

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 Duperré	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	PLENARY: PROF ZE-XIA GAO		
	Session 3: Reproduction and breeding I		Chairs: Roberto de la Herrán & Elisavet Kaitetzidou
		Coffee break	
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 in 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 Artic 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

	Session 4: Development and early life interventions		Chairs: Laia Ribas & Aristotelis Moulitanos
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	Silvia Beato	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 embryonic temperature programming	Erik Burgerhout	Nofima

Thu
14:30-
17:30

	15:45	Correlation between epigenetic and transcriptomic changes in golden barramundi (<i>Lates calcarifer</i>): a multiomic approach	Roberta Marcoli	James Cook University
		Coffee break		
		Session 5: Structural genomics and population genetics	Chairs: Efthimia Antonopoulou & Maria Papadaki	
	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	PLENARY: Prof Wes Warren	Coffee break	
		Session 6: Nutrition, growth and pigmentation	Chairs: Carla Piazzon & Nikolas Panteli	
	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
Fri 09:45-13:00	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
		Lunch break		
Fri 14:30-23:30		EXCURSION TO VERGINA		

POSTER PRESENTATIONS

Title	Presenting author	Institution
P1- 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
P2- 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
P3- Deciphering the IGH locus of gilthead seabream	Carla Piazzon	IATS-CSIC
P4- Nutrition and immune function in farmed fish regulation of inflammatory and anti-inflammatory responses	Asma Abushweka	University of Aberdeen
P5- 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
P6- Influence of 3'UTR variants on germ cell-specific gene expression in Atlantic salmon	Silja Gulliksen	Mowi Genetics
P7- Mussel antiviral transcriptome response and elimination of viral haemorrhagic septicaemia virus (VHSV)	Amaro Saco	IIM-CSIC
P8- Transcriptomic analysis of turbot (<i>Scophthalmus maximus</i>) treated with zymosan a reveals that lncRNAs and inflammation-related genes mediate the protection conferred by β -glucans against <i>Aeromonas salmonicida</i>	Alejandro Romero	IIM-CSIC
P9- Genetic structure of native and translocated freshwater crayfish <i>Pontastacus leptodactylus</i> populations from Greece and turkey	Maria Alvanou	University of Western Macedonia
P10- Dissecting the genetic basis underlying response against salmonid alphavirus in Atlantic salmon	Domniki Manousi	Norwegian University of Life Sciences
P11- Molecular and physiological responses to chronic stress in European sea bass, <i>Dicentrarchus labrax</i>	Athanasios Samaras	University of Crete
P12- Can Atlantic bluefin tuna be efficiently switched from small pelagic fish to pellet feed under farming conditions?	Ivana Buselic	IZOR
P13- Divergent evolutionary paths and ontogenic regulation of proteases in the genome of European sea bass (<i>Dicentrarchus labrax</i>)	Rafael Angelakopoulos	University of Thessaly
P14- Serotype variation and genomic characterization of streptococcus agalactiae strains isolated from Nile tilapia	Renan Appel	Nord University
P15- Should we rear tilapia larvae in the dark?	Nikko Cabillon	Hebrew University of Jerusalem
P16- 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
P17- Comparison of tendon tissue differentiation between zebrafish and medaka by single-cell sequencing	Yu Long Chen	Huazhong Agricultural University
P18- Early life programming and molecular regulation of the stress response in greater amberjack (<i>Seriola dumerili</i>) larvae	Michail Pavlidis	University of Crete
P19- Genetic analysis of growth traits in fugu, <i>Takifugu rubripes</i>	Clémence Fraslín	The Roslin Institute
P20- Evolutionary dynamics of paralogous genes in oxidative phosphorylation and ontogenetic regulation in gilthead seabream (<i>Sparus aurata</i>)	Andreas Tsipourlianos	University of Thessaly
P21- Genetic resilience in the common cockle (<i>Cerastoderma edule</i>):	Marina Pampin	University of

contrasting natural selection and selective breeding for marsteiliosis resistance	Iglesias	Santiago de Compostela
P22- Discriminating freshwater prawn populations in Benin: a comparative analysis of morphological traits and modelling approaches	Mahugnon Santoze Adido	Sokoine University of Agriculture
P23- 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
P24- A heatwave event after hatching alters DNA methylation profile in rainbow trout (<i>Oncorhynchus mykiss</i>)	Ignacio Fernández	IEO-CSIC
P25- Due to their improved immunity, disease resistant common carp fish are also less infective	Lior David	The Hebrew University of Jerusalem
P26- A new sex determining gene identified in striped bass	Evgeniya Marcos-Hadad	The Hebrew University of Jerusalem
P27- Genetic analysis and development of sex-specific markers in populations of <i>Megalobrama amblycephala</i> based on whole-genome re-sequencing	Lifei Luo	College of Fisheries Huazhong Agricultural University
P28- 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
P29- Using long-read sequencing with oxford nanopore to enable genomic and epigenomic profiling of livestock fish	Fernando Naya-Catala	IATS-CSIC
P30- 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
P31- Differential expression of micro RNAs (miRNAs) in gonads of gilthead seabream <i>Sparus aurata</i>	Maria Papadaki	HCMR
P32- Molecular identification of bacterial pathogens associated with diseases in aquaculture farms in the Philippines	Casiano Choresca	NFRDI
P33- Understanding the genetic basis of pigmentation anomalies in flatfish	Daniel Costas Imbernón	IIM-CSIC
P34- The effect of dietary <i>Rhodotorula mucilaginosa</i> on liver antioxidant gene expression of <i>Sparus aurata</i>	Emmanouil Malandrakis	Agricultural University of Athens
P35- GRINNAQUA: green innovation strategies for animal health management: towards sustainable aquaculture	Sergio Fernández-Boo	CIIMAR
P36- Developing molecular diagnostic tools for QX disease in oyster aquaculture	Jonathan Wanderley Lawley	Griffith University
P37- Genetic identification of sturgeon populations from Ukraine using DNA markers	Olha Malysheva	The Leibniz Institute for Zoo and Wildlife Research
P38- Molecular characterization of breeders of <i>Solea senegalensis</i>	Marco Anaya	University of Cádiz
P39- A single heatwave event is able to disrupt spermatogenesis in rainbow trout (<i>Oncorhynchus mykiss</i>) breeders	Marta Riesco	University of León
P40- 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
P41- Single-cell transcriptome and epigenetic profiling of the pituitary gland provide insights into teleost puberty	Ioannis Konstantinidis	Nord University
P42- Skmer – genetic diversity metrics from genome skims for broodstock selection	Homère Alves Monteiro	University of Copenhagen

P43- 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
P44- 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
P45- Transcriptome analysis reveals the impact of environmental toxicants on ovarian tissue of climbing perch (<i>Anabas testudienus</i>)	Kiran Rasal	ICAR
P46- Exploring genetic diversity and hybridisation patterns of mussels in northern Scotland	Ambre Chapuis	The Roslin Institute
P47- Broodstock management influences the metabolic status, gene expression and epigenetic gene regulation in progeny	Kaja Skjærven	University of Bergen
P48- Genomic prediction of survival against <i>Vibrio harveyi</i> in leopard coral grouper (<i>Plectropomus leopardus</i>) using GBLUP, weighted GBLUP, and BAYESCP	Sheng Lu	Yellow Sea Fisheries Research Institute
P49- Gene expression profile of the cockle <i>Cerastoderma edule</i> in response to trematode infection	Simão Correia	CIIMAR
P50- 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
P51- Genetic diversity of <i>Plesionika edwardsii</i> : a shrimp species with economic interest in the Alboran sea region	Francisca Robles	University of Granada
P52- Comparative analysis of gonads from wild and F1 cultivated adult males of Senegalese sole by scRNASeq	Carmelo Ruiz-Rejón	University of Granada
P53- Morphometrics in different genotypic classes of <i>Dicentrarchus labrax</i> two developmental stages (Linnaeus, 1758)	Marinina Pampichail	University of Ioannina