

# PROGRAMME

## DAY 1



- 08:30 **REGISTRATION**  
 09:15 **GIA WELCOME**  
**WELCOME SPEECHES**  
 Dean of the Faculty of Sciences, Head of the Biology School  
 (Aristotle University of Thessaloniki)  
 09:45 **PLENARY: PROF LUCA BARGELLONI**

Coffee break

### Session 1: Stress and immune response I

**Chairs: Alexandros Triantafyllidis & Roberta Marcoli**

Wed  
09:45-  
13:00

11:00	The molecular and cellular repertoires of a teleost tongue – insights into the interplay of gustation and immunity	Carlo Lazado	Nofima
11:15	Genomic basis of the variation in sea lice susceptibility among Atlantic salmon and coho salmon revealed by single-nuclei RNA sequencing	Sarah Salisbury	The Roslin Institute
11:30	Use of transcriptomics and gene editing to explore genetic mechanisms giving species-specific host-resistance to sea lice	Nick Robinson	Nofima
11:45	Immunoglobulin sequencing provides new insight in B cells biology of salmonid fish	Aleksei Krasnov	Nofima
12:00	Conserved and divergent arms of the antiviral response in the duplicated genomes of salmonid fishes	Thomas Clark	University of Aberdeen
12:15	Microbiome responses to aquaculture-related husbandry practices	Arun Shankregowda	Swansea University
12:30	Host-microbiota cross-talk upon gut parasite infection in gilthead seabream	Socorro Toxqui-Rodriguez	IATS-CSIC
12:45	Chromatin accessibility in gill tissue identifies candidate genes and loci associated with aquaculture relevant traits in tilapia	Tarang Mehta	Earlham Institute

Lunch break

### Session 2: Stress and immune response II

**Chairs: Costas Tsigenopoulos & Lorenzo Colona**

Wed  
14:30-  
16:00

14:30	Impact of the incorporation of functional annotation into genomic prediction in a turbot population challenged with <i>Philasterides dicentrarchi</i>	Christina Kriaridou	The Roslin Institute
14:45	Functional genomic architecture of viral nervous necrosis disease resistance in farmed European seabass	Robert Mukiibi	The Roslin Institute
15:00	Transcriptomic approach to characterize gene expression in mussel ( <i>Mytilus galloprovincialis</i> ) gills and hemocytes from the hemolymph or the intervalvar liquid	Magalí Rey-Campos	IIM-CSIC
15:15	The genomic basis of the effective immune response of mussels	Amaro Saco	IIM-CSIC
15:30	Validation of a genomic region associated with bonamiosis status in flat oyster populations at individual level	Inés Sambade	University of Santiago de Compostela
15:45	Single nuclei RNA-sequencing of WSSV-infected whiteleg shrimp ( <i>Litopenaeus vannamei</i> ) reveals novel genes involved in white spot infection	Alexandra Florea	The Roslin Institute
16:00	Low metabolism activity and efficient antiviral response	Léo Duperret	Ifremer

	enable to counteract the pacific oyster mortality syndrome in non-permissive conditions induced by the temperature		
16:15	Signatures of selection for tolerance and resistance to <i>Perkinsus olseni</i> in grooved carpet shell clam ( <i>Ruditapes decussatus</i> ) using population genomics	João Estêvão	University of Santiago de Compostela

Wed  
16:30-  
18:30

POSTER SESSION

 DAY 2

09:45	<b>PLENARY: PROF ZE-XIA GAO</b>		
		Coffee break	
	<b>Session 3: Reproduction and breeding I</b>	<b>Chairs: Roberto de la Herrán &amp; Elisavet Kaitetzidou</b>	
11:00	Applications of genomic selection for complex economic traits in large yellow croaker	Peng Xu	Xiamen University
11:15	Epigenetic regulation of genetic sex determination of channel catfish explains sex ratio variations with high temperature	John Liu	Tennessee Tech University
11:30	High-throughput screening of the first chromosome-level genome assembly of <i>Merluccius merluccius</i> suggests a sex determining gene underlying a XX/XY system	Paulino Martínez	University of Santiago de Compostela
11:45	Characterisation of olfactory transcriptome in Senegalese sole ( <i>Solea senegalensis</i> ) at the single-cell level: functional implications in reproduction	Dorinda Torres	University of Santiago de Compostela
12:00	miRNA phenotypic target identification reveals hippo pathway-mediated regulation of reproduction by miR-202	Julien Bobe	INRAE
12:15	Genomic regions associated with variable sperm motility across the reproductive season in Arctic charr	Khrystyna Kurta	Swedish University of Agricultural Sciences
12:30	Deciphering the sperm methylation landscape of Swedish Arctic charr with regard to male-fertility traits	Fotis Pappas	Swedish University of Agricultural Sciences
12:45	Unravelling sex-dependent epigenetics mechanisms in response to environmental cues	Laia Ribas	ICM-CSIC

Thu  
09:45-  
13:00

Lunch break

	<b>Session 4: Development and early life interventions</b>	<b>Chairs: Laia Ribas &amp; Aristotelis Moulitanos</b>	
14:30	SALMOCODE: A single-cell atlas of Atlantic salmon organogenesis	Christiaan Henkel	Norwegian University of Life Sciences
14:45	Epigenomics of embryogenesis in the turbot ( <i>Scophthalmus maximus</i> )	Oscar Aramburu	University of Santiago de Compostela
15:00	DNA methylation during early development in diploid and triploid European seabass	Francesc Piferrer	ICM-CSIC
15:15	Integration of multi-omics data to uncover key genes and metabolic pathways involved in flatfish metamorphosis.	Laura Guerrero-Peña	IIM-CSIC
15:30	Improving Atlantic salmon health and welfare by	Erik Burgerhout	Nofima

Thu  
14:30-  
17:30

	embryonic temperature programming		
15:45	Correlation between epigenetic and transcriptomic changes in golden barramundi ( <i>Lates calcarifer</i> ): a multiomic approach	Roberta Marcoli	James Cook University
<b>Coffee break</b>			
	<b>Session 5: Structural genomics and population genetics</b>	<b>Chairs: Efthimia Antonopoulou &amp; Maria Papadaki</b>	
16:30	The giant clam genome sequence analysis help elucidate the evolution of photosymbiosis	Yang Zhang	South China Sea Institute of Oceanology
16:45	First insights into genetic differentiation among sympatric morphs of arctic charr based on whole-genome sequencing	Khrystyna Kurta	Swedish University of Agricultural Sciences
17:00	Unveiling genomic signatures for domestication in European seabass ( <i>Dicentrarchus labrax</i> L.)	Aristotelis Moulitanos	Aristotle University of Thessaloniki
17:15	Mitochondrial function is at the frontline of domestication in Eurasian perch ( <i>Perca fluviatilis</i> )	Daniel Źarski	Polish Academy of Sciences

**Thu**  
**19:30-**  
**23:30**

**GALA DINNER**

 **DAY 3**

09:45	<b>PLENARY: PROF WES WARREN</b>		
<b>Coffee break</b>			
	<b>Session 6: Nutrition, growth and pigmentation</b>	<b>Chairs: Carla Piazzon &amp; Nikolas Panteli</b>	
11:00	Transcriptomic adaptation to salinity in Mozambique tilapia takes shorter time than in Nile tilapia	Avner Cnaani	Volcani Institute
11:15	Candidate list of biological age markers for welfare auditing in farmed gilthead sea bream	Alvaro Belenguer	IATS-CSIC
11:30	A la cart(e) genome-editing for enhanced feeding behavior in Nile tilapia	Jakob Biran	Volcani Institute
11:45	Early life feeding effects on Nile tilapia gut microbiome and transcriptome	Fotini Kokou	Wageningen University
12:00	GWAS and accuracy of prediction for growth in meagre <i>Argyrosomus regius</i>	Stavroula Oikonomou	HCMR
12:15	Identification of SNPs and candidate genes associated with growth using GWAS and transcriptome analysis in <i>Coilia nasus</i>	Yue Yu	Huazhong Agriculture University
12:30	Utilizing pool-seq to identify the gene controlling black patches pigmentation in ornamental carp (koi)	Roni Tadmor	The Hebrew University of Jerusalem
12:45	Genome survey for processes susceptible to manipulation through DNA methylation remodelling in gilthead sea bream	Erick Perera	ICMAN-CSIC

**Fri**  
**09:45-**  
**13:00**

**Lunch break**

**Fri**  
**14:30-**

**EXCURSION TO VERGINA**

## POSTER PRESENTATIONS

Title	Presenting author	Institution
<b>P1-</b> Identification of SNPs and candidate genes associate with growth performance in all-female mandarin fish ( <i>Siniperca chuatsi</i> ) by a genome-wide association study	Dingrui Liu	Sun yat-sen University
<b>P2-</b> Isolation and molecular detection of virulence and antimicrobial resistance genes of pathogenic <i>Escherichia coli</i> isolated from farm raised carps of fish farms of Kasur and Muzaffargarh	Talib Hussain	University of Education Lahore
<b>P3-</b> Deciphering the IGH locus of gilthead seabream	Carla Piazzon	IATS-CSIC
<b>P4-</b> Nutrition and immune function in farmed fish regulation of inflammatory and anti-inflammatory responses	Asma Abushweka	University of Aberdeen
<b>P5-</b> Different sampling approaches for DNA metabarcoding analysis of the stomach contents of the Atlantic bluefin tuna ( <i>Thunnus thynnus</i> Linnaeus, 1758)	Luka Žuvić	IZOR
<b>P6-</b> Influence of 3'UTR variants on germ cell-specific gene expression in Atlantic salmon	Silja Gulliksen	Mowi Genetics
<b>P7-</b> Mussel antiviral transcriptome response and elimination of viral haemorrhagic septicaemia virus (VHSV)	Amaro Saco	IIM-CSIC
<b>P8-</b> Transcriptomic analysis of turbot ( <i>Scophthalmus maximus</i> ) treated with zymosan a reveals that lncRNAs and inflammation-related genes mediate the protection conferred by $\beta$ -glucans against <i>Aeromonas salmonicida</i>	Alejandro Romero	IIM-CSIC
<b>P9-</b> Genetic structure of native and translocated freshwater crayfish <i>Pontastacus leptodactylus</i> populations from Greece and turkey	Maria Alvanou	University of Western Macedonia
<b>P10-</b> Dissecting the genetic basis underlying response against salmonid alphavirus in Atlantic salmon	Domniki Manousi	Norwegian University of Life Sciences
<b>P11-</b> Molecular and physiological responses to chronic stress in European sea bass, <i>Dicentrarchus labrax</i>	Athanasios Samaras	University of Crete
<b>P12-</b> Can Atlantic bluefin tuna be efficiently switched from small pelagic fish to pellet feed under farming conditions?	Ivana Buselic	IZOR
<b>P13-</b> Divergent evolutionary paths and ontogenic regulation of proteases in the genome of European sea bass ( <i>Dicentrarchus labrax</i> )	Rafael Angelakopoulos	University of Thessaly
<b>P14-</b> Serotype variation and genomic characterization of streptococcus agalactiae strains isolated from Nile tilapia	Renan Appel	Nord University
<b>P15-</b> Should we rear tilapia larvae in the dark?	Nikko Cabillon	Hebrew University of Jerusalem
<b>P16-</b> Combined quantitative and population genetics methods provide insight into the genetic landscape of fillet fat in European sea bass <i>Dicentrarchus labrax</i>	Stavroula Oikonomou	HCMR
<b>P17-</b> Comparison of tendon tissue differentiation between zebrafish and medaka by single-cell sequencing	Yu Long Chen	Huazhong Agricultural University
<b>P18-</b> Early life programming and molecular regulation of the stress response in greater amberjack ( <i>Seriola dumerili</i> ) larvae	Athanasios Samaras	University of Crete
<b>P19-</b> Genetic analysis of growth traits in fugu, <i>Takifugu rubripes</i>	Clémence Frasin	The Roslin Institute
<b>P20-</b> Evolutionary dynamics of paralogous genes in oxidative phosphorylation and ontogenetic regulation in gilthead seabream ( <i>Sparus aurata</i> )	Andreas Tsipourlianos	University of Thessaly

<b>P21-</b> Genetic resilience in the common cockle ( <i>Cerastoderma edule</i> ): contrasting natural selection and selective breeding for Marteiliopsis resistance	Marina Pampin Iglesias	University of Santiago de Compostela
<b>P22-</b> Discriminating freshwater prawn populations in Benin: a comparative analysis of morphological traits and modelling approaches	Mahugnon Santoze Adido	Sokoine University of Agriculture
<b>P23-</b> Applying a chromosome-scale assembly to explore population structure, metagenomics and evolution in the blue mussel ( <i>Mytilus edulis</i> )	Tim Regan	The Roslin Institute
<b>P24-</b> A heatwave event after hatching alters DNA methylation profile in rainbow trout ( <i>Oncorhynchus mykiss</i> )	Ignacio Fernández	IEO-CSIC
<b>P25-</b> Due to their improved immunity, disease resistant common carp fish are also less infective	Lior David	The Hebrew University of Jerusalem
<b>P26-</b> A new sex determining gene identified in striped bass	Evgeniya Marcos-Hadad	The Hebrew University of Jerusalem
<b>P27-</b> Genetic analysis and development of sex-specific markers in populations of <i>Megalobrama amblycephala</i> based on whole-genome re-sequencing	Lifei Luo	Huazhong Agricultural University
<b>P28-</b> Gene expression profiling of six6 and bcl6a in larva and juvenile stages in European seabass ( <i>Dicentrarchus labrax</i> L.)	Aristotelis Moulitanos	Aristotle University of Thessaloniki
<b>P29-</b> Using long-read sequencing with Oxford Nanopore to enable genomic and epigenomic profiling of livestock fish	Fernando Naya-Catala	IATS-CSIC
<b>P30-</b> The expansion of sirtuin gene family in gilthead sea bream ( <i>Sparus aurata</i> ). Phylogenetic, syntenic and functional insights across the vertebrate/fish lineage	Fernando Naya-Catala	IATS-CSIC
<b>P31-</b> Differential expression of micro RNAs (miRNAs) in gonads of gilthead seabream <i>Sparus aurata</i>	Maria Papadaki	HCMR
<b>P32-</b> Molecular identification of bacterial pathogens associated with diseases in aquaculture farms in the Philippines	Casiano Choresca	NFRDI
<b>P33-</b> Understanding the genetic basis of pigmentation anomalies in flatfish	Daniel Costas Imbernón	IIM-CSIC
<b>P34-</b> The effect of dietary <i>Rhodotorula mucilaginosa</i> on liver antioxidant gene expression of <i>Sparus aurata</i>	Emmanouil Malandrakis	Agricultural University of Athens
<b>P35-</b> GRINNAQUA: green innovation strategies for animal health management: towards sustainable aquaculture	Sergio Fernández-Boo	CIIMAR
<b>P36-</b> Developing molecular diagnostic tools for QX disease in oyster aquaculture	Jonathan Wanderley Lawley	Griffith University
<b>P37-</b> Genetic identification of sturgeon populations from Ukraine using DNA markers	Olha Malysheva	The Leibniz Institute for Zoo and Wildlife Research
<b>P38-</b> Molecular characterization of breeders of <i>Solea senegalensis</i>	Laureana Rebordinos	University of Cádiz
<b>P39-</b> A single heatwave event is able to disrupt spermatogenesis in rainbow trout ( <i>Oncorhynchus mykiss</i> ) breeders	Marta Riesco	University of León
<b>P40-</b> A high-quality genome assembly of the Mediterranean mussel ( <i>Mytilus galloprovincialis</i> ) provides insights into mussel sex determination	Raquel Rodríguez-Vázquez	University of Santiago de Compostela
<b>P41-</b> Single-cell transcriptome and epigenetic profiling of the pituitary gland provide insights into teleost puberty	Ioannis Konstantinidis	Nord University
<b>P42-</b> Skmer – genetic diversity metrics from genome skims for	Homère Alves	University of

broodstock selection	Monteiro	Copenhagen
<b>P43-</b> Assessing the impact of insect meal on the intestinal bacterial microbiota of the Baltic shrimp <i>Palaemon adspersus</i>	Nikolas Panteli	Aristotle University of Thessaloniki
<b>P44-</b> Study on the developmental characteristics and molecular regulatory mechanisms of different types of intermuscular bone in <i>Coilia nasus</i>	Shiming Wan	Huazhong Agricultural University
<b>P45-</b> Transcriptome analysis reveals the impact of environmental toxicants on ovarian tissue of climbing perch ( <i>Anabas testudienus</i> )	Kiran Rasal	ICAR
<b>P46-</b> Exploring genetic diversity and hybridisation patterns of mussels in northern Scotland	Ambre Chapuis	The Roslin Institute
<b>P47-</b> Broodstock management influences the metabolic status, gene expression and epigenetic gene regulation in progeny	Kaja Skjærven	University of Bergen
<b>P48-</b> Gene expression profile of the cockle <i>Cerastoderma edule</i> in response to trematode infection	Simão Correia	CIIMAR
<b>P49-</b> Differential gene expression at different stages of gonadal development in male and female Senegalese sole ( <i>Solea senegalensis</i> )	Roberto de la Herrán	University of Granada
<b>P50-</b> Genetic diversity of <i>Plesionika edwardsii</i> : a shrimp species with economic interest in the Alboran sea region	Francisca Robles	University of Granada
<b>P51-</b> Comparative analysis of gonads from wild and F1 cultivated adult males of Senegalese sole by scRNASeq	Carmelo Ruiz-Rejón	University of Granada
<b>P52-</b> Morphometrics in different genotypic classes of <i>Dicentrarchus labrax</i> two developmental stages (Linnaeus, 1758)	Aristotelis Moulitanos	Aristotle University of Thessaloniki