIES IN SOUTHERN FLORIDA <b>Geiger</b>	MAPPING THE GROWTH AND QUALITY OF FARMED SUGAR KELP ( <i>SACCHARINA LATISSIMA</i> ) IN THE ESTUARIES SURROUNDING LONG ISLAND, NEW YORK <b>Doall, Curtin, Morrell, Provost, Eckstein, Chen, Gobler</b>	A METHOD FOR ESTIMATING HORSESHOE CRAB ABUNDANCE IN THE DELAWARE BAY, USA <b>Anstead, Sweka, Barry, Hallerman, Smith, Wong</b>	OFF-SHORE AQUACULTURE POTENTIAL FOR THE ATLANTIC SURFCLAM, <i>SPISULA SOLIDISSIMA</i> : FIELD OBSERVATIONS AND MULTI-STRESSOR LABORATORY EXPERIMENTS <b>Steeves, Munroe, Meseck, Guo, Towers, Myers, Martin, Dameron</b>
1:15 PM	EFFECTS OF SHIFTS IN SALINITY AND PARASITE LOADING IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> <b>Kirby, Geiger</b>	USE OF SEAWEEDS TO PROTECT AQUACULTURED BIVALVES AGAINST CLIMATE CHANGE CO-STRESSORS AND HARMFUL ALGAL BLOOMS <b>Gobler, Sylvers, Doall</b>	USING EPIBIONT DIVERSITY AND CARAPACE CONDITION IN AMERICAN HORSESHOE CRABS ( <i>LIMULUS POLYPHEMUS</i> L.) AS TOOLS TO DISTINGUISH BETWEEN POPULATIONS AND ELUCIDATE AGE-STRUCTURE <b>Botton, Colón, Jean-Baptiste, Zaw, Loveland</b>	REVISITING ECOLOGICAL CARRYING CAPACITY INDICES FOR BIVALVE CULTURE <b>Comeau, Guyondet, Drolet, Sonier, Clements, Tremblay, Filgueira</b>
1:30 PM	TRANSCRIPTOMIC RESPONSES TO LOW SALINITY IN EASTERN OYSTER ADULTS AND LARVAE <b>Bhandari, Purnell, Yeboah, Butt, Liu</b>	CAN INTEGRATED MULTI-TROPHIC AQUACULTURE HELP MITIGATE THE EFFECTS OF CLIMATE CHANGE ON ECONOMICALLY IMPORTANT FILTER FEEDERS <b>Rastrick, Jiang, Wang, Graham, Collier, Whiteley, Strohmeier, Fang, Strand</b>	MITIGATION STRATEGY FOR HORSESHOE CRAB IMPINGEMENT BY A FLORIDA POWER PLANT <b>Heres, Brockmann, Crowley, Gandy</b>	FOOD WEBS SUPPORTING CRAB PRODUCTION IN ESTUARIES WITH EXPANDING COASTAL URBANISATION <b>Waltham, Connolly</b>
1:45 PM	SURVIVAL AND GROWTH OF TETRAPLOID EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> , IN DIFFERING SALINITIES WITHIN THE NORTHEASTERN GULF OF MEXICO <b>Capps, Rikard, Spellman, Chaplin</b>	ENHANCING MARINE AQUACULTURE IN THE TROPICAL U.S.: METHODS FOR SUSTAINABLE COMMERCIAL CO-CULTIVATION OF SHELLFISH AND SEAWEED IN FLORIDA <b>Welch, Roberson</b>	DISTRIBUTION OF HORSESHOE CRAB EGGS AND INFAUNA AROUND INTERTIDAL OYSTER FARMS IN DELAWARE BAY <b>Bouchard*, Munroe, Maslo, Bushek</b>	POTENTIAL TROPHIC NICHES OVERLAP OF NATIVE AND NON-INDIGENOUS SPECIES: WHO EATS WHAT AND WHO EATS MORE? <b>Cabral*, Costa, Chainho, Comeau, Tremblay</b>
2:00 PM	EFFECTS OF DESICCATION PRACTICES ON EASTERN OYSTER ( <i>CRASSOSTREA VIRGINICA</i> ) CONDITION INDEX, GROWTH RATE, AND PARASITE LOAD <b>Thomas, Buck, Wilbur</b>	THE GREENWAVE OCEAN FARMING HUB: A PLATFORM FOR SEAWEED FARMER TRAINING AND COLLABORATION <b>Olsen</b>	HORSESHOE CRAB INTERACTIONS WITHIN A NEWLY-RESTORED FRINGING MARSH IN STRATFORD POINT, CONNECTICUT <b>Kasinak</b>	HOW DOES RECRUITMENT CONTRIBUTE TO RECENT SHIFTS IN LONG-TERM TRAJECTORIES OF BURROWING SHRIMP POPULATIONS AND THEIR EFFECT ON SHELLFISH AQUACULTURE IN WILLAPA BAY, WASHINGTON? <b>Dumbauld, McIntyre, Lewis, Ruesink, Hull</b>
2:15 PM	MECHANISMS OF MORTALITY IN <i>CRASSOSTREA VIRGINICA</i> DURING SEVERE HYPOXIA: EFFECTS OF ENDOGENOUS AND EXOGENOUS BACTERIA, AND TEMPERATURE <b>Steeves, Winterburn, Filgueira, Comeau, Guyondet, Maillet, Babarro, Clements, Mallet, Haché, Poirier, Deb, Coffin</b>	INCORPORATING KELP AND OYSTER CO-CULTURE AT SCALE <b>Grindle</b>	COMPARING EMBRYONIC DEVELOPMENT IN BEACH AND MARSH HABITATS FOR THE AMERICAN HORSESHOE CRAB, <i>LIMULUS POLYPHEMUS</i> , IN SOUTH CAROLINA, USA <b>Scott, Sasson, Kendrick, Brunson, Kingsley-Smith</b>	SENSITIVITY OF THE GROOVED CARPET SHELL CLAM, <i>RUDITAPES DECUSSATUS</i> , TO OCEAN ACIDIFICATION <b>Ei-Wazzan, Shaltout, Madkour, Abu El-Regal, El Shazly, Awad</b>
2:30 PM	EFFECT OF BIOFOULING CONTROL AND STOCKING DENSITY ON MICROCLIMATE IN OFF-BOTTOM OYSTER CULTURE GROW-OUT BAGS: OYSTER PERFORMANCE <b>Greene, Walton</b>	LEVERAGING THE SHARED RESOURCES OF OYSTER CO-OPERATIVE TO SUPPORT KELP PRODUCTION <b>Sparta, Foote, Sparta</b>	THE USE OF NON-SANDY BEACH HABITATS BY SPAWNING HORSESHOE CRABS: A CONVERSATION ABOUT ITS IMPLICATIONS AND FUTURE RESEARCH PRIORITIES <b>Sasson, Brunson, Scott, Kendrick</b>	ONTOGENETIC SHIFTS IN SALINITY TOLERANCE IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> : IMPLICATIONS FOR RESTORATION AND RECOVERY IN APALACHICOLA BAY, FLORIDA <b>Fuqua*, Brooke</b>
2:45PM		CO-CULTURE OF BAY SCALLOPS AND KELP IN CHINCOTEAGUE BAY, MARYLAND <b>Rush, Holloway</b>		EFFECTS OF HYPOXIA AND ACIDIFICATION ON EARLY-STAGE BIVALVES UNDER NATURAL AND ARTIFICIAL CYCLING CONDITIONS <b>Kraemer Jr.*, Gobler</b>
3:00 PM				TRANSGENERATIONAL INHERITANCE OF OCEAN ACIDIFICATION-INDUCED FEMINIZATION IN THE PORTUGUESE OYSTER <b>Dang*, Thiyagarajan</b>
3:30 – 6:00 PM	<b>CLOSING HAPPY HOUR</b> Stadium Ballroom – 2 <sup>nd</sup> floor			

\* denotes student presenter

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