



# ISGAXV

## XV International Symposium on Genetics in Aquaculture

*11-17 May*





# ISGA XV Agenda

11-17 May 2025

Conference Location: Cádiz

## Sunday 11th May

16:00 -21:00	Registration Open.	EDIFICIO CONSTITUCIÓN 1812 (LA BOMBA)
19:00 - 21:00	Welcome reception	EDIFICIO CONSTITUCIÓN 1812 (LA BOMBA)

## Monday 12th May

### Day 2

9:00 - 9:30	<b>Welcome to ISGA XV and opening Ceremony</b> <i>Rector de la Universidad de Cádiz</i> <i>Presidenta de IFAPA</i> <i>Delegación Territorial de Agricultura, Pesca, Agua y Desarrollo Rural de Cádiz</i>
9:30 - 10:30	Opening conference Keynote <b>PROGRESS AND CURRENT STATUS OF GENOMICS AND MOLECULAR BREEDING OF MARINE FISH IN CHINA</b> <i>Dr Songling Chen</i> <i>Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery</i>
10:30 - 11:30	<b>Session 1: Genomic Selection I</b> <i>Moderators: Xu Peng, Dean Jerry</i>
10:30-10:45	<b>REALIZED RESPONSE TO GENOMIC SELECTION FOR FEED EFFICIENCY IN EUROPEAN SEABASS</b> <i>Marc Vandeputte</i> <i>MARBEC, Université de Montpellier, CNRS, Ifremer, IRD, INRAE, Palavas-les-Flots, France</i>
10:45-11:00	<b>OPTIMISATION OF GENOMIC SELECTION FOR HARVEST TRAITS OF MALABAR RED SNAPPER (<i>Lutjanus malabaricus</i>)</b> <i>Bing Liang</i> <i>Tropical Futures Institute, James Cook University Singapore, Singapore</i>
11:00-11:15	<b>EPIGENETIC-BASED MOLECULAR MARKER SCREENING FOR GENOMIC SELECTION IN <i>LITOPENAEUS VANNAMEI</i></b> <i>Zhi Ye</i> <i>Key Laboratory of Tropical Aquatic Germplasm of Hainan Province, Sanya</i>





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	Oceanographic Institution, Ocean University of China, Sanya 572024, China
11:15-11:30	<b>GWAS AND GENOMIC SELECTION FOR GROWTH-RELATED TRAITS IN EASTERN OYSTER (CRASSOSTREA VIRGINICA)</b> Constanza Urzúa-Encina/ Rodrigo Marín-Nahuelpi Facultad de Ciencias Veterinarias y Pecuarias, Universidad de Chile, Avenida Santa Rosa 11735, 8820808, La Pintana, Santiago, Chile
11:30 - 12:00	<b>Coffee Break</b>
12:00 - 13:30	<b>Session 2: Genomic Selection II</b> Moderators: Xu Peng, Dean Jerry
12:00-12:15	<b>APPLICATIONS OF GENOMICS SELECTION FOR FEED EFFICIENCY PERFORMANCE IN LARGE YELLOW CROAKER</b> Peng Xu State Key Laboratory of Mariculture Breeding, College of Ocean and Earth Sciences, Xiamen University, Xiamen 361102, China
12:15-12:30	<b>HARNESSING SNPS AND INDELS FROM WHOLE-GENOME SEQUENCING TO ENHANCE GENOMIC PREDICTION IN STURGEONS</b> Hailiang Song Fisheries Science Institute, Beijing Academy of Agriculture and Forestry Sciences & Beijing Key Laboratory of Fisheries Biotechnology, Beijing 100068, China
12:30-12:45	<b>INTEGRATING FUNCTIONAL ANNOTATION DATA IN GENOMIC PREDICTION MODELS FOR VNN RESISTANCE IN EUROPEAN SEA BASS: BAYESIAN AND MACHINE LEARNING METHODS</b> Sara Faggion Department of Comparative Biomedicine and Food Science, University of Padova, Italy
12:45-13:00	<b>GENOMIC PREDICTION OF SCALE DROP DISEASE RESISTANCE IN BARRAMUNDI Lates calcarifer UNDER CONTROLLED LABORATORY CONDITIONS</b> Zhi Weng Josiah Poon Tropical Futures Institute, James Cook University Singapore, 149 Sims Drive, 387380, Singapore
13:00-13:15	<b>STANDARDIZATION OF A LOW-DENSITY SNP FOR PARENTAGE ASSESSMENT AND FOR COST-EFFECTIVE GENOMIC SELECTION IN DUSKY GROUPER (EPINEPHELUS MARGINATUS)</b> Alexandre Wagner Silva Hilsdorf Integrated Center of Biotechnology, University of Mogi das Cruzes, Brazil
13:15-13:30	<b>ENHANCING FARMERS PROFITABILITY USING SPECIALISED PRODUCTS: A STRATEGIC APPROACH TO LINE BREEDING IN TILAPIA</b> Rajesh Joshi GenoMar Genetics Group, Norway



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13:30 - 14:30	Lunch
14:30 - 16:30	<b>Session 3: Quantitative Genetics and Breeding I</b> <i>Moderators: Jesus Fernandez, Anna K. Sonesson</i>
14:30-14:45	<b>CAPTURING THE HOST-DONOR INTERACTION EFFECT TO BETTER SELECT FOR PEARL SIZE IN THE SILVER PEARL OYSTER, <i>P. MAXIMA</i></b> Cecile Massault ARC Research Hub for Supercharging Tropical Aquaculture Through Genetic Solutions, James Cook University, Townsville, Australia
14:45-15:00	<b>SIGNATURES OF SELECTION IN TWO LINES OF RAINBOW TROUT SELECTED FOR THEIR DIVERGENT FAT CONTENT</b> Simon Pouil Université Paris-Saclay, INRAE, AgroParisTech, GABI, Jouy-en-Josas, France
15:00-15:15	<b>THE IMPORTANCE OF SEASONAL GROWTH IN AQUACULTURE BREEDING PROGRAMS</b> Brad Evans CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Castray Esplanade, Battery Point Tasmania 7004, AUSTRALIA
15:15-15:30	<b>DO WE HAVE TO INTEGRATE MOLT STAGE IN THE GENETIC EVALUATION OF PACIFIC BLUE SHRIMP <i>PENAEUS STYLIROSTRIS</i>?</b> Pierre Haffray Syndicat des sélectionneurs avicoles et aquacoles français, Campus de Beaulieu, Rennes, France
15:30-15:45	<b>GENETIC PARAMETERS OF RESISTANCE TO ACUTE HEPATOPANCREAS NECROSIS DISEASE (AHPND) AND THEIR GENETIC CORRELATIONS WITH GROWTH TRAITS IN <i>PENAEUS VANNAMEI</i></b> Marina Martínez Soler Aquaculture Research Group (GIA), Institute of Sustainable Aquaculture and Marine Ecosystems (IU-ECOQUA), University of Las Palmas de Gran Canaria (ULPGC), Telde, Spain
15:45-16:00	<b>GENETIC VARIANCE FOR THE UNIFORMITY OF SHELL WIDTH IN PACIFIC OYSTER (<i>CRASSOSTREA GIGAS</i>)</b> Hooi Ling Khaw CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Castray Esplanade, Battery Point Tasmania 7004, AUSTRALIA
16:00-16:15	<b>GENOME-WIDE ASSOCIATION STUDY (GWAS) AND GENOMIC PREDICTION FOR IMPROVED BREEDING OF <i>Enteromyxum leei</i> RESISTANCE IN OLIVE FLOUNDER (<i>Paralichthys olivaceus</i>)</b> Kim Gaeun Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea





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16:15-16:30	<p><b>UNRAVELLING FAMILY CONTRIBUTIONS AND SURVIVAL ACROSS GENERATIONS UNDER SKEWED BREEDING DYNAMICS: A CASE STUDY OF COMMERCIALY FARMED SILVER-LIPPED PEARL OYSTER <i>PINCTADA MAXIMA</i></b></p> <p>Nga Vu Australian Research Council Industrial Transformation Research Hub for Supercharging Tropical Aquaculture Through Genetic Solutions, College of Science and Engineering, James Cook University, Townsville, 4811, Australia.</p>
16:30 - 17:00	<b>Coffee Break</b>
17:00 - 18:30	<p><b>Session 4: Quantitative Genetics and Breeding II</b></p> <p>Moderators: Romain Morvezen, Ashie Norries</p>
17:00-17:15	<p><b>EVALUATING THE USE OF PHENOTYPES OBTAINED UNDER COMMERCIAL CONDITIONS ON GENETIC GAIN FOR BODY WEIGHT IN TURBOT BREEDING PROGRAMS</b></p> <p>Jesús Fernández Martín Dpto. Mejora Genética Animal, INIA-CSIC, 28040 Madrid, Spain</p>
17:15-17:30	<p><b>RESPONSE FOR SHRIMP BODY WEIGHT SELECTION IN A COMMERCIAL POND IN ECUADOR INVOLVING MORPHOLOGICAL TRAITS</b></p> <p>Hugo H Montaldo Genomar - La Chamecita SAS, Santa Elena, Ecuador</p>
17:30-17:45	<p><b>IS HEART MORPHOLOGY GENETICALLY ASSOCIATED WITH POST-HANDLING MORTALITY IN ATLANTIC SALMON?</b></p> <p>Roberto Carvalheiro CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Australia</p>
17:45-18:00	<p><b>HIGH-DENSITY GENOME-WIDE ASSOCIATION STUDY IN TWO COHORTS OF RAINBOW TROUT IDENTIFIES CANDIDATE GENES FOR RESISTANCE TO INFECTIOUS PANCREATIC NECROSIS</b></p> <p>Florence Phocas Université Paris-Saclay, INRAE, AgroParisTech, Jouy-en-Josas, France</p>
18:00-18:15	<p><b>GENOME-WIDE INSIGHTS AND PREDICTIONS ON THE GENETIC BASIS OF THERMAL TOLERANCE IN OLIVE FLOUNDER</b></p> <p>Ganepola Arachchige Nipuni Piyumika Department of Marine Life Sciences &amp; Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea</p>
18:15-18:30	<p><b>A NOVEL TOOL TO ASSIGN POLYPLOID STURGEONS (<i>ACIPENSER BAERII</i>, <i>ACIPENSER GUELLENSTAEDTII</i>) FOR CONSERVATION OR SELECTIVE BREEDING PURPOSES</b></p> <p>Anastasia Bestin SYSAAF, INRAE-LPGP, Campus de Beaulieu, Rennes, France</p>



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**18:30 - 19:30**

**Poster session**





## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

### Tuesday 13th May

#### Day 3

8:45-9:00	<b>Welcome of the day</b>
9:00 - 9:30	<p>Opening session Keynote  <b>DESIGNS TO INTEGRATE GENE EDITING IN SELECTIVE BREEDING PROGRAMMES</b></p> <p>Anna K. Sonesson  Nofima AS, P.O. Box 210, 1433, Aas, Norway</p>
9:30 - 11:00	<p><b>Session 5: Genetics and genomic of diseases I</b>  Moderators: Helena D'Cotta, Songling Chen</p>
09:30-09:45	<p><b>IDENTIFICATION OF CANDIDATE GENES FOR RESISTANCE TO <i>Miamiensis avidus</i> IN OLIVE FLOUNDER BY GENOME WIDE ASSOCIATION STUDIES AND MODELS OPTIMIZATION FOR GENOMIC PREDICTION</b></p> <p>Duwage Chandima Gihan Rodrigo  Department of Marine Life Sciences &amp; Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju 63243, Republic of Korea</p>
09:45-10:00	<p><b>NOVEL SELECTION STRATEGIES TO COMBAT ENTEROCYTOZON HEPATOPENAEI AND WHITE FECES DISEASE IN WHITELEG SHRIMP (<i>PENAEUS VANNAMEI</i>).</b></p> <p>Marcela Salazar  Benchmark Genetics, Norway</p>
10:00-10:15	<p><b>LEVERAGING ADVANCED 'OMICS' APPROACHES FOR FISH WELFARE SCREENING AND EARLY PATHOGEN DETECTION IN BARRAMUNDI AQUACULTURE</b></p> <p>Varsha Balu  ARC Industrial Transformation Research Hub for Supercharging Tropical Aquaculture through Genetic Solutions, James Cook University, Townsville, Australia</p>
10:15-10:30	<p><b>IDENTIFICATION AND CHARACTERIZATION OF ACTIVATED RAINBOW TROUT TRANSPOSABLE ELEMENT IN RESPONSE TO PISCIRICKETTSIOSIS</b></p> <p>Rodrigo Vidal  Genomic Lab, Faculty of Chemistry and Biology, University of Santiago of Chile, Chile</p>
10:30-10:45	<p><b>CYPRINID FISH SPECIES APPEAR TO BE BOTH DISEASE RESISTANT AND INFECTION RESISTANT TO CYPRINID HERPES VIRUS TYPE 3 (CYHV-3)</b></p> <p>Batya Dorfman  Dept. of Animal Sciences, R.H. Smith Faculty of Agricultural, The Hebrew University of Jerusalem, Israel</p>
10:45-11:00	<p><b>IMPACT OF VACCINATION ON THE GENOMIC PREDICTION ACCURACY OF INFECTIOUS PANCREATIC NECROSIS (IPN)</b></p>



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	<b>RESISTANCE IN RAINBOW TROUT (<i>ONCORHYNCHUS MYKISS</i>)</b> <i>Rodrigo Marín-Nahuelpi</i> <i>Laboratorio de Genómica Acuicola, Facultad de Ciencias Veterinarias y Pecuarias.</i> <i>Universidad de Chile, Chile</i>
<b>11:00 - 11:30</b>	<b>Coffee Break</b>
<b>11:30 - 13:30</b>	<b>Session 6: Quantitative genetics and breeding III</b> <i>Moderators: Paulino Martinez, Costas Tsigenopoulos</i>
11:30-11:45	<b>PERFORMANCE OF TRIPLOID PACIFIC ABALONE CULTURED ON A SEA-BASED SUSPENDED SYSTEM AND A THERMOSTATIC SYSTEM: TRIPLOIDS EXHIBITED LOWER FERTILITY AND HIGHER MEAT YIELD</b> <i>Xuan Luo</i> <i>State Key Laboratory of Mariculture Breeding, College of Ocean and Earth Sciences, Xiamen University, Xiamen 361102, China</i>
11:45-12:00	<b>GENETIC PARAMETERS AND TRENDS FOR BODY WEIGHT IN COMMERCIAL GROW-OUT CONDITIONS FOR A GENOMICALLY SELECTED POPULATION OF <i>LITOPENAEUS VANNAMEI</i> IN ECUADOR</b> <i>Juana L Chuma-Álvarez</i> <i>Genomar – La Chamecita SAS, Santa Elena, Ecuador.</i>
12:00-12:15	<b>SINGLE-STEP GENOMIC BLUP BREEDING VALUE ESTIMATION IN MULTI POPULATION ATLANTIC SALMON DATA</b> <i>Gebreyohans Gebregiweris</i> <i>Dept of Animal and Aquaculture Sciences, NMBU, Norway</i>
12:15-12:30	<b>THE ECONOMIC VALUE OF <math>\ln</math>VAR, A NOVEL INDICATOR FOR GROWTH CONSISTENCY IN FISH</b> <i>Muhammad Hunaina Fariduddin Aththar</i> <i>Animal Breeding and Genomics, Wageningen University &amp; Research, the Netherlands</i>
12:30-12:45	<b>GENETIC AND PHENOTYPIC VALIDATION OF FATTY ACIDS PREDICTED USING RAMAN SPECTROSCOPY: FROM CRUDE FAT TO INDIVIDUAL FATTY ACIDS IN ATLANTIC SALMON</b> <i>Jisoo Park</i> <i>Department of Animal and Aquacultural Sciences, Norwegian University of Life Sciences, Faculty of Biosciences, Ås, Norway</i>
12:45-13:00	<b>ESTIMATION OF GENOTYPE BY ENVIRONMENT INTERACTION FOR GROWTH RESPONSE TO FISHMEAL AND PARTIAL PLANT-BASED DIETS IN ASIAN SEABASS</b> <i>Sila Sukhavachana</i> <i>Department of Aquaculture, Faculty of Fisheries, Kasetsart University, Bangkok, Thailand</i>
13:00-13:15	<b>HOW TO WEIGH A FISH?</b> <i>John Bastiaansen</i>





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	Wageningen University & Research Animal Breeding and Genomics, Wageningen, the Netherlands
13:15-13:30	Photo ISGAXV and proposals for next ISGAXVI
<b>13:30 - 14:30</b>	<b>Lunch</b>
<b>14:30 - 16:30</b>	<b>Session 7: Genetics and genomic of diseases II</b> <i>Moderators: Jesús Fernández, Jose M. Yáñez</i>
14:30-14:45	<b>GENETIC ARCHITECTURE AND GENOMIC PREDICTION ACCURACY OF VIRAL HEMORRHAGIC SEPTICEMIA VIRUS RESISTANCE IN A VACCINATED POPULATION OF OLIVE FLOUNDER</b> Yasara Kavindi Kodagoda Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju 63243, Republic of Korea
14:45-15:00	<b>MOLECULAR GENETIC RESEARCH TO IDENTIFY THE GENE RESPONSIBLE FOR RESISTANCE TO BACTERIAL COLD-WATER DISEASE IN AYU (<i>Plecoglossus altivelis</i>).</b> Takashi Sakamoto Department of Marine Biosciences, Tokyo University of Marine Science and Technology, Tokyo 108-8477, Japan
15:00-15:15	<b>MULTI-TRAIT ASSOCIATION AND MACHINE LEARNING ANALYSIS FOR HEPATOPANCREATIC PARVOVIRUS RESISTANCE ASSOCIATED SNPS IN <i>PENAEUS MERGUIENSIS</i></b> Chontida Phuthaworn Department of Aquaculture, Faculty of Fisheries, Kasetsart University, Bangkok, Thailand
15:15-15:30	<b>GENOME-WIDE ASSOCIATION STUDY (GWAS) FOR FLAVOBACTERIUM OREOCHROMIS RESISTANCE IN NILE TILAPIA (<i>OREOCHROMIS NILOTICUS</i>) USING LOW-PASS SEQUENCING DATA</b> Baltasar Fernandes Garcia Aquaculture Center of Sao Paulo State University (CAUNESP), Brazil
<b>15:30-16:30</b>	<b>Pitch session 1</b> <i>Moderators: Joao Cardoso</i>
15:30-16:00	<b>EFFECTS OF DNA METHYLATION ON INBREEDING DEPRESSION IN THE GUPPIES (<i>POECILIA RETICULATA</i>)</b> Masamichi Nakajima Graduate School of Agricultural Science, Tohoku University  <b>REDUCED MARKER DENSITY STRATEGIES FOR GENOMIC SELECTION IN WHITELEG SHRIMP BREEDING PROGRAMS</b> Christina Kriaridou Center for Aquaculture Technologies, 8445 Camino Santa Fe, Suite 104, San Diego, CA, 92121, United States



16:00-16:30	<p><b>GENOMIC PREDICTION FOR FRANCISELLA ORIENTALIS RESISTANCE IN NILE TILAPIA USING DIFFERENT SNP DENSITIES</b></p>
	<p>Marcelo Souza Silva Filho Aquaculture Center of Sao Paulo State University (CAUNESP), Brazil</p>
	<p><b>CHROMOSOMAL STRUCTURAL VARIATION IN TASMANIAN ATLANTIC SALMON IS ASSOCIATED WITH ADAPTIVE AND PRODUCTION TRAITS</b></p>
	<p>Roberto Carvalheiro CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Australia</p>
	<p><b>ELUCIDATING THE ROLE OF MAVS IN ZEBRAFISH IMMUNITY AGAINST VHSV INFECTION USING CRISPR/CAS9 TECHNOLOGY</b></p>
	<p>Hyerim Ha Department of Marine Life Sciences &amp; Center for Genomic selection in Korean Aquaculture, Jeju National University, Jeju 63243, Republic of Korea</p>
16:00-16:30	<p><b>EPIGENOMIC INSIGHTS INTO TURBOT EMBRYOGENESIS: A REGULATORY ATLAS FOR SUSTAINABLE AQUACULTURE</b></p>
	<p>Oscar Aramburu University of Santiago de Compostela, Lugo, Spain</p>
	<p><b>MECHANISM OF TENDON OSSIFICATION BASED ON MULTI-OMICS SEQUENCING AND FUNCTIONAL ANALYSIS OF CANDIDATE GENES IN CYPRINIDAE</b></p>
	<p>Xu-Dong Wang College of Fisheries, Key Lab of Freshwater Animal Breeding, Ministry of Agriculture and Rural Affairs/Key Lab of Agricultural Animal Genetics, Huazhong Agricultural University</p>
	<p><b>MOLECULAR IDENTIFICATION IN AQUACULTURE: ENHANCING SPECIES MANAGEMENT, BIOSECURITY, AND SUSTAINABILITY</b></p>
	<p>Iris A.L. Silva S2AQUAcoLAB – Collaborative Laboratory for a Sustainable and Smart Aquaculture, Olhão, Portugal.</p>
	<p><b>CHECKMATE?: PARENTAL DISPUTE OVER OFFSPRING PHENOTYPE IN EURASIAN PERCH</b></p>
	<p>Rossella Debernardis Team of Reproduction and Development in Fish, Institute of Animal Reproduction and Food Research, Polish Academy of Sciences, Olsztyn, Poland</p>
	<p><b>GENOMIC EVALUATION OF RESISTANCE TO WHITE SPOT SYNDROME VIRUS (WSSV) IN PENAEUS VANNAMEI ON AN INDUSTRIAL SCALE (PMG_BIOGEMAR®)</b></p>
	<p>Álvaro Lorenzo-Felipe GIA-ECOQUA de la Universidad de las Palmas de Gran Canaria (ULPGC), Telde, Spain.</p>
17:30 - 19:30	<p><b>Visit in bus throughout the Bay of Cádiz, visiting an IMTA-flatfish aquaculture facility and traditional</b></p>





**aquaculture ponds**



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

### Wednesday 14th May

#### Day 4

8:45-9:00	<b>Welcome of the day</b>
9:00 - 9:30	<p>Opening session Keynote</p> <p><b>THE COMMERCIAL GENETIC IMPROVEMENT OF PACIFIC OYSTER IN FRANCE: FROM ITS INTRODUCTION TO POLYPLOIDIZATION AND APPLIED GENOMIC SELECTION</b></p> <p>Romain Morvezen SYSAAF, Aquaculture Section, Campus de Beaulieu, Rennes, France</p>
9:30 - 11:00	<p><b>Session 8: Gene editing and biotechnology I</b></p> <p>Moderators: Paulino Martinez, Delphine Lallias</p>
09:30-9:45	<p><b>COMBINING GENE EDITING TRANSGENESIS AND INTERSPECIFIC HYBRIDIZATION TO IMPROVE PRODUCTION TRAITS AND STERILIZE ICTALURID CATFISH</b></p> <p>Rex Dunham School of Fisheries, Aquaculture and Aquatic Sciences, Auburn University, Auburn, Alabama, United States of America</p>
09:45-10:00	<p><b>CELLULAR AQUACULTURE FOR SMART PROTEIN PRODUCTION: PERSPECTIVE AND CHALLENGES</b></p> <p>Mukunda Goswami Indian Council of Agricultural Research- Central Institute of Fisheries Education, Mumbai, India</p>
10:00-10:15	<p><b>GENE EDITING APPROACH TO IMPROVE DISEASE RESISTANCE IN ZEBRAFISH: EXPLORING Tlr5a KNOCKOUT USING CRISPR/CAS9 IN RESPONSE TO <i>Edwardsiella piscicida</i></b></p> <p>B. P. M. Vileka Jayamali <sup>a</sup>Department of Marine Life Sciences &amp; Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea</p>
10:15-10:30	<p><b>OPTIMISING COMMERCIAL TRAITS IN BARRAMUNDI (LATES CALCARIFER) THROUGH GENE EDITING</b></p> <p>Megan Moran Centre for Sustainable Tropical Fisheries, College of Science and Engineering, James Cook University, Townsville, Queensland, Australia</p>
10:30-10:45	<p><b>MOLECULAR MECHANISM OF RUNX2B REGULATING THE FORMATION OF INTERMUSCULAR BONES</b></p> <p>Chunhong Nie College of Fisheries, Huazhong Agricultural University, WuHan, 430070, China</p>
10:45-11:00	<p><b>CAN WE BREED ATLANTIC SALMON TO BE MORE "COHO-LIKE" IN THEIR RESPONSE TO SEA LICE?</b></p> <p>Nick Robinson Breeding and Genetics, Nofima, Ås, Norway</p>





<b>11:00 - 11:30</b>	<b>Coffee Break</b>
<b>11:30 - 13:30</b>	<b>Session 9: Quantitative genetics and breeding IV</b> <i>Moderators: Eric Saillant, Marc Vandeputte</i>
11:30-11:45	<b>GROWTH AND SURVIVAL OF RED TILAPIA AND SELECTED GENETICALLY IMPROVED TILAPIA STRAINS IN HYPERSALINE CONDITIONS</b> <i>Maria Rowena Romana-Eguia</i> <i>Biology Department, College of Science, De La Salle University, Manila, Philippines</i>
11:45-12:00	<b>SELECTION RESPONSE FOR RESISTANCE TO CARDIOMYOPATHY SYNDROME IN ATLANTIC SALMON AND ITS IMPACT ON GENETIC ARCHITECTURE</b> <i>Ingunn Thorland</i> <i>Benchmark Genetics, Bergen, Norway</i>
12:00-12:15	<b>SELECTIVE BREEDING OF COPEPODS FOR HIGH FECUNDITY</b> <i>Evan Durland</i> <i>Nofima, Osloveien 1, 1433 Ås, Norway</i>
12:15-12:30	<b>UNDERSTANDING THE GENETIC BASIS OF PIGMENTATION ANOMALIES IN TURBOT</b> <i>Daniel Costas-Imbernón</i> <i>AquaBioTec Lab, Institute of Marine Research, Spanish Research Council, Vigo, Spain</i>
12:30-12:45	<b>GENETIC BASES OF THERMAL ADAPTATION FOR GROWTH IN THREE POPULATIONS OF EUROPEAN SEABASS (<i>Dicentrarchus labrax</i>)</b> <i>Damien Crestel</i> <i>MARBEC, Univ Montpellier, CNRS, Ifremer, IRD, INRAE, Palavas-Les-Flots, France</i>
12:45-13:00	<b>GENOTYPE BY ENVIRONMENT INTERACTION IN GILTHEAD SEABREAM (<i>SPARUS AURATA</i>) GROWTH TRAIT FOR OFFSPRING FROM PARENTS IN DIFFERENT PHOTOPERIODS</b> <i>Matias Florian Schrauf</i> <i>Wageningen University &amp; Research Animal Breeding and Genomics, Wageningen, the Netherlands</i>
13:00-13:15	<b>GENETIC STUDIES OF HYPOXIA TOLERANCE IN ATLANTIC SALMON</b> <i>José Gallardo-Matus</i> <i>Pontificia Universidad Católica de Valparaíso, Laboratorio de Genética y Genómica Aplicada, Chile</i>
13:15-13:30	<b>HARVEST WEIGHT CAN BE USED TO PREDICT FILET YIELD IN PIKE-PERCH (<i>SANDER LUCIOPERCA</i>)</b> <i>Hanne Marie Nielsen</i> <i>Center for Quantitative Genetics and Genomics, Aarhus University, 8000 Aarhus, Denmark</i>



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13:30 - 14:30	Lunch
14:30 - 16:30	<b>Session 10: Quantitative genetics and breeding V</b> <i>Moderators: Eric Saillant, Marc Vandeputte</i>
14:30-14:45	<b>EVALUATION OF GENETIC PERFORMANCE OF IMPROVED BRACKISHWATER ENHANCED SELECTED TILAPIA (IBEST) STRAIN IN THE PHILIPPINES</b> <i>Ma. Jodecel Danting</i> <i>Bureau of Fisheries and Aquatic Resources-National Freshwater Technology Center, CLSU Compound, Science City of Muñoz, Philippines 3120</i>
14:45-15:00	<b>PREDICTING FEED INTAKE ACROSS DEVELOPMENTAL STAGES IN ATLANTIC SALMON USING NEAR-INFRARED SPECTROSCOPY</b> <i>Nicholas Jacob</i> <i>Department of Animal and Aquacultural Sciences, Faculty of Biosciences, Norwegian University of Life Sciences, Ås, Norway</i>
15:00-15:15	<b>THE USE OF OPTIMAL CONTRIBUTION SELECTION TO DRIVE SUSTAINABLE GENETIC PROGRESS IN EUROPEAN SEA BASS</b> <i>Carlos Diaz Gil</i> <i>Xelect, Horizon House, Abbey Walk, St Andrews, Fife, Scotland, UK</i>
15:15-15:30	<b>GENOME-WIDE ASSOCIATION STUDY (GWAS) FOR REPRODUCTIVE PARAMETERS IN MALES ATLANTIC SALMON</b> <i>Paulina Lopez</i> <i>AquaGen Chile, San Francisco 340, Puerto Varas, Los Lagos, Chile</i>
15:30-15:45	<b>HARNESSING MACHINE LEARNING FOR TOPIC DISCOVERY AND RESEARCH TREND ANALYSIS IN AQUACULTURE GENETICS</b> <i>Javier De La Hoz-Maestre</i> <i>Universidad del Magdalena, Santa Marta, Colombia</i>
15:45-16:00	<b>GENOMIC INSIGHTS AND PREDICTION MODELS FOR ACUTE AND CHRONIC THERMAL STRESS TOLERANCE IN OLIVE FLOUNDER (<i>Paralichthys olivaceus</i>) AQUACULTURE</b> <i>Hanchapola H.A.C.R</i> <i>Department of Marine Life Sciences &amp; Center for Genomic Selection in Korean Aquaculture, Jeju National University, Republic of Korea</i>
16:00-16:15	<b>AI-BASED INDIVIDUAL IDENTIFICATION AS A STRATEGY FOR GENETIC SELECTION IN THE AMAZON FISH COLOSSOMA MACROPOMUM</b> <i>Lemos C. G</i> <i>Aquaculture Center, Sao Paulo State University (CAUNESP), Brazil</i>
16:15-16:30	
16:30 - 17:00	Coffee Break
17:00 - 18:30	<b>Session 11: Gene editing and biotechnology II</b>



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

	<b>Moderators:</b> Yangzhen Li, Diogo Teruo Hashimoto
17:00-17:15	<b>CANDIDATE GENE SELECTION FOR CRISPR GENE EDITING IN PACIFIC WHITELEG SHRIMP (<i>Litopenaeus vannamei</i>) FOLLOWING TRANSCRIPTOMIC ANALYSIS OF HEALTHY AND WSSV-INFECTED TISSUE</b> Alexandra Florea The Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom
17:15-17:30	<b>INVESTIGATING IMMUNE RESPONSE REGULATION IN ZEBRAFISH DURING VIRAL INFECTION VIA TARGETED MXA GENE DEPLETION USING THE CRISPR/CAS9 SYSTEM</b> U.P.E. Arachchi Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea
17:30-17:45	<b>OPTIMIZING CRISPR/CAS9 DELIVERY TO DECIPHER THE GENETIC BASIS OF DISEASE RESISTANCE IN FISH</b> Sara Veiga Rúa Department of Zoology, Genetics and Physical Anthropology, Biological Research Center (CIBUS), University of Santiago de Compostela, Santiago de Compostela, Spain
17:45-18:00	<b>GENETIC AND GENOMIC SELECTION OF AQUACULTURE SPECIES USING DNA POOLING, AN INNOVATIVE APPROACH</b> Wagdy Mekkawy CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Australia
18:00-18:15	<b>CONSTRUCTION AND APPLICATION OF STURGEON BREEDING PLATFORM IN CHINA</b> Hongxia Hu Fisheries Science Institute, Beijing Academy of Agriculture and Forestry Sciences & National Freshwater Fisheries Engineering Center, Beijing, China, 100068
18:15-18:30	<b>OPTIMIZATION OF LENTIVIRAL TRANSDUCTION IN ATLANTIC SALMON CELLS</b> Prabin Sharma Humagain Norwegian University of Life Sciences
18:30 - 19:30	<b>Poster session</b>





**Thursday 15th May**

**Day 5**

8:45-9:00	<b>Welcome of the day</b>
9:00 - 9:30	<p>Opening session Keynote</p> <p><b>GENETIC IMPROVEMENT OF SALMONID SPECIES IN CHILE: ACHIEVEMENTS AND FUTURE PERSPECTIVES</b></p> <p>José Manuel Yáñez Facultad de Ciencias Veterinarias y Pecuarias, Universidad de Chile, Santiago 8820808, Chile.</p>
9:30 - 11:00	<p><b>Session 12: Functional genomics I</b></p> <p>Moderators: Erick Perera, Daniel Żarski</p>
09:30-9:45	<p><b>RESISTANCE OF ATLANTIC SALMON TO PANCREATIC DISEASE: GENETICS, TRANSCRIPTOMICS, IMMUNITY</b></p> <p>Aleksei Krasnov Nofima (Norwegian institute of Food, Fisheries and Aquaculture research), PO Box 210, N-1432, Ås, Norway</p>
09:45-10:00	<p><b>DOES TRANSCRIPTOME OF FRESHLY HATCHED FISH LARVAE DESCRIBE PAST OR PREDICT FUTURE DEVELOPMENTAL TRAJECTORY?</b></p> <p>Daniel Żarski Team of Reproduction and Development in Fish, Institute of Animal Reproduction and Food Research, Polish Academy of Sciences, Olsztyn, Poland</p>
10:00-10:15	<p><b>SPATIOTEMPORAL TRANSCRIPTOMIC REVEALS DIVERGENCE OF TENOCYTES IN MYOSEPTA OF TELEOST</b></p> <p>Jia-Jia Zhou College of Fisheries, Key Lab of Freshwater Animal Breeding, Ministry of Agriculture and Rural Affairs/Key Lab of Agricultural Animal Genetics, Huazhong Agricultural University, Wuhan, China</p>
10:15-10:30	<p><b>FUNCTIONAL REDUNDANCY OF PROOPIOMELANOCORTIN (POMC) GENES IN GILTHEAD SEABREAM LIMITS THE LONG-TERM MODULATION OF STRESS RESPONSE THROUGH DIET</b></p> <p>Erick Perera Department of Marine Biology and Aquaculture, Andalusian Institute of Marine Sciences (ICMAN), Spanish National Research Council (CSIC), 11519 Puerto Real, Cadiz, Spain</p>
10:30-10:45	<p><b>SINGLE-CELL TRANSCRIPTOMICS OF <i>Hyriopsis cumingii</i> MANTLE TISSUE REVEALS THE EXISTING BIOMINERALIZATION CELL MARKED BY <i>Nasilin1</i> GENE</b></p> <p>Zhiyi Bai Key Laboratory of Freshwater Aquatic Genetic Resources, Ministry of Agriculture and Rural Affairs, Shanghai Ocean University, Shanghai 201306, China</p>



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

10:45-11:00	<p><b>SINGLE-NUCLEI RNA SEQUENCING REVEALS UNIQUE MOLECULAR RESPONSES TO SEA LICE IN ONCORHYNCHUS SPECIES, HIGHLIGHTING NOVEL GENE TARGETS TO ENHANCE ATLANTIC SALMON RESISTANCE</b></p> <p>Sarah Salisbury The Roslin Institute and Royal (Dick) School of Veterinary Studies, University of Edinburgh, Edinburgh, UK</p>
11:30 - 12:00	<b>Coffee Break</b>
12:00 - 13:30	<p><b>Session 13: Genomes and microbiomes</b></p> <p>Moderators: Zhanjiang Liu, Ashie Norries</p>
11:30-11:45	<p><b>ADVANCES IN GENOME TECHNOLOGIES AND THEIR APPLICATIONS IN AQUACULTURE GENETICS AND BREEDING</b></p> <p>Zhanjiang Liu Department of Biology, College of Arts and Sciences, Tennessee Technological University, Cookeville, TN 38505 USA</p>
11:45-12:00	<p><b>LOCAL ADAPTATION AND GENOMIC ADMIXTURE SHAPE THERMAL RESILIENCE IN EUROPEAN SEABASS LARVAE</b></p> <p>Francois Allal MARBEC, Univ Montpellier, CNRS, Ifremer, IRD, INRAE, Palavas-Les-Flots, France</p>
12:00-12:15	<p><b>THE COBIA (<i>Rachycentron canadum</i>) GENOME: CHROMOSOME-LEVEL ASSEMBLY, GWAS, AND TRANSCRIPTOMICS UNVEIL MALE HETEROGAMETIC REGIONS CONSERVED ACROSS ITS GLOBAL DISTRIBUTION</b></p> <p>Jose A Domingos Centre for Sustainable Tropical Fisheries and Aquaculture, James Cook University, Australia</p>
12:15-12:30	<p><b>GRAPH-BASED PANGENOME ANALYSIS IDENTIFIES STRUCTURAL VARIATIONS ASSOCIATED WITH MEAT QUALITY TRAITS IN COMMON CARP</b></p> <p>Qinglei Xu Fisheries Engineering Institute, Chinese Academy of Fishery Sciences, Beijing 100141, China</p>
12:30-12:45	<p><b>GENOMIC PREDICTION OF SEA LICE (<i>Caligus rogercresseyi</i>) BURDEN IN ATLANTIC SALMON (<i>Salmo salar</i>) USING HOST-GENOME AND SKIN MICROBIOME INFORMATION</b></p> <p>Lucas Venegas Facultad de Ciencias Veterinarias y Pecuarias, Universidad de Chile, Santiago, Chile</p>
12:45-13:00	<p><b>MICROBIOMES IDENTIFY POTENTIAL HEALTH RISKS OF BIVALVES CONSUMPTION IN ANGOLA</b></p> <p>Joao Cardoso Comparative Endocrinology and Integrative Biology, Algarve Centre of Marine Sciences (CCMAR-Algarve), Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal</p>



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

13:00-13:15	<b>INSIGHTS INTO MICROBIOTA INFORMATION IN BARRAMUNDI FARMING FROM RESIDUAL GENOTYPE-BY-SEQUENCING DATASETS</b> Thanh Vu Nguyen Tropical Futures Institute, James Cook University, Singapore
13:15-13:30	<b>DEVELOPMENT OF A THERMOTOLERANCE EXPERIMENTAL SETUP AND ITS APPLICATION IN SALMONIDS BREEDING</b> Mark Looseley Xelect, Horizon House, Abbey Walk, St Andrews, Fife, Scotland, UK
13:30 - 14:30	<b>Lunch</b>
14:30 - 16:30	<b>Session 14: Functional genomics II</b> Moderators: Erick Perera, Daniel Żarski
14:30-14:45	<b>SINGLE-CELL RNA SEQUENCING TO STUDY IMMUNE CELL SUBPOPULATIONS AND THEIR VIRAL RESPONSE IN FISH</b> Pablo Jiménez-Barrios Fish Immunology and Pathology Group, National Institute for Agricultural and Food Research and Technology -Spanish Research Council (INIA-CSIC), Madrid, Spain
14:45-15:00	<b>THYROID HORMONES REGULATE INNATE AND ADAPTIVE IMMUNE COMPETENCE DURING METAMORPHOSIS</b> Sandra C Silva Centro de Ciências do Mar (CCMAR), Universidade do Algarve, Faro, Portugal.
15:00-15:15	<b>EXPLORING TRANSCRIPTOMIC VARIABILITY IN ISOLATED MATURE ADIPOCYTES FROM RAINBOW TROUT FAT DEPOTS</b> Enrique José Rosell Moll Departament de Biologia Celular, Fisiologia i Immunologia, Facultat de Biologia, Universitat de Barcelona, Spain
15:15-15:30	<b>ALLELE-SPECIFIC EXPRESSION (ASE) AND DIFFERENTIALLY EXPRESSED GENES (DGE) FOR RESISTANCE AGAINST PISCIRICKETTSIA SALMONIS IN ATLANTIC SALMON</b> Bassini Liane Escuela Medicina Veterinaria, Facultad de Ciencias de la Vida, Universidad Andres Bello, Republica 440, 8370251 Santiago, Chile
15:30-16:30	<b>Pitch session 2</b> Moderators: Rex Dunham
15:30-16:00	<b>RNA-SEQ-BASED BIOMARKER PANEL FOR GROWTH RATE IN Sparus aurata: IDENTIFICATION AND VALIDATION OF CANDIDATE GENES IN LIVER</b> Morgan Angelo S2AQUAcoLAB, Collaborative Laboratory for a Sustainable and Smart Aquaculture, Olhão, Portugal  <b>EFFICACY OF A SALMONID SEMEN FREEZING KIT ALLOWING COMPARABLE FERTILITY RATE THAN FRESH SEMEN</b> Lucie Gavin-Plagne



16:00-16:30

IMV Technologies, L'Aigle, France

**DEVELOPMENT MECHANISM AND GENETIC IMPROVEMENT OF FISH INTERMUSCULAR BONES**

Gao Zexia

College of Fisheries, Huazhong Agricultural University, Wuhan, Hubei, China

**EXPLORING GENETIC RESISTANCE TO *Edwardsiella piscicida* IN A SOUTH KOREAN OLIVE FLOUNDER POPULATION USING GWAS AND GENOMIC PREDICTION**

Jeongeun Kim

Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province, Republic of Korea

**RESEARCH AND DEVELOPMENT OF EFFICIENT BREEDING TECHNOLOGY FOR SALMON AND TROUT AND BREEDING OF EXCELLENT VARIETIES**

Tianqing Huang

State Key Laboratory of Mariculture Biobreeding and Sustainable Goods, Heilongjiang River Fisheries Research Institute, Chinese Academy of Fishery Sciences, China

**MITIGATING STRESS IN AQUACULTURE: THE ROLE OF FUNCTIONAL INGREDIENTS AND MOLECULAR BIOMARKERS**

Iris A.L. Silva

S2AQUAcoLAB – Collaborative Laboratory for a Sustainable and Smart Aquaculture, Olhão, Portugal.

**GENOME WIDE ASSOCIATION STUDIES (GWAS) AND GENOMIC PREDICTION FOR RESISTANCE TO *Edwardsiella piscicida* USING ANTIBODY RESPONSE IN OLIVE FLOUNDER**

Duwage Chandima Gihan Rodrigo

Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju 63243, Republic of Korea

**GENETIC ARCHITECTURE OF RESISTANCE TO VIRAL HEMORRHAGIC SEPTICEMIA IN RAINBOW TROUT**

Thomas Valentin

Université Paris-Saclay, INRAE, GABI, 78350 Jouy-en-Josas, France

**UTILIZING CRISPR/CAS9 SYSTEM TO EXPLORE THE ROLE OF IL-6 IN ZEBRAFISH IMMUNITY AGAINST *Edwardsiella piscicida***

P.U.M. Harishchandra

Department of Marine Life Sciences & Center for Genomic Selection in Korean Aquaculture, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea

**CONSEQUENCES OF GENOMIC SELECTION FOR DISEASE RESISTANCE ON THE RISK OF OUTBREAKS WHEN UNDERLYING**



***EPIDEMIOLOGICAL TRAITS ARE CORRELATED - A SIMULATION STUDY IN SALMON***

*Silvia Garcia-Ballesteros*

*Departamento de Mejora Genética Animal, INIA-CSIC, 28040 Madrid, Spain*

to confirm

**Winery in Jerez de la Frontera and Gala dinner**



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

### Friday 16th May

#### Day 6

8:45-9:00	<b>Welcome of the day</b>
9:00 - 9:30	<p>Opening session Keynote</p> <p><b>HARNESSING EPIGENETICS TO ENHANCE AQUACULTURE PRODUCTION</b></p> <p>Francesc Piferrer Institute of Marine Sciences, Spanish National Research Council (ICM-CSIC), Barcelona, Spain</p>
9:30 - 11:00	<p><b>Session 15: Epigenetics and sex determination</b></p> <p>Moderators: Francesc Piferrer, Laureana Rebordinos</p>
09:30-09:45	<p><b>A SNP IN MATERNALLY PROVIDED DEAD END1 PRODUCES 90% STERILITY IN ATLANTIC SALMON</b></p> <p>Marlen C. Rice Institute of Marine Research, Bergen, Norway</p>
09:45-10:00	<p><b>RAPID THERMAL DOMESTICATION IN PACIFIC ABALONE SUPPORTED BY GENETIC DIVERGENCE AND EPIGENETIC MODIFICATION</b></p> <p>Weiwei You State Key Laboratory of Mariculture Breeding, Xiamen University, Xiamen, PR China</p>
10:00-10:15	<p><b>GENOTYPE-BY-TEMPERATURE INTERACTION IN SHAPING THE MALE PHENOTYPE OF NILE TILAPIA</b></p> <p>Helena D'Cotta ISEM, Univ Montpellier, CNRS, IRD, CIRAD, Montpellier, France</p>
10:15-10:30	<p><b>GENETIC AND EPIGENETIC BIOMARKERS OF ROBUSTNESS IN THE EUROPEAN SEA BASS</b></p> <p>Nuria Sánchez-Baizán MARBEC Univ. Montpellier, CNRS, Ifremer, IRD, INRAE, Palavas-les-Flots, France</p>
10:30-10:45	<p><b>COMPLEX GENETIC ARCHITECTURE UNDERLYING SEX DETERMINATION IN COMMON CARP</b></p> <p>Lior David Dept. of Animal Sciences, R.H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel</p>
10:45-11:00	<p><b>IMPACT OF EARLY COLD TEMPERATURE ON GENOME-WIDE DNA METHYLATION PATTERNS IN RAINBOW TROUT DIVERGENT LINES FOR MUSCLE FAT CONTENT</b></p> <p>Delphine Lallias Université Paris-Saclay, INRAE, AgroParisTech, GABI, Jouy-en-Josas, France</p>
11:00-11:15	<p><b>MOLECULAR AND EPIGENETIC RESPONSES TO CROWDING STRESS IN RAINBOW TROUT SKELETAL MUSCLE</b></p>





## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

	<p><i>Juan Antonio Valdés</i> Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andrés Bello, Santiago, Chile</p>
11:15-11:30	<p><b>Special issue for ISGAXV in Aquaculture Journal</b> <i>Jorge Galindo-Villegas</i> Editor in-chief Aquaculture</p>
11:30 - 12:00	<b>Coffee Break</b>
12:00 - 13:30	<p><b>Session 16: Spanish National Research Aquaculture. FEMPA, ThinkinAzul and related projects</b> <i>Moderators: Manuel Manchado, Carmen Garrido</i></p>
12:00-12:10	<p><b>AQUACULTURE INNOVATION AND RESEARCH THROUGH FEMPA IN ANDALUSIA</b> <i>Manuel Manchado</i> Andalusian Institute of Agricultural and Fisheries Research and Training (IFAPA), El Toruño, Cádiz, Spain</p>
12:10-12:20	<p><b>THINKinAZUL PROGRAM IN ANDALUSIA</b> <i>Carmen Garrido</i> Department of Environmental Technologies, Faculty of Marine and Environmental Sciences, University Marine Research Institute (INMAR), University of Cádiz, Spain</p>
12:20-12:30	<p><b>PRECISION AQUACULTURE IN ANDALUSIA: INNOVATIVE TOOLS FOR THE TRANSFER OF RESULTS AND PRACTICAL APPLICATIONS</b> <i>Isabel Saez</i> Department of Biology and Geology, CEIMAR, University of Almería, 04120 Almería, Spain</p>
	<p><b>Pitch Talks for projects</b> <i>Moderators: Manuel Manchado</i></p>
12:30-13:00	<p><b>IN SITU SEX IDENTIFICATION IN SENEGALESE SOLE (<i>Solea senegalensis</i>) USING LOOP-MEDIATED ISOTHERMAL AMPLIFICATION</b> <i>Alejandro Centeno</i> Genetics Laboratory, Faculty of Marine and Environmental Sciences. University of Cádiz. Spain</p> <p><b>GUT MICROBIOTA COLONIZATION AND DEVELOPMENT IN GREATER AMBERJACK LARVAE: INFLUENCE OF DIET</b> <i>Carmen Navarro-Guillén</i> Department of Marine Biology and Aquaculture, Andalusian Institute of Marine Sciences (ICMAN), Spanish National Research Council (CSIC), 11519 Puerto Real, Cadiz, Spain</p> <p><b>TRANSCRIPTOMIC PROFILES AND GENOMIC VARIANTS ASSOCIATED WITH GROWTH IN SENEGALESE SOLE</b> <i>Patricia Gayo</i> Andalusian Institute of Agricultural and Fisheries Research and Training (IFAPA), El Toruño, Cádiz, Spain</p>

13:00-13:30	<p><b>OCCURRENCE OF INBREEDING DEPRESSION FOR PIGMENTATION IN A FARMED POPULATION OF TURBOT</b>  <i>Daniel Costas-Imbernón</i>  AquaBioTec Lab, Institute of Marine Research, Spanish Research Council, Vigo, Spain</p> <p><b>SINGLE-NUCLEI RNA-SEQ OF THE OLFACTORY EPITHELIUM IN SENEGALESE SOLE (<i>Solea senegalensis</i>) UNCOVERS INSIGHTS INTO THE SPECIES' REPRODUCTIVE CHALLENGES</b>  <i>Dorinda Torres</i>  Department of Zoology Genetics and Physical Anthropology, Faculty of Veterinary, University of Santiago de Compostela, Lugo, Spain</p> <p><b>AN EPIGENETIC AND TRANSCRIPTOMIC APPROACH FOR UNDERSTANDING REPRODUCTIVE DIFFICULTIES IN SOLEA SENEGALENSIS</b>  <i>Daniel Ramírez Torres</i>  Genetics Laboratory, Faculty of Marine and Environmental Sciences. University of Cádiz. Spain</p> <p><b>UNVEILING THE ROLE OF CHROMOSOMAL INVERSIONS IN THE GENETIC STRUCTURE OF FLAT OYSTER <i>Ostrea edulis</i> ACROSS ITS DISTRIBUTION RANGE</b>  <i>Inés Sambade</i>  Departamento de Genética, Universidade de Santiago de Compostela, Lugo, Spain</p> <p><b>RESPONSE TO SELECTION FOR RESISTANCE TO <i>PHOTOBACTERIUM DAMSELAE</i> IN GILTHEAD SEABREAM</b>  <i>Antonio Vallecillos Quijada</i>  Department of Agronomic Engineering, Technical University of Cartagena, Spain</p> <p><b>BIOTECHNOLOGICAL AND GENETIC TOOLS APPLIED TO MICROALGAE PRODUCTION OF TARGET COMPOUNDS: AN OVERVIEW</b>  <i>Carlos Infante</i>  Fitoplancton Marino, S.L, Dársena comercial s/n, 11500 El Puerto de Santa María, Cádiz, Spain</p>
13:30 - 14:30	<b>Lunch</b>
14:30 - 16:30	<p><b>Session 17: Breeding/industry VI</b>  Moderators: <i>Jorge Galindo-Villegas, Jose M. Yañez</i></p>
14:30-14:45	<p><b>HOW HAVE GENETIC IMPROVEMENT PROGRAMS DELIVERED FOR THE LARGEST SALMON PRODUCER IN THE WORLD</b>  <i>Ashie Norris</i></p>



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

	Mowi Genetics, Norway
14:45-15:00	<b>DEVELOPMENT OF A BREEDING PROGRAM FOR GULF OF MEXICO EASTERN OYSTER USING COMMUNAL REARING OF FAMILIES AND MARKER-BASED PEDIGREE RECONSTRUCTION</b> Eric Saillant University of Southern Mississippi, Gulf Coast Research Laboratory, 703 East Beach Drive, Ocean Springs, MS 39564, USA
15:00-15:15	<b>USING QTL IN GENOMIC PREDICTION TO ACCELERATE GENETIC PROGRESS FOR BCWD RESISTANCE IN RAINBOW TROUT</b> Kasper Janssen Hendrix Genetics, Boxmeer, the Netherland
15:15-15:30	<b>FROM RESEARCH TO REALITY: INDUSTRY-DRIVEN GENETIC RESEARCH TO ENHANCE NEW ZEALAND SHELLFISH AQUACULTURE RESILIENCE</b> Megan Scholtens Cawthron Institute, 98 Halifax Street East Nelson, 7010. New Zealand
15:30-15:45	<b>INTEGRATING GENOME EDITING INTO BREEDING PROGRAMS: ACHIEVING COMMERCIAL SCALE</b> Alejandro Gutierrez The Center for Aquaculture Technologies, San Diego, CA, 92121. USA
15:45-16:00	<b>SELECTION FOR RESISTANCE TO SRS AND BKD IN CHILEAN ATLANTIC SALMON</b> Sissel Kjølglum AquaGen Norway, Havnegata 9, Trondheim, Norway
16:00-16:15	<b>ADVANCES AND CHALLENGES IN GENETIC BREEDING AND REPRODUCTION CONTROL IN SOLE</b> Carlos Carballo CUPIMAR, Ctra. Carraca, n2, Salina San Juan Bautista, San Fernando, Spain
16:15-16:30	<b>BREEDING ON A BUDGET: LOW-COST GENOMIC SELECTION FOR AQUACULTURE</b> Curtis Lind CSIRO Agriculture and Food, Aquaculture Applied Breeding Team, Castray Esplanade, Battery Point Tasmania, AUSTRALIA
16:30 - 17:00	Coffee Break
17:00 - 17:30	Session 18: Closing Session
17:00-17:30	Closing session





## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

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17:00-17:30	<i>Degustation of local products</i>
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### Saturday 17th May

#### Day 7

8:30 - 14:00	<i>Cultural visit to Baelo Claudia Roman archeological site, the culture of tuna or similar place in Cádiz under confirmation</i>
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Posters	
Rex Dunham	FIXING GENETIC AND COMBINING ABILITIES GAINS VIA XENOGENESIS FOR ICTALURID CATFISH PRODUCTION
Caihuan Ke	GENOME ANALYSIS AND MOLECULAR BASIS OF SEX DIFFERENTIATION IN IVORY SNAIL
Yan Zhang	MULTI-OMICS ANALYSIS TO IDENTIFY THE SNPS AND GENES ASSOCIATED WITH MUSCULAR POLY-UNSATURATED FATTY ACID CONTENT IN COMMON CARP ( <i>Cyprinus carpio</i> )
D Costas-Imbernón	TURBOT MALPIGMENTATION: UNDERSTANDING THE GENETIC BASIS
Dongya Gao	SEX-SPECIFIC RNAS AS MARKERS OF SEX IDENTIFICATION OF TRANSCRIPTOMIC DATASETS
Arthika Kalaichelvan	UNVEILING THE ROLE OF TUMOR NECROSIS FACTOR-ALPHA-TYPE I (TNF- $\alpha$ 1) IN ZEBRAFISH ANTIVIRAL IMMUNITY USING CRISPR/CAS9-MEDIATED GENE KNOCKOUT
Ganepola Nipuni Arachchige Piyumika Ganepola	GWAS IDENTIFIES SNPS LINKED TO ACUTE LOW-TEMPERATURE STRESS RESILIENCE IN OLIVE FLOUNDER
Ganepola Nipuni Arachchige Piyumika Ganepola	GENOME-WIDE IDENTIFICATION AND FUNCTIONAL ANNOTATION OF SNPS ASSOCIATED WITH ACUTE HYPOXIA RESILIENCE IN OLIVE FLOUNDER
Marina Martínez Soler	GENETIC PARAMETERS FOR MINERAL COMPOSITION OF THE EXOSKELETON AND THEIR ASSOCIATION WITH GROWTH TRAITS IN <i>PENAEUS VANNAMEI</i>
Hyun Suk Shin	VALIDATION OF A LOW-DENSITY SNP GENOTYPING ARRAY IN WHITE LEG SHRIMP ( <i>PENAEUS VANNAMEI</i> ) FROM ECUADOR'S PMG-BIOGEMAR® BREEDING PROGRAM FOR GROWTH TRAIT
María Laura Gallo	GENOMIC STRATEGIES FOR CLIMATE-RESILIENT MUSSEL FARMING: TOXIN ACCUMULATION IN <i>MYTILUS GALLOPROVINCIALIS</i>
Binyam Dagnachew	MEASURES OF INBREEDING USING GENOMIC AND PEDIGREE DATA FOR MOWI'S ATLANTIC SALMON POPULATION
Abdul Hawil Abas	DEVELOPING AN AI-POWERED PHENOTYPING PLATFORM FOR INDIVIDUAL FEED INTAKE DETECTION IN GROUP CONDITION OF EUROPEAN SEABASS ( <i>Dicentrarchus labrax</i> )
Israel Guerrero Cózar	GENETIC ESTIMATES AND SNP IDENTIFICATION FOR CAUDAL FIN AND BODY SHAPE TRAITS IN SENEGALESE SOLE ( <i>SOLEA SENEGALENSIS</i> )



## XV INTERNATIONAL SYMPOSIUM ON GENETICS IN AQUACULTURE

Alain Vergnet	UNLEASHING YOUR RESEARCH WITH THE UNIQUE EUROPEAN SEABASS LINES: A RESOURCE FOR CUTTING-EDGE SCIENCE
Jouseph Hidalgo Gallardo-	REFERENCE-FREE GENOTYPE IMPUTATION AT 1X COVERAGE IN RAINBOW TROUT ( <i>ONCORHYNCHUS MYKISS</i> ) USING DENOISING AUTOENCODERS: A COST-EFFECTIVE STRATEGY
Ignacio Fernandez	GENOMIC AND PROTEOMIC RESOURCES FOR WRECKFISH ( <i>Polyprion americanus</i> ) ALLOWS THE IDENTIFICATION OF LESS INVASIVE BIOMARKERS TO OPTIMIZE REARING CONDITIONS
Paulina Lopez	DETERMINATION OF THE EFFECT OF INBREEDING IN DISEASE RESISTANCE TRAIT IN ATLANTIC SALMON
Bruno Ruiz	FROM AQUACULTURE TO THE WILD: GENETIC STRUCTURE AND ADAPTATION OF INTRODUCED COHO SALMON IN CHILE
Alejandro Cuadros Centeno	OPTIMIZING ENVIRONMENTAL DNA TECHNIQUES FOR SENEGALESE SOLE ( <i>Solea senegalensis</i> ) IN AQUACULTURE
C. G. Lemos	DEEP LEARNING APPROACH FOR GENETIC SELECTION OF STRESS RESPONSE IN THE AMAZON FISH <i>Colossoma macropomum</i>
Koichi Okuzawa	GENOMIC PREDICTION FOR HIGH GROWTH RATE OF RED SEABREAM ( <i>Pagrus major</i> )
Bao Lou	APPLICATION OF GENOMIC SELECTION BREEDING TECHNOLOGY IN GROWTH AND DISEASE RESISTANCE IMPROVEMENT OF <i>Larimichthys polyactis</i>
Yangzhen Li	GENOMIC SELECTION SIGNATURE ANALYSIS REVEALS THE GENETICALLY IMPROVED DISEASE RESISTANCE IN TONGUE SOLE
Costas Tsigenopoulos	GENOMIC PARAMETERS FOR FATTY ACIDS, CHEMICAL FAT AND WEIGHT FOR EUROPEAN SEABASS
Camino Fierro-Castro	EFFECTS ON THE INTESTINAL MICROBIOTA OF TILAPIA ( <i>Oreochromis niloticus</i> ) BY PROLONGED FEEDING WITH B-GLUCAN.
Paula Simó-Mirabet	INSIGHTS ON PUTATIVE PROGRAMMING EFFECTS PRODUCED BY ALGAE NUTRACEUTICALS IN CARNIVOROUS SPECIES AT EARLY STAGES
Costas Tsigenopoulos	BUILDING THE REFERENCE GENOME OF THE SEA LOUSE <i>Caligus minimus</i>
Paulino Martínez	POPULATION GENOMICS OF THE COMMON OCTOPUS ( <i>Octopus vulgaris</i> ) FOR SUSTAINABLE FISHERIES MANAGEMENT





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Roberto de la Herrán	GENOME SEQUENCING AND PRELIMINARY ANALYSIS OF THE BIVALVE-PARASITIZING PROTOZOAN <i>Marteilia pararefringens</i>
Manuel Alejandro Merlo	HOX GENE FAMILY EXPRESSION DURING LARVAL PHASES AND METAMORPHIC STAGES OF THE SENEGALESE SOLE ( <i>Solea senegalensis</i> , Kaup 1858)
Yangzhen Li	TELOMERE-TO-TELOMERE GENOME OF TIGER PUFFERFISH
Julan Kim	GENOME ASSEMBLIES AND GRAPH-STRUCTURED GENETIC VARIANTS OF THE OLIVE FLOUNDER ( <i>Paralichthys olivaceus</i> )
Pedro Perdiguero	DEVELOPMENT OF A VERSATILE AND ADAPTABLE REPERTOIRE SEQUENCING (REP-SEQ) PROTOCOL FOR DEEP ANALYSIS OF FISH B CELL AND T CELL RECEPTORS
Sheng Lu	GAP-FREE TELOMERE-TO-TELOMERE HAPLOTYPE ASSEMBLY OF THE TOMATO HIND ( <i>Cephalopholis sonnerati</i> )
U.P.E. Arachchi	CHARACTERIZATION OF CCR2 FROM <i>Epinephelus akaara</i> : A KEY MODULATOR OF INFLAMMATION IN RESPONSE TO TLR STIMULATION
B. P. M. Vileka Jayamali	MOLECULAR CHARACTERIZATION AND INSIGHTS INTO THE REGULATORY ROLE OF MARCH2 FROM <i>Amphiprion clarkii</i> IN MODULATING STARVATION-INDUCED AUTOPHAGY
Arthika Kalaichelvan	THIOREDOXIN-RELATED TRANSMEMBRANE PROTEIN 1 (TMX1) IN CHUB MACKEREL: ANTIOXIDANT, ANTI-APOPTOTIC, AND IMMUNE FUNCTIONS
Hyerim Ha	CHARACTERIZING PEROXIREDOXIN 2 IN <i>Scomber japonicus</i> AS A KEY PLAYER IN ANTIOXIDANT DEFENSE
H.P.U.M. Harishchandra	MOLECULAR EXPRESSION, OXIDOREDUCTASE FUNCTIONAL ASSESSMENT, AND IMMUNOLOGICAL EXPRESSION ANALYSIS OF GLUTAREDOXIN 3 (GRX3) FROM CHUB MACKEREL ( <i>Scomber japonicus</i> )
Yanliang Jiang	EARLY MUCOSAL RESPONSES IN COMMON CARP TO THE INFECTION OF AEROMONS HYDROPHILA
Sho Hosoya	GENETIC BASIS OF <i>Enteromyxum leei</i> -INDUCED MYXOSPOREAN EMACIATION DISEASE IN THE TIGER PUFFERFISH ( <i>Takifugu rubripes</i> )
Marjolein Verweij	TROUTGANIC: ESTABLISHMENT OF AN ORGANIC LINE OF RAINBOW TROUT
Chaehyeon Lim	DISSECTING THE GENETIC ARCHITECTURE OF BACTERIAL DISEASE RESISTANCE IN OLIVE FLOUNDER ( <i>Paralichthys olivaceus</i> ): A MULTI-TRAIT GENOME-WIDE ASSOCIATION STUDY



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Joao Cardoso	A BACTERIAL CHALLENGE PROVOKES AN IMMUNE RESPONSE IN THE MANTLE OF THE MEDITERRANEAN MUSSEL ( <i>Mytilus galloprovincialis</i> )
Maria Carolina Ribeiro	DIAGNOSTIC AND PREVENTION TECHNIQUES FOR MARINE FISH ECTOPARASITES, MONOGENA, BASED ON LIFE CYCLE STUDIES AND MOLECULAR TOOLS
Diogo Teruo Hashimoto	GENETIC CORRELATIONS FOR FRANCISELLA ORIENTALIS RESISTANCE AND CARCASS TRAITS IN NILE TILAPIA ( <i>Oreochromis niloticus</i> ) USING PEDIGREE INFORMATION
Valeria Quiñones Aguilar	DEVELOPMENT OF GECKO SCREENING TOOLS IN ATLANTIC SALMON
Anyell Caderno	KEY MOLECULAR ASPECTS OF JUVENILE SEABREAM ( <i>Sparus aurata</i> ) CULTURE: THE USE OF BIOTECHNOLOGICALLY TREATED PLANT PROTEINS AND MICROALGAE-BASED NUTRACEUTICAL COMPOUNDS
Carmen Garrido Pérez	BIOPROSPECTING AND GENETIC ANALYSIS OF MARINE MICROALGAE IN THE BAY OF CÁDIZ FOR THE EVALUATION OF THEIR PRODUCTIVE POTENTIAL
Alba María Gutiérrez-Diánez	GENERATION OF MICROALGAE STRAINS WITH INCREASED RESISTANCE TO TEMPERATURE AND LIGHT STRESS CONDITIONS
Álvaro Arana	OPTIMIZATION OF GENETIC EDITING IN CELL CULTURES OF AQUACULTURE SPECIES FOR IN VIVO APPLICATION
Hiroyuki Okamoto	GONADAL TISSUE ANALYSIS OF GENOME-EDITED BLUEGILL: THE DEVELOPMENT OF METHODS TO CONTROL INVASIVE SPECIES POPULATIONS BY STERILE GENE-INDUCED SUPPRESSION
Ocalewicz Konrad	TRANSCRIPTOME PROFILES OF RAINBOW TROUT EGGS WITH DIFFERENT ABILITY FOR GYNOGENESIS
Juan Miguel Mancera	MODULATION OF GENE EXPRESSION OF WELFARE BIOMARKERS IN THE BRAIN OF EUROPEAN SEABASS TRANSPORTED USING A PHYTOGENIC PROTOTYPE WITH SEDATIVE PROPERTIES
Marian Ponce García	FUNGI AS BIOACTIVE COMPOUNDS IN AQUACULTURE
Marian Ponce García	IMMUNOMODULATORY EFFECTS OF ULVAN DOSAGE ON EUROPEAN SEABASS MACROPHAGES GENE EXPRESSION

Pedro Perdiguero	EXPLORING IMMATURE T CELL STATES IN ADULT RAINBOW TROUT THYMUS USING SINGLE CELL RNA SEQUENCING
Marcin Kuciński	THE EFFECT OF HYBRIDIZATION AND TRIPLOIDIZATION ON MATERNAL TRANSCRIPTOME IN RAINBOW TROUT (ONCORHYNCHUS MYKISS)♀ × BROOK TROUT ( <i>Salvelinus fontinalis</i> )♂ HYBRID
Anyell Caderno	SHORT-TERM FEED DEPRIVATION MODULATES NEURAL PLASTICITY IN JUVENILE GILTHEAD SEABREAM ( <i>Sparus aurata</i> )
Carmelo Ruiz Rejón	TRANSCRIPTOMIC ANALYSIS OF <i>Mytilus galloprovincialis</i> UNDER INFECTION BY <i>Marteilia pararefringens</i>
Israel Guerrero Cózar	LIGHT AND TEMPERATURE SHAPE THE TRANSCRIPTOMIC PROFILES OF THE HALOPHYTE SALICORNIA RAMOSISSIMA IN INTEGRATED MULTI-TROPHIC RECIRCULATING AQUACULTURE
Marta Riesco	miR 221a-5p AS A LESS INVASIVE BIOMARKER OF CLIMATE CHANGE EFFECTS ON RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> ) REPRODUCTION
Israel Guerrero Cózar	RNA-SEQ REVEALS GENETIC MECHANISM INVOLVED IN GROWTH OF SEA BREAM ( <i>Sparus aurata</i> ).
Saeko Isabel Gaitán-Ibarra	MODULATION OF GENE EXPRESSION IN THE FEMINISATION OF JUVENILE SNOOK ( <i>Centropomus undecimalis</i> ): IMPLICATIONS FOR REPRODUCTIVE MANAGEMENT
Sandra da Silva	REPROGRAMMING IMMUNE SYSTEM COMPETENCE WITH $\beta$ -GLUCAN DURING DEVELOPMENT
Arno Juliano Butzge	PATERNAL THERMAL STRESS MODIFIES HYPOTHALAMIC GENE EXPRESSION IN OFFSPRING OF RAINBOW TROUT
Sila Sukhavachana	RESPONSE TO GENOMIC SELECTION FOR GROWTH IN ASIAN SEABASS
Inês Freitas	DEVELOPMENT OF MULTIPLEX PCR ASSAYS FOR THE DETECTION OF PATHOGENS IN AQUACULTURE
Mantigalla Arachchige Hasitha Dilshan	UNRAVELING THE GENETIC BASIS OF RESISTANCE TO <i>Streptococcus parauberis</i> IN OLIVE FLOUNDER ( <i>Paralichthys olivaceus</i> ) THROUGH A GENOME-WIDE ASSOCIATION AND PREDICTION STUDY





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Mantigalla Hasitha Dilshan	Arachchige	GENOME-WIDE ASSOCIATION AND PREDICTION STUDY FOR THE DETECTION OF GENETIC VARIANTS ASSOCIATED WITH THE ANTIBODY RESPONSE UPON THE VHSV INFECTION IN <i>Paralichthys olivaceus</i>
Curtis Lind		QUANTITATIVE GENETICS OF FRESHWATER MATURATION IN TASMANIAN ATLANTIC SALMON
Nga Vu		TRACKING FAMILY CONTRIBUTIONS AND SURVIVAL IN SILVER-LIPPED PEARL OYSTER PINCTADA MAXIMA: UNLOCKING COST-EFFECTIVE STRATEGIES FOR SELECTIVE BREEDING
Megan Scholtens		BREEDING FOR THE HEAT: NOVEL APPROACHES TO EVALUATE TEMPERATURE TOLERANCE IN CHINOOK SALMON ( <i>Oncorhynchus tshawytscha</i> )
Gabryelle Castro de Sousa	Guimaraes	DEVELOPMENT OF A COMPUTER VISION SYSTEM FOR THE ESTIMATION OF GENETIC PARAMETERS RELATED TO FILLET YIELD IN NILE TILAPIA ( <i>Oreochromis niloticus</i> )
Maria Laura Gallo		GENOMIC INSIGHTS TO BOOST RESILIENCE AGAINST ACUTE SALINITY STRESS IN MANILA CLAMS AND COMMON COCKLES
Marina Pampín Iglesias		EXPLORING SNP-BASED RESISTANCE MECHANISMS TO MARTEILIA COCHILLIA IN HATCHERY AND WILD COCKLE STRAINS
Adrian Lopez-Murcia		EPIGENETIC STUDY OF FISH ERYTHROCYTES FOR THE SEARCH OF INNOVATIVE ANTIVIRAL SOLUTIONS IN AQUACULTURE
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Tamara Montenegro		GENOME-WIDE ASSOCIATION STUDY IDENTIFIES A POTENTIAL GENE AND REGULATORY REGION ASSOCIATED WITH ASTAXANTHIN METABOLISM IN ATLANTIC SALMON
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Munusamy Ajithkumar	GENOMIC SELECTION AND GENOME-WIDE ASSOCIATION STUDY FOR RESISTANCE TO ONE PATHOGENIC STRAIN OF VIBRIO SPLENDIDUS IN BLUE MUSSELS CULTIVATED IN FRANCE
Ismael Cross	EVOLUTION AND ADAPTIVE ROLE OF REPETITIVE SEQUENCES IN FLATFISHES
Xueyan Shen	EXPLORING the COBIA ( <i>Rachycentron canadum</i> ) GENOME: UNVEILING PUTATIVE MMAL HETEROGAMETIC REGIONS and IDENTIFICATION of SEX-SPECIFIC MARKERS
D Costas-Imbernón	TURBOT MALPIGMENTATION: UNDERSTANDING THE GENETIC BASIS
Mathieu BESSON	CAN WE SELECT FOR SURVIVAL WITHOUT RECORDING MORTALITY? A SIMULATION STUDY
A W. S. Hilsdorf	UNVEILING THE GENETIC RESOURCES OF FAT-SNOOK (CENTROPOMUS PARALLELUS): A STEP TOWARD A BREEDING PROGRAM FOR THE SPECIES.
P. Haffray,	PARENTAGE ASSIGNMENT USING SNP MAKERS EFFICIENTLY IMPROVES THE MANAGEMENT OF GENETIC DIVERSITY IN MASS SPAWNED HATCHERY SPAT OF THE BLACK LIPPED PEARL OYSTER <i>Pinctada margaritifera</i> IN FRENCH POLYNESIA
D.C.G. Rodrigo	GENOME-WIDE ASSOCIATION STUDY (GWAS) REVEALS NOVEL GENETIC LOCI ASSOCIATED WITH ACUTE LOW-SALINITY STRESS RESISTANCE IN OLIVE FLOUNDER ( <i>Paralichthys olivaceus</i> )