






09.00 10.00	Registration/ Hanging of Posters		
10.00 10.45	INFANTE		
	OPENING CEREMONY CHAIR: IVONA MLADINEO K1 The effects of CO₂ and related water chemistry on fish: climate change v. aquaculture ROD W. WILSON, University of Exeter		
10.45 11.15	Coffee Break & Group Photo		
	INFANTE	D. MARIA	D. LUÍS
	CLIMATE CHANGES, OCEAN ACIDIFICATION AND DISEASES CHAIRS: ROD WILSON & SONIA DIOS	BACTERIAL DISEASES I CHAIRS: ALICIA ESTÉVEZ TORANZO & CARA BROSNÄHN	PARASITOLOGICAL DISEASES I CHAIRS: ANNEMARIE AVENANT-OLDEWAGE & SARAH POYNTON
11.15 11.30	001-O Paramoebic infections in changing environment BARBARA NOWAK, University of Tasmania	007-O* The role of hypermutable strains in evolution of fish pathogenic bacteria and implications for vaccination in aquaculture OLEKSANDRA SILAYEVA, The University of Queensland	015-O A global review of parasites in finfish aquaculture SARAH POYNTON, Johns Hopkins University School of Medicine
11.30 11.45	002-O* What the history of the common cockle (<i>Cerastoderma edule</i>) can tell us about its potential future KATE MAHONEY, School of Biological, Earth and Environmental Sciences, and Aquaculture and Fisheries Development Centre, University College Cork	008-O Insights into microbial biofilm communities in an aquaculture facility JOERG GRAF, University of Connecticut	016-O Molecular analysis for the detection of significant southern bluefin tuna parasites from environmental samples NATHAN BOTT, RMIT University
11.45 12.00	003-O* The impacts of UV-B radiation on pacific oyster <i>Crassostrea gigas</i> health and development of pathogens <i>Vibrio aestuarianus</i> and ostreid herpesvirus-1 (OSHV-1MICROVAR) GARY KETT, School of Biological, Earth and Environmental Sciences, and Aquaculture and Fisheries Development Centre, University College Cork	009-O* First report of pasteurellosis in meagre - genetic and biochemical identification of <i>Photobacterium damsela</i> subs. <i>piscicida</i> MÁRCIO MOREIRA, Portuguese Institute for the Ocean and Atmosphere, Aquaculture Research Station	017-O The hidden genome of a marine amoeba <i>Neoparamoeba perurans</i> NATASHA BOTWRIGHT, CSIRO Agriculture and Food, St Lucia
12.00 12.15	NUTRITION AND HEALTH CHAIR: ANTONIO PAULO CARVALHO & CLÁUDIA SERRA 004-O* The guppy MODEL - developing functional feed additives against ectoparasites ELISSAVET ARAPI, Cardiff University	010-O* Comparison of <i>Pasteurella</i> sp. isolated from outbreaks of pasteurellosis in lump sucker (<i>Cyclopterus lumpus</i> L.) in Norway and Scotland SEAN MONAGHAN, Institute of Aquaculture, University of Stirling	018-O Phenotypic characterization of <i>Paramoeba perurans</i> clones obtained from different populations of Atlantic salmon and ballan wrasse STEFFEN H. BLINDHEIM, The Industrial and Aquatic Laboratory
12.15 12.30	005-O* Cellular and molecular fingerprinting of feed-induced intestinal inflammation in Atlantic salmon YOUNGJIN PARK, Nord University	011-O* A new serogroup of <i>Vibrio harveyi</i> in the Adriatic Sea - comparison of virulent vs non-virulent strains for sea bass ŽELJKO PAVLINEC, Croatian Veterinary Institute	019-O Novel anti-parasitics in the fight against amoebic gill disease in Atlantic salmon NATASHA BOTWRIGHT, CSIRO Agriculture and Food



	INFANTE	D. MARIA	D. LUÍS
12.30 12.45	006-O Mycotoxin exposure poses a risk to farmed fish CONSTANZE PIETSCH, Zurich University of Applied Sciences	012-O* Neurological signs in grey mullet <i>Mugil cephalus</i> caused by <i>Vibrio harveyi</i> ROSA INES STREM, Ben Gurion University	020-O First report of <i>Tetracapsuloides bryosalmonae</i> and PKD in Alaskan salmonids BARTOLOMEO GORGOLIONE, Aquatic Animal Health Laboratory, Dept. of Pathobiology and Diagnostic Investigation, CVM & Dept. of Fisheries and Wildlife
12.45 13.00	109-O* Evaluation of skin mucous cells of Atlantic salmon (<i>Salmo salar</i>) fed plant-based diets and probiotics NIMALAN NADANASABESAN, Faculty of Bioscience and Aquaculture, Nord University	013-O Pathology of mouthrot caused by <i>Tenacibaculum maritimum</i> in farmed Atlantic salmon KATHLEEN FRISCH, Cermaq Canada	
13.00 14.00	Lunch (Ground Floor)		
	EMERGING AND ALIEN PATHOGEN SPECIES CHAIRS: KLAUS KNOPF & ESTEBAN SOTO	BACTERIAL DISEASES II CHAIRS: SIMON JONES & ŽELJKO PAVLINEC	PARASITOLOGICAL DISEASES II CHAIRS: JORGE EIRAS & CRISTINA CRUZ
14.00 14.15	021-O Killers or bystanders? Cases of PRV-1 in Atlantic salmon and PRV-3 in rainbow and brown trout in German MIKOLAJ ADAMEK, University of Veterinary Medicine	026-O Tenacibaculosis in the sea lice cleaner fish <i>Cyclopterus lumpus</i> L. SVERRE BANG SMÅGE, Cermaq Canada	031-O* Duality of late glochidiosis: a gill parasitosis of salmon and key stage for freshwater mussel culture PEDRO ANTONIO CASTRILLO, Universidade de Santiago de Compostela
14.15 14.30	022-O Piscine orthoreovirus-3 (PRV-3), a new pathogen for farmed rainbow trout NIELS JØRGEN OLESEN, European Union Reference Laboratory for Fish and Crustacean Diseases, National Institute of Aquatic Resources, DTU aqua	027-O Variable <i>Piscirickettsia salmonis</i> shedding rates during infections in Pacific and Atlantic salmon SIMON JONES, Fisheries and Oceans Canada	032-O Infestation and infection dynamics of tapeworms (<i>Eubothrium</i> sp.) in farmed Atlantic salmon HAAKON HANSEN, Norwegian Veterinary Institute, Fish Health Research Group
14.30 14.45	023-O First isolation of a bafinivirus in imported goldfish in the United Kingdom - pathogenicity studies IRENE CANO, Cefas	028-O First pathological description of <i>Chlamydia</i> bacteria in Chilean salmonid farming RUDY SUAREZ, Laboratorio de Biotecnología Aplicada, Facultad de Medicina Veterinaria, Universidad San Sebastián	DISEASES OF PUBLIC CONCERN CHAIRS: MÁRCIO MOREIRA & ŽELJKO TRUMBIC 033-O Risk mapping of zoonotic parasites in Italian aquaculture ANDREA GUSTINELLI, Department of Veterinary Medical Sciences, Alma Mater Studiorum Università di Bologna
14.45 15.00	024-O Analysis of the white sturgeon (<i>Acipenser transmontanus</i>) immune response during <i>Veronaea botryosa</i> infection ESTEBAN SOTO, University of California	029-O* New Zealand rickettsia-like organism: investigating the association of this bacteria with mortalities in farmed chinook salmon in New Zealand CARA BROSNÄHN, Ministry for Primary Industries	035-O* Assessing zoonotic potential and viability of cythocotylid muscle metacercariae found in a common carp (<i>Cyprinus carpio</i>) aquaculture in Hungary DIÁNA SÁNDOR, Institute for Veterinary Medical Research, Centre for Agricultural Research, Hungarian Academy of Sciences
15.00 15.15	025-O From lamb to lion: unleashing the beast in "virulent" <i>Aeromonas hydrophila</i> BENJAMIN BECK, USDA ARS Aquatic Animal Health Research Unit		



15.15 16.00	Poster Sessions and Coffee Break		
	INFANTE	D. MARIA	D. LUÍS
	WS: H2020 VIVALDI PROJECT CHAIR: ISABELLE ARZUL	WS: H2020 PROJECT MEDAID AND PERFORMFISH CHAIRS: FRANCESC PADROS & EDGAR BRUN	AQUATIC ANIMAL EPIDEMIOLOGY CHAIRS: EDDA BJÖRK HAFSTAD ÁRMANNSDÓTTIR & DIRK WILLEM KLEINGELD
16.00 16.15	<p>036-O VIVALDI Project ISABELLE ARZUL, IFREMER, Laboratoire de Génétique et Pathologie des Mollusques Marins</p> 	<p>037-O Open Workshop: Bottlenecks in diagnostics of Mediterranean fish diseases SNJEŽANA ZRNČIĆ, Croatian Veterinary Institute</p>  	<p>038-O Spatiotemporal mortality patterns in Norwegian salmonid aquaculture BRITT BANG JENSEN, Norwegian Veterinary Institute</p>
16.15 16.30			<p>039-O* Development of method for detection of salmonid alphavirus (SAV) from seawater LISA-VICTORIA BERNHARDT, Norwegian Veterinary Institute</p>
16.30 16.45			<p>040-O* Evolution of the piscine orthoreovirus genome linked to emergence of heart and skeletal muscle inflammation in farmed Atlantic salmon TURHAN MARKUSSEN, Faculty of Veterinary Medicine, Norwegian University of Life Sciences</p>
16.45 17.00			<p>041-O Piscine myocarditis virus (PMCV) in Atlantic salmon: prevalence in fry and broodstock material and complications in relation to mechanical delousing PETRA E. PETERSEN, Faroese Food and Veterinary Authority, Tórshavn</p>
17.00 17.15			<p>042-O Risk factors for clinical outbreaks of cardiomyopathy syndrome (CMS) in Atlantic salmon in Norway BRITT BANG JENSEN, Norwegian Veterinary Institute</p>
17.15 17.30			<p>043-O No evidence of vertical transmission of ISAV-HPR0 from Atlantic salmon brood fish to offspring's in Faroese aquaculture DEBES H. CHRISTIANSEN, Faroese Food and Veterinary Authority</p>
17.30 17.45			<p>044-O A web-based application for simulating the spread of pancreas disease after introduction in a naïve population BRITT BANG JENSEN, Norwegian Veterinary Institute</p>
17.45 18.00			<p>045-O Longitudinal survey of <i>Flavobacterium</i> species in Icelandic fish farms THORBJORG EINARSDOTTIR, Institute for Experimental Pathology, University of Iceland</p>
18.00 18.15			<p>250-O* Fungal pathogens causing systemic mycosis in <i>Onchorhynchus mykiss</i> and <i>Cyprinus carpio communis</i>; pathogenicity characterization by SEIR modeling and histopathological approach AQIB R. MAGRAY, Centre of Research for Development, University of Kashmir</p>
18.30 19.30			<p>Host Organisation Reception Alfândega Congress Centre (Ground Floor)</p>



	PORTO	D. MARIA	D. LUÍS
	KEYNOTE SESSION CHAIR: ÚNA MCCARTHY	VIRUSES AND VIRAL DISEASES I CHAIRS: VIKRAM VAKHARIA & MARCOS GODDY	HOST-PARASITE INTERACTIONS I CHAIRS: GEMA ALAMA BERMEJO & PEDRO A. CASTILLA ARIAS
09.00 09.15	<p>K2 The progressive management for improving aquaculture biosecurity: a new initiative MELBA BONDAD-REANTASO, Food and Agriculture Organization of the United Nations</p>	<p>047-O RGNNV capsid protein amino acids 247 and 270 are involved in betanodavirus virulence to European sea bass (<i>Dicentrarchus labrax</i>) M. CARMEN ALONSO, Universidad de Málaga, Departamento de Microbiología, Facultad de Ciencias</p>	<p>055-O* Comparative proteomic profiling of pathogenic and non-pathogenic <i>Paramoeba perurans</i> proteins associated with AGD KERRIE NI DHUFAIGH, Galway-Mayo Institute of Technology</p>
09.15 09.30		<p>048-O* Betanodavirus transmission through marine invertebrates LUCÍA VÁZQUEZ-SALGADO, Universidade de Santiago de Compostela</p>	<p>056-O A static <i>in vitro</i> gill model successfully reproduces <i>in vivo</i> Atlantic salmon host responses to <i>Neoparamoeba perurans</i> infection IRENE CANO, Cefas</p>
09.30 09.45	WS: BIOSECURITY I CHAIR: ÚNA MCCARTHY	<p>049-O* RGNNV/SJNNV reassortant betanodavirus outbreaks in a sea bream and sea bass farm ENRICO VOLPE, Department of Veterinary Medical Sciences, University of Bologna</p>	<p>057-O* Functional analysis with RNA interference technique of highly expressed protease genes at the invasive and parasitic stages of <i>Cryptocaryon irritans</i> YUHO WATANABE, The University of Tokyo</p>
09.45 10.00	<p>046-O Developing a Biorisk assessment system for aquatic pathogens ÚNA MCCARTHY, Marine Scotland Science</p>	<p>050-O Viral encephalo and retinopathy (VER) in gilthead sea bream: results of experimental infections with RGNNV/SJNNV betanodavirus ANNA TOFFAN, Istituto Zooprofilattico Sperimentale delle Venezie</p>	<p>058-O Serum metabolomics tells the story of disease degree in a fish enteritis model ARIADNA SITJÀ-BOBADILLA, Fish Pathology Group, Instituto de Acuicultura Torre de la Sal</p>
10.00 10.15		<p>051-O* Genome-wide sequencing of salmonid alphavirus suggests recent anthropogenic transmission across large distances in Norwegian aquaculture MICHAEL GALLAGHER, The Roslin Institute</p>	<p>059-O Ultrastructural studies on the early interaction between the oomycete <i>Saprolegnia parasitica</i> and fish cells PILAR MUÑOZ, Universidad de Murcia</p>
10.15 10.30		<p>052-O* Tuning salmonid alphavirus (SAV) virulence by modification of viral glycosylation and nuclear localization signal IDA AKSNES, Norwegian University of Life Sciences</p>	<p>060-O Leukocyte nucleolus and <i>Anisakis pegreffii</i>: when falling apart actually is falling in place IVONA MLADINEO, Institute of Oceanography and Fisheries</p>
10.30 10.45		<p>053-O Fast recombination in the hemagglutinin gene of salmon isavirus gives rise to new genotypes: evidence of template switching MARCELO CORTEZ-SAN MARTÍN, Laboratory of Molecular Virology and Pathogen Control, Faculty of Chemistry and Biology, University of Santiago</p>	<p>030-O* Epizootiology and genomic characterisation of a novel epitheliocystis agent in greater amberjack in Greece MARIA CHIARA CASCARANO, Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research</p>
10.45 11.15		<p>Coffee Break</p>	




	PORTO	D. MARIA	D. LUÍS
	WS: BIOSECURITY II CHAIR: ÚNA MCCARTHY	VIRUSES AND VIRAL DISEASES II CHAIRS: MARIA CARMEN ALONSO & MICHAEL GALLAGHER	HOST-PARASITE INTERACTIONS II CHAIRS: ROBERTO BERMÚDEZ-POSE & REBECCA HEAVYSIDE
11.15 11.30	061-O Assessment of the biosecurity in fish farms with an innovating decision-making tool SOPHIE LE BOUQUIN, ANSES, Ploufragan / Plouzanié / Niort Laboratory, Epidemiology, Health and Welfare Unit	066-O* Clinical and subclinical infections of coho salmon (<i>Oncorhynchus kisutchi</i>) by piscine orthoreovirus (PRV) MARCOS GODOY, Laboratorio de Biotecnología Aplicada, Facultad de Medicina Veterinaria, Universidad San Sebastián	073-O The salmon louse (<i>Lepeophtheirus salmonis</i>) salivary gland secretes immune regulatory proteins AINA-CATHRINE ØVERGÅRD, SLRC, Department of Biological Sciences, University of Bergen
11.30 11.45		067-O* Piscine orthoreovirus (PRV-1) persists in erythroid progenitor cells, erythrocytes, macrophages and unknown cells in kidney of Atlantic salmon (<i>Salmo salar</i>) MUHAMMAD SALMAN MALIK, Department of Food Safety & Infection Biology, Norwegian University of Life Sciences	074-O* Identification of proteins from the secretory/ excretory products (SEPS) of the branchiuran ectoparasite <i>Argulus foliaceus</i> (Linnaeus, 1758) AISHA AMBUALI, Institute of Aquaculture, University of Stirling
11.45 12.00		068-O Genomic characterisation of Tasmanian salmon reoviruses PETER MOHR, CSIRO, Australian Animal Health Laboratory	075-O <i>Ceratomyxa oestroides</i> and sea bass interaction inferred by histology and 3D visualisation IVONA MLADINEO, Institute of Oceanography and Fisheries
12.00 12.15	DISEASES OF WILD AND ORNAMENTAL FISH CHAIRS: HEIKE SCHMIDT-POSTHAUS & AURELIA SARAIVA 062-O <i>Saprolegnia</i> infections in wild salmonids - an increasing challenge for fisheries JOANNA JAMES, Environment Agency	069-O Identification of virulence determinants of viral hemorrhagic septicemia virus in rainbow trout VIKRAM VAKHARIA, Institute of Marine & Environmental Technology, University of Maryland Baltimore County	076-O <i>Piscirickettsia salmonis</i> extracellular products would decrease <i>in vitro</i> macrophage apoptosis SMITH PA, Faculty of Veterinary Sciences, University of Chile
12.15 12.30	063-O Micro and macroparasites in pink salmon (<i>Oncorhynchus gorbuscha</i>) invading rivers in western Norway EGIL KARLSBAKK, University of Bergen	070-O Molecular basis for VHSV virulence in rainbow trout VALENTINA PANZARIN, IZSVe, Padova	077-O* <i>Vibrio anguillarum</i> expresses some virulence factors in a temperature-dependent manner MARTA A. LAGES, Universidade de Santiago de Compostela
12.30 12.45	064-O Epidemiological and genetic investigations of the cnidarian parasite of sturgeon and paddlefish eggs, <i>Polypodium hydriforme</i> BETH OKAMURA, Natural History Museum, London	071-O Virulence characterization of Italian infectious haematopoietic necrosis virus strains MIRIAM ABBADI, Istituto Zooprofilattico Sperimentale delle Venezie	078-O You shall not pass! 25-Hydroxycholesterol based antiviral response can block entry of CVHV-3 into common carp cells MIKOLAJ ADAMEK, University of Veterinary Medicine
12.45 13.00		072-O* Development of viral reporter systems for the detection of SVCV and VHSV replication ANNABEL RICE, Cefas	079-O Applications, potential and challenges of an <i>in vitro</i> heart model: salmon cardiac primary cultures (SCPCS) PATRICIA NOGUERA, Health and Welfare, Marine Scotland Science




13.00 14.00	Lunch & Branch Officers Working Lunch		
	PORTO	D. MARIA	D. LUÍS
	DISEASES OF UNCERTAIN AETIOLOGY CHAIRS: BARBARA NOWAK & EVA LEWISCH	VIRUSES AND VIRAL DISEASES III CHAIRS: OLGA HAENEN & VALENTINA PANZARIN	IMMUNOMODULATORS AND AQUATIC ANIMAL HEALTH CHAIRS: SIWICKI ANDRZEJ KRYSZTOF & ANA TERESA GONÇALVES
14.00 14.15	080-O* Pathological characterization of emerging disease: hematomas and hepatic rupture syndrome in rainbow trout (<i>Oncorhynchus mykiss</i>) MARCOS GODOY, Laboratorio de Biotecnología Aplicada, Facultad de Medicina Veterinaria, Universidad San Sebastián	085-O Pike, a "discrete vector" of viral hemorrhagic septicemia virus (VHSV) and infectious hematopoietic necrosis virus (IHNV)? THIERRY MORIN, French Agency for Food, Environmental and Occupational Health & Safety, Ploufragan-Plouzanié-Niort Laboratory, Unit Viral Diseases of Fish, National Reference Laboratory for listed fish diseases	089-O Significance of immunomodulators in control of aquatic animal health – over 30 years of application and actual possibility ANDRZEJ SIWICKI, Department Microbiology and Clinical Immunology, University of Warmia and Mazury
14.15 14.30	081-O Cysts of unknown etiology (CUES): new insights and main factors affecting their prevalence in Mediterranean wild fish populations MARIA CONSTENLA, Universitat Autònoma de Barcelona	086-O* Micro-carriers for cultivation of fish cells and propagation of koi herpesvirus LISA KATHARINA JORDAN, Institute of Bioprocess Engineering, Friedrich-Alexander University Erlangen-Nürnberg	090-O* Addition of fulvic acid to fish production water increases growth performance and stimulates the immune response THORA LIEKE, Leibniz Institute of Freshwater Ecology and Inland Fisheries
14.30 14.45	082-O Skin health of chinook salmon farmed in New Zealand BARBARA NOWAK, University of Tasmania	087-O* Infection of European eel by anguillid herpesvirus 1: physical contacts between infected and naïve eels enhance viral transmission NATACHA DELREZ, Immunology-Vaccinology, Department of Infectious and Parasitic Diseases, Fundamental and Applied Research for Animals & Health, Faculty of Veterinary Medicine, University of Liège	091-O Anti-inflammatory effects of β-1,3/1,6 glucan supplemented feeds in farmed salmon PAUL J. MIDTLYG, Faculty of Veterinary Medicine, Norwegian University of Life Sciences
14.45 15.00	083-O Effect of antibiotic in-feed treatment against red mark syndrome in rainbow trout JACOB G. SCHMIDT, DTU Aqua, Unit for Fish and Shellfish Diseases	088-O Prevention and control management of grass carp hemorrhagic disease (GCHD) in China QING WANG, Pearl River Fisheries Research Institute, Chinese Academy of Fishery Sciences	092-O Probiotic yeast protects Atlantic salmon against <i>Piscirickettsia salmonis</i> by empowering crosstalk between microbiota and fish via micrornas modulation ANA TERESA GONÇALVES, Interdisciplinary Center for Aquaculture Research
15.00 15.15	084-O Epizootic skin tumors in pike-perch (<i>Sander lucioperca</i>) from lake constance in Austria EVA LEWISCH, Clinical Division of Fish Medicine, University of Veterinary Medicine Vienna	251-O First detection of infectious spleen and kidney necrosis virus (ISKNV) associated with massive mortalities in farmed tilapia in Africa RICHARD K. PALEY, Cefas Weymouth Laboratory	
15.15 16.00	Poster Sessions and Coffee Break		



	PORTO	D. MARIA	D. LUÍS
	ANTIMICROBIAL RESISTANCE IN FISH AND SHELLFISH CHAIRS: SANDRINE BARON & DAVID VERNER-JEFFREYS	INDUSTRY FORUM PARAFISHCONTROL CHAIR: PANOS CHRISTOFILOGIANNIS	WS: CO-INFECTIONS AND MULTIPLE STRESSORS CHAIRS: BARTOLOMEO GORGGLIONE & OLGA HAENEN
16.00 16.15	093-O The importance of using standard protocols to determine antimicrobial susceptibility PETER SMITH , Department of Microbiology, National university of Ireland Galway	101-O ParaFishControl Workshop "Mediterranean fish parasite management strategies" ARIADNA SITJA-BOBADILLA , Fish Pathology Group, Instituto de Acuicultura Torre de la Sal 	103-O Pathological synergies in co-infecting pathogens are impacted by exposure order, and host response to initial infection MARK D. FAST , Hoplite Research group, Department of Pathology and Microbiology, Atlantic Veterinary College, UPEI
16.15 16.30	094-O Trans-national study: proposition of provisional epidemiological cut off value for <i>Vibrio anguillarum</i> and <i>Vibrio vulnificus</i> isolated from diseased fish SANDRINE BARON , ANSES, Ploufragan-Plouzané-Niort Laboratory, Mycoplasmaology-Bacteriology and Antimicrobial Resistance Unit		
16.30 16.45	095-O* Antimicrobial resistance in the bacterial communities of the rainbow trout file? NICOLAS HELSENS , SECALIM, INRA, Oniris, Université Bretagne		104-O The pathobiome in animal and plant health DAVID BASS , Cefas
16.45 17.00	096-O Antimicrobial susceptibility of <i>Aeromonas</i> spp. isolated from wild freshwater fish and farmed trout in France SANDRINE BARON , ANSES, Ploufragan-Plouzané-Niort Laboratory, Mycoplasmaology-Bacteriology and Antimicrobial Resistance Unit		105-O* Expecting the unexpected: an analysis of multiple stressors and their physiological consequences for rainbow trout (<i>Oncorhynchus mykiss</i>) CHRISTYN BAILEY , Centre for Fish and Wildlife Health
17.00 17.15	097-O* Antimicrobial susceptibility testing of atypical <i>Aeromonas salmonicida</i> isolates from wrasse in the United Kingdom ELIZABETH BUBA , University of Stirling		106-O* Saprolegniosis: who is there and why MARCIA SARAIVA , Aberdeen Oomycete Laboratory, International Centre for Aquaculture Research and Development, Institute of Medical Sciences, University of Aberdeen



	PORTO	D. MARIA	D. LUÍS
17.15 17.30	098-O Biofilm formation by atypical <i>Aeromonas salmonicida</i> and effect of sub-lethal concentrations of antibiotics ANDREW DESBOIS , Institute of Aquaculture, University of Stirling	101-O ParaFishControl Workshop "Mediterranean fish parasite management strategies" ARIADNA SITJA-BOBADILLA , Fish Pathology Group, Instituto de Acuicultura Torre de la Sal 	107-O Multi-causal eel diseases in the Netherlands OLGA HAENEN , Wageningen Bioveterinary Research, NRL for Fish Diseases
17.30 17.45	099-O Composition of the cultivable aerobic and facultative anaerobic intestinal microbiota of dwarf gourami (<i>Colisa lalia</i>) and prevalence of antibiotic resistance SIMON MENANTEAU-LEDOUBLE , Klinische Abteilung für Fischmedizin		108-O <i>Flavobacterium branchiophilum</i> co-infection can increase pathological changes during koi sleepy disease caused by carp edema virus infection in carp. MIKOLAJ ADAMEK , University of Veterinary Medicine
17.45 18.00	100-O* The prevalence of plasmid-mediated quinolone resistance genes in <i>Chrysobacterium aquaticum</i> isolated from farmed salmonids in Turkey IZZET B. SATICIOGLU , Aquatic Animal Disease Department, Faculty of Veterinary Medicine, Erciyes University		246-O Simultaneous and sequential co-infection patterns modulating rainbow trout response to BCWD and IHNV BARTOLOMEO GORGGLIONE , Aquatic Animal Health Laboratory, Dept. Pathobiology and Diagnostic Investigation, CVM & Dept. Fisheries and Wildlife, CANR, Michigan State University
18.00 18.15			247-O Environment and UV-irradiation affect severity and timing of multiple infections in seawater-reared Atlantic salmon smolts in British Columbia, Canada SIMON JONES , Fisheries and Oceans Canada
18.15 18.30			248-O Gill histopathology scoring vs gross morphology and transcriptome analysis in farmed Atlantic salmon (<i>Salmo salar</i>) PATRICIA NOGUERA , Health and Welfare, Marine Scotland Science
18.30 18.45		249-O* Farmed Atlantic salmon microbiome on gills and mucous samples during an amoebic gill disease episode: towards an early prediction VICTOR B. BIRLANGA , National University of Ireland	
19.30 20.30	Civic Reception Rectory of Porto University		



	PORTO	D. MARIA	D. LUÍS
	KEYNOTE SESSION CHAIR: AURÉLIA SARAIVA	DIAGNOSTICS I CHAIRS: OSWALDO PALENZUELA & EVA JANSSON	AQUATIC ANIMAL WELFARE CHAIRS: THOMAS WAHLI & KATE MAHONY
09.00 09.15	K3 The immune system of sea bass <i>Dicentrarchus labrax</i> in health and upon stimulation GIUSEPPE SCAPIGLIATI, Department for Innovative Biology, Agrofood and Forestry, University of Tuscia	115-O* DNA-based electrochemical biosensor for the detection of ostreid herpesvirus-1 in <i>Crassostrea gigas</i> ANNA TOLDRA, IRTA, Sant Carles de la Ràpita	122-O The animal health law - a particular challenge for EU member states with small-scale aquaculture production business DIRK WILLEM KLEINGELD, Lower Saxony State Office for Consumer Protection and Food Safety
09.15 09.30		116-O Histological diagnostic criteria for nematocyst associated gill disease in finfish HAMISH RODGER, VAI Consulting	123-O* An innovative two-chamber skin explant model to study skin diseases in marine fish MAAIKE VERCAUTEREN, Ghent University, Faculty of Veterinary Medicine
	FISH AND SHELLFISH IMMUNOLOGY I CHAIRS: GIUSEPPE SCAPIGLIATI & ANDREW BARNES		
09.30 09.45	111-O Evolutionary characteristics 184 family of protease inhibitors suggest a lineage-specific multigene family likely functioning as immune effector mechanism in mollusks QINGGANG XUE, Zhejiang Wanli University	117-O Salmonid alphavirus subtype I isolated from clinically-diseased Atlantic salmon, <i>Salmo salar</i>, in freshwater culture SILVIA DE CARVALHO SOARES, Marine Scotland Science, Marine Laboratory	124-O Recommendations for stunning and killing of common carp (<i>Cyprinus carpio</i>) and rainbow trout (<i>Oncorhynchus mykiss</i>) VERENA JUNG-SCHROERS, University of Veterinary Medicine
09.45 10.00	112-O* Understanding the immune response of big-belly seahorse <i>Hippocampus abdominalis</i> under bacterial infection by differential expression analysis SUKKYOUNG LEE, Fish Vaccine Research Center, Jeju National University	118-O Difference in virulence of PRV-1 strains infecting Atlantic salmon ØYSTEIN WESSEL, Faculty of Veterinary Medicine, Norwegian University of Life Sciences	125-O* Distress and eustress in the fish brain LINDA TSCHIRREN, Zurich University of Applied Sciences
10.00 10.15	114-O Transcriptomic profiles of Atlantic salmon challenged with <i>Piscirickettsia salmonis</i> reveal a strategy to evade the adaptive immune response ANDREA PEÑA, Laboratorio Pathovet	119-O Use of non-lethal sampling in pancreas disease (PD) diagnosis and surveillance MARIAN MCLOUGHLIN, Fish Vet Group	126-O Does flash photography cause stress in aquarium fish? KLAUS KNOPF, Leibniz-Institute of Freshwater Ecology and Inland Fisheries
10.15 10.30	252-O Evidence of trained immunity for common carp macrophages GEERT F. WIEGERTJES, Cell Biology and Immunology Group	120-O Discovery of cutthroat trout virus (CTV) in Atlantic salmon and other salmonids from the eastern Canada NELLIE GAGNÉ, Fisheries and Oceans Canada, Gulf Fisheries Center	127-O Influence of a nanofiltration - reactor on the bacterial microflora and on <i>Ichthyophthirius multifiliis</i> theronts in recirculating aquaculture systems VERENA JUNG-SCHROERS, University of Veterinary Medicine
10.30 10.45		121-O* Real-time PCR and droplet digital PCR: two methods for pathogen detection with key differences TODD TESTERMAN, University of Connecticut	128-O* Sea-based container culture of European lobster (<i>Homarus gammarus</i>) increases bacterial diversity of the gut and lowers susceptibility to viral infection COREY C. HOLT, University of Exeter/Centre for Environment, Fisheries and Aquaculture Science



10.45 11.15	Coffee Break		
	PORTO	D. MARIA	D. LUÍS
	FISH AND SHELLFISH IMMUNOLOGY II CHAIRS: DIETER STEINHAGEN & BENJAMIN COSTAS	DIAGNOSTICS II CHAIRS: SIGRÍÐUR GUÐMUNDSDÓTTIR & EDEL CHAMBERS	MOLLUSCS AND CRUSTACEAN DISEASES I CHAIRS: ANTONIO VILLALBA & SERGIO FERNANDES-BOO
11.15 11.30	129-O Early immune response in Atlantic salmon vaccinated with inactivated whole-cell bacterin from <i>Piscirickettsia salmonis</i> or infected with pathogenic isolates ANDREA PEÑA, Laboratorio Pathovet	136-O Phylogenetic analyses and diagnostic tools improvement to optimize the control of regulated rhabdoviruses in France THIERRY MORIN, French Agency for Food, Environmental and Occupational Health & Safety, Ploufragan-Plouzané-Niort Laboratory, Unit Viral Diseases of Fish, National Reference Laboratory for listed fish diseases	143-O Implementing an eDNA based method for assessing the spread of a listed disease: the Irish national crayfish plague surveillance programme CIAR O'TOOLE, Marine Institute
11.30 11.45	130-O* <i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i> activates rainbow trout IGM+ B cells through TLR signalling IRENE SOLETO, Animal Health Research Center	137-O Nodular gill disease in rainbow trout... an emerging disease? ROBERTO BERMÚDEZ, Universidade de Santiago de Compostela	144-O Crayfish plague in Ireland - a complex story DEBORAH CHESLETT, Marine Institute
11.45 12.00	131-O Stress reduces proliferative response of rainbow trout head kidney macrophages <i>in vitro</i> JOSE ANTONIO GARCIA CABRERA, UCM, EAFP	138-O Novel immunodiagnostic tools for nodavirus detection in <i>Dicentrarchus labrax</i> brain samples CARMEN GALÁN, Inmunología y Genética Aplicada S.A.	145-O* Identification and pathogenicity of pathogenic bacterium isolated from mud crab <i>Scylla serrata</i> larvae YUKI MIDORIKAWA, Tokyo University of Marine Science and Technology
12.00 12.15	132-O* Rainbow trout preferentially respond to thymus-independent antigens upon anal administration ALBA MARTIN-MARTÍN, Animal Health Research Center, Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria	139-O Isolation and characterization of a bunyavirus associated with clinical infection of black bass, <i>Micropterus salmoides</i> ESTEBAN SOTO, University of California	146-O* Disease connectivity: using eDNA to investigate disease dynamics of the parasite <i>Hematodinium</i> sp. in shore crabs, <i>Carcinus maenas</i> CHARLOTTE DAVIES, Department of Biosciences, College of Science, Swansea University
12.15 12.30	133-O* Immune related genes of cobia (<i>Rachycentron canadum</i>) responding to <i>Streptococcus dysgalactiae</i> infection SHUN MAEKAWA, Department of Veterinary Medicine, College of Veterinary Medicine, National Pingtung University of Science and Technology	140-O* Isolation and characterization of EVEVX in glass eels (<i>Anguilla anguilla</i>) IVANA GIOVANNA ZUPICIC, Croatian Veterinary Institute	147-O Addressing the health of <i>Macrobrachium rosenbergii</i> in Bangladesh aquaculture CHANTELLE HOOPER, Cefas
12.30 12.45	134-O Development of a monoclonal antibody against CD4-2 of gibel carp, <i>Carassius auratus langsdorffii</i> LIK-MING LAU, Laboratory of Fish Pathology, Tokyo University of Marine Science and Technology	141-O Genetic identification of two variants of a sturgeon mimivirus using high-resolution melting analysis LAURENT BIGARRÉ, Agence Nationale de Sécurité Sanitaire	148-O Handbook of pathogens and diseases in cephalopods CAMINO GESTAL, Aquatic Molecular Pathobiology Group, Instituto de Investigaciones Marinas
12.45 13.00	135-O Immune response in a goldfish resistant strain to cyprinid herpesvirus 2 experimental infection MAKOTO SHIRATO, Tokyo University of Marine Science and Technology	142-O Simple and rapid methods for tilapia lake virus on-site detection and serological diagnostic WANG QING, Pearl-River Fisheries Research Institut of CAFS	149-O A new <i>Aggregata</i> species (Apicomplexa: Aggregatidae) of <i>Octopus bimaculatus</i> from Baja California, Mexico GRACIELA ESMERALDA COLUNGA RAMIREZ, Universidad Autónoma de Baja California



13.00 14.00	Lunch (Ground Floor)		
	PORTO	D. MARIA	D. LUÍS
	FISH AND SHELLFISH IMMUNOLOGY III CHAIRS: SEAN MONAGHAN & OTTAVIA BENEDECENTI	DIAGNOSTICS III CHAIRS: SNJEŽANA ZRNČIĆ & CARMEN GALÁN	MOLLUSCS AND CRUSTACEAN DISEASES II CHAIRS: ANTONIO FIGUERAS & CHARLOTTE DAVIES
14.00 14.15	150-0* Immersion vaccination efficacy against atypical <i>Aeromonas salmonicida</i> in juvenile farmed ballan wrasse (<i>Labrus bergyllta</i> , Ascanius) SEAN MONAGHAN , Institute of Aquaculture, University of Stirling	155-0* Non-lethal sampling for detection and quantification of the high-fatality fish pathogen, <i>Nocardia seriolae</i> , using comparative genomics and real-time PCR CUONG LE , GeneCology Research Centre, University of the Sunshine Coast	160-0* Disseminated neoplasia in baltic bivalves: aetiology, characteristics and prevalence ALICJA MICHNOWSKA , Department of Marine Ecosystems Functioning, Institute of Oceanography, University of Gdańsk
14.15 14.30	151-0 Adjuvant influences immune suppression and antibody avidity as well as kinetics of antibody response to a T-dependent antigen in barramundi ANDREW BARNES , The University of Queensland	156-0 Construction of a qPCR-based macroarray for diagnosis, typing and evaluation of virulence of VHSV strains CARLOS P DOPAZO , Departamento de Microbiología y Parasitología, Instituto de Acuicultura. Universidade de Santiago de Compostela	162-0 A MALDI-TOF MS database for identification of <i>Vibrio</i> spp. that are potentially pathogenic in marine molluscs MIRNA MOUSSA-POULY , Ifremer
14.30 14.45	152-0 Development of MAB 10F8-3 and its role in characterizing CD4-1 T cells in the immune response of olive flounder (<i>Paralichthys olivaceus</i>) TAE SUNG JUNG , Laboratory of Aquatic Animal Diseases, College of Veterinary Medicine, Gyeongsang National University	157-0 Can transport swabs maintain the viability of fish pathogens – can we stop taking agar plates into the field? EDEL CHAMBERS , Centre for environment, fisheries and aquaculture science	163-0* Francisellosis, an emerging disease causing high mortality among cultured Yesso scallops <i>Patinopecten yessoensis</i> in Japan MIKU KAWAHARA , The University of Tokyo
14.45 15.00	153-0* A novel ligand of common receptor subunit beta chain in common carp promotes development of basophils and macrophages KOHEI NISHIYA , Laboratory of Comparative Immunology, Department of Veterinary Medicine, Nihon University	158-0 Non-lethal sampling for the detection of <i>Renibacterium salmoninarum</i> EVA JANSSON , National Veterinary Institute	164-0 Life cycle, host specificity, phylogeny and pathogenicity of <i>Merocystis kathae</i> , the first apicomplexan known to have two mollusc hosts ARNI KRISTMUNDSSON , Institute for Experimental Pathology at Keldur, University of Iceland
15.00 15.15	154-0 When hypnos meets thanatos to kill hygiene – physiological stress during koi sleepy disease causes suppression of T- and B-cells DIETER STEINHAGEN , University of Veterinary Medicine	159-0 Persistence of <i>Renibacterium salmoninarum</i> antigens in kidney samples of arctic charr, <i>Salvelinus alpinus</i> SIGRÍÐUR GUÐMUNDSDÓTTIR , Institute for Experimental Pathology, University of Iceland	165-0* The effect of light on the trematode <i>Himasthla elongata</i> - from cercaria behaviour to infection success SIMÃO CORREIA , Departamento de Biologia & CESAM, Universidade de Aveiro
15.15 16.00	Poster Sessions and Coffee Break		
16.15 18.15	General Assembly (Porto)		



	PORTO	D. MARIA	D. LUÍS
	KEYNOTE SESSION CHAIR: JERRI BARTHOLOMEW	MOLLUSCS AND CRUSTACEAN DISEASES III CHAIRS: ISABELLE ARZUL & SERGIO FERNANDES-BOO	PROPHYLAXIS I CHAIRS: GEORGE RIGOS & PAULA SEPÚLVEDA
09.00 09.15	K4 Next-generation sequencing: a revolution in the field of fish diseases JEAN-CHRISTOPHE AVARRE , Institute of Evolutionary Sciences of Montpellier, DIVA, Fish Diversity and Aquaculture	171-0 Ascetoporean parasites of invertebrates: an update and review DAVID BASS , Cefas	178-0* Bacteriophages-bacteria dynamics: fundamental studies towards phage therapy in aquaculture and fisheries ALICE MAESTRI , Exeter University
09.15 09.30		172-0* Widespread distribution of Haplosporidia in the cockle <i>Cerastoderma edule</i> in Ireland SARA ALBUIXECH-MARTI , School of Biological, Earth and Environmental Sciences, University College Cork	179-0 The use of phages as a "smart disinfectant" for aquaculture live feeds PANTELIS KATHARIOS , Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research
	MYXOZOAN DISEASES I CHAIRS: JERRI BARTHOLOMEW & IVAN FIALA		
09.30 09.45	166-0 The complex evolution of Myxozoa mitochondrial genomes DOROTHEE HUCHON , School of Zoology, George S. Wise Faculty of Life Sciences, Tel-Aviv University	173-0* Development and validation of a specific real time PCR assay for the detection of the parasite <i>Perkinsus olseni</i> BEATRIZ NOVOA , Instituto de Investigaciones Marinas	180-0 Phage-resistant <i>Flavobacterium columnare</i> isolates: a challenge for phage therapy? HEIDI MT KUNTTU , Department of Biological and Environmental Science and Nanoscience Center, University of Jyväskylä
09.45 10.00	167-0* Functional characterisation of a myxozoan micro exon gene: utility as a biomarker and vaccine candidate MARC NICHOLAS FABER , Scottish Fish Immunology Research Centre, University of Aberdeen	174-0* Poor ecological fitness and mortality of manila clam caused by heavy <i>Marteilia granulata</i> infection on the south coast of Korea HYE-MI LEE , Jeju National University	181-0* Bacteriophage-coated feed to control <i>Flavobacterium psychrophilum</i> infections in vivo in rainbow trout fry: a prophylactic approach VALENTINA LAURA DONATI , National Institute of Aquatic Resources, Technical University of Denmark
10.00 10.15	168-0* The initiation of life cycle complexity in the Myxozoa: evolutionary events and potential mechanisms MARTINA LISNEROVÁ , Institute of Parasitology, Biology Centre of the Czech Academy of Sciences	175-0 Is natural selection enhancing resistance against marteiliosis in cockles recruited in the inner side of the Ría of Arousa? ANTONIO VILLALBA , Centro de Investigacións Mariñas, Consellería do Mar da Xunta de Galicia	183-0* The bioactive potential of fish-gut <i>Bacillus</i> to prevent aquaculture fish diseases CLÁUDIA R. SERRA , Centro Interdisciplinar de Investigación Marinha e Ambiental
10.15 10.30	169-0* Expressional profiling of minicolлагens during myxozoan development JIRI KYSLIK , Institute of Parasitology, Biology Centre CAS	176-0 Improving the characterisation of closely related parasites by long-range sequencing of ribosomal RNA CHANTELLE HOOPER , Cefas	184-0 Analysis of structural characteristics and antimicrobial activity of analogues derived from C-terminal salmonids IL-8 PAULA ANDREA SANTANA SEPÚLVEDA , Instituto de Ciencias Químicas Aplicadas, Facultad de Ingeniería, Universidad Autónoma de Chile
10.30 10.45	170-0* Description of new and known myxozoans infecting wild Indian fishes in Uttar Pradesh, India URVASHI GOSWAMI , Institute of Veterinary Medical Research, Centre for Agricultural Research, Hungarian Academy of Sciences	177-0 Survey of pathological conditions in two french cockle (<i>Cerastoderma edule</i>) beds ISABELLE ARZUL , IFREMER, Laboratoire de Génétique et Pathologie des Mollusques Marins	



10.45 11-15	Coffee Break		
	PORTO	D. MARIA	D. LUÍS
	MYXOZOAN DISEASES II CHAIRS: STEPHEN ATKINSON & GEMA ALAMA-BERMEJO	MOLLUSCS AND CRUSTACEAN DISEASES IV CHAIRS: FRANCISCO DE ASSIS LOPES RUANO & KATIE ELLEN COSTELLO	PROPHYLAXIS II CHAIRS: PANTELIS KATHARIOS & CLÁUDIA SERRA
11.15 11.30	185-O <i>Sphaerospora molnari</i> : a new <i>in vivo</i> and <i>in vitro</i> model for myxozoan research ASTRID HOLZER, Institute of Parasitology, Biology Centre of the Czech Academy of Sciences	192-O Detecting all listed pathogens of flat oysters in one step: a new PCR to diagnose <i>Marteilia refringens</i> and <i>Bonamia</i> sp. ISABELLE ARZUL, IFREMER, Laboratoire de Génétique et Pathologie des Mollusques Marins	198-O Fortior genetics, a platform to enhance disease resistance by genetic selection in aquaculture THIERRY MORIN, French Agency for Food, Environmental and Occupational Health & Safety, Ploufragan-Plouzané-Niort Laboratory, Viral Fish Pathology Unit
11.30 11.45	186-O* Game of genes: tracking the major trajectories to successful parasitism of <i>Sphaerospora molnari</i> in common carp ANUSH KOSAKYAN, Institute of Parasitology, Biology Center of the Czech Academy of Sciences	193-O Where can <i>Bonamia ostreae</i> and <i>Marteilia refringens</i> be found outside their bivalve host, <i>Ostrea edulis</i> ? ISABELLE ARZUL, IFREMER, Laboratoire de Génétique et Pathologie des Mollusques Marins	199-O Pharmacokinetics and effect of anti-bacterial treatments of lumpfish experimentally challenged with <i>V. anguillarum</i> , atypical <i>A. salmonicida</i> and <i>Pasteurella</i> sp. GYRI T. HAUGLAND, University of Bergen
11.45 12.00	187-O Do antibodies matter in the myxozoan infections? TOMAS KORYTÁŘ, Faculty of Fisheries and Protection of Waters, University of South Bohemia	194-O* Characterization of OSHV-1 μ VAR genotypic diversity during pacific oyster mortality outbreaks in two French aquaculture areas JEAN DELMOTTE, IHPE, Université de Montpellier, CNRS, IFREMER, Université de Perpignan Via Domitia	200-O* <i>In vitro</i> assessment of the antimicrobial activity of chitosan nanoparticles against major fish pathogens FATMA AHMED, Clinical Division of Fish Medicine, University of Veterinary Medicine
12.00 12.15	188-O Expressional profiling and 3D structure modeling of cysteine protease inhibitors of <i>Sphaerospora molnari</i> (Cnidaria: Myxozoa) PAVLA BARTOSOVA-SOJKOVA, Institute of Parasitology, Biology Centre of the Czech Academy of Sciences	195-O Transcriptomic profile and targeted genotyping on OSHV-1 resistant and susceptible <i>Crassostrea gigas</i> MARIA PRADO-ALVAREZ, Marine Research Institute, Spanish National Research Council Científicas	202-O* Turbot (<i>Scophthalmus maximus</i>) NK-lysin induces broad-spectrum activity against parasites, bacteria and virus BEATRIZ NOVOA, Instituto de Investigaciones Marinas, Consejo Superior de Investigaciones Científicas
12.15 12.30	189-O Novel myxozoan kunitz type serine peptidase inhibitors and their inferred function ASHLIE HARTIGAN, Natural History Museum London	196-O Unsuspected OSHV-1 genomic diversity at inter and intra-host level BENJAMIN MORGA, IFREMER	203-O* H ₂ O ₂ treatment impacts immune activity in Atlantic salmon gills and causes similar mucin disruption to high grade AGD affected fish CAROLINA FERNANDEZ, University of Stirling
12.30 12.45	190-O* Does time matter in <i>Enteromyxum leei</i> (Myxozoa) fish-to-fish experimental transmission? AMPARO PICARD SÁNCHEZ, Fish Pathology Group, Instituto de Acuicultura Torre de la Sal	197-O* The potential role of invasive tunicates in the transmission of pathogens in the marine environment KATIE ELLEN COSTELLO, School of Biological, Earth and Environmental Sciences And Aquaculture and Fisheries Development Centre, Environmental Research Institute, University College Cork	204-O The interaction of treatment temperature and hydrogen peroxide dose on amoebic gill disease affected Atlantic salmon RICHARD S TAYLOR, CSIRO, Agriculture and Food
12.45 13.00	191-O* Teleost thymus is an active player in infectious episodes: the example of turbot enteromyxosis PAOLO RONZA, Universidade de Santiago de Compostela	245-O Distribution of cockle disseminated neoplasia in Ireland: evaluation of their clonal structure SEILA DÍAZ, Centro Singular de Investigación en Medicina Molecular y Enfermedades Crónicas, Universidad de Santiago de Compostela	014-O AQUAPATHLAB: a web-based virtual pathology lab for diseases of aquatic animals PANTELIS KATHARIOS, Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research



13.00 14.00	Lunch (Ground Floor)		
	PORTO	D. MARIA	D. LUÍS
	MYXOZOAN DISEASES III CHAIRS: ASTRID HOLZER & MARC NICOLAS FABER	VACCINOLOGY I CHAIRS: NIELS LORENZEN & ROWENA HOARE	PROPHYLAXIS III CHAIRS: JOSÉ GARCIA & LAURA VALENTINA DONATI
14.00 14.15	205-O* Transcriptome signatures in brown trout kidney during proliferative kidney disease ARUN SUDHAGAR, Clinical Division of Fish Medicine, University of Veterinary Medicine	211-O* <i>Amyloodinium ocellatum</i> vaccine-induced modulation of immune genes expression in European sea bass (<i>Dicentrarchus labrax</i>) OMKAR BYADGI, University of Udine	217-O Developing bioassays and determining baseline salinity tolerance of salmon lice, <i>Lepeophtheirus salmonis</i> , a problem parasite of farmed Atlantic salmon MELANIE ANDREWS, Sealice Research Centre, Oslo
14.15 14.30	206-O Is stocking in PKD positive river systems necessary to maintain the brown trout population stable? How sustainable is this measure? HEIKE SCHMIDT-POSTHAUS, Centre for Fish and Wildlife Health, Vetsuisse Faculty, University of Bern	212-O* Differences in antibody responses and C3 levels in salmon following immunization with whole sea lice antigen using different immunization protocols ELISABETH GISLEFOSS, Norwegian University of Life Sciences	218-O A field study assessing the effects of skirts to control salmon louse settlement and of concurrent aeration PAUL J. MIDTLYNG, Faculty of Veterinary Medicine, Norwegian University of Life Sciences
14.30 14.45	207-O Transcriptome analysis of bryozoan, <i>Fredericella sultana</i> in response to <i>Tetracapsuloides bryosalmonae</i> (Myxozoa) GOKHLESH KUMAR, Clinical Division of Fish Medicine, University of Veterinary Medicine	213-O* Protection and antibody reactivity in lumpstickers (<i>Cyclopterus lumpus</i> L.) following vaccination against <i>Pasteurella</i> sp. REBECCA MARIE ELLUL, University of Bergen	219-O Impacts of different benzoylphenylureas across various life stages of <i>L. salmonis</i> MARK FAST, Atlantic Veterinary College - University of Prince Edward Island
14.45 15.00	208-O Omics approaches unravel structures and functions of <i>Ceratonova shasta</i> (Cnidaria: Myxozoa) nematocysts during proliferation and spore development STEPHEN ATKINSON, Oregon State University	214-O* Intramuscular vaccination of Atlantic lumpfish induces inflammation and local IgM production TONI ERKINHARJU, Norwegian Veterinary Institute	220-O Pharmacokinetic study of in-feed administered Praziquantel in greater amberjack, <i>Seriola dumerili</i> DIMITRA KOGIANNOU, Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research
15.00 15.15	209-O Evolution of <i>Ceratonova shasta</i> virulence as it encounters new hosts JERRI BARTHOLOMEW, Oregon State University	216-O Immune responses induced by oil-adjuvanted inactivated vaccine against bacterial cold-water disease (BCWD) in ayu <i>Plecoglossus altivelis</i> GOSHI KATO, Tokyo University of Marine Science and Technology	221-O* The effect of different treatment strategies on <i>Cardicola</i> spp. infection in ranched southern bluefin tuna in South Australia CECILIA POWER, Centre for Environmental Sustainability and Remediation, RMIT University
15.15 15.30	210-O Proteases and their inhibitors are parasite virulence factors of <i>Ceratonova shasta</i> (Myxozoa: Cnidaria) in salmonid fish hosts GEMA ALAMA-BERMEJO, Institute of Parasitology, Biology Centre of the Academy of Sciences of the Czech Republic		
15.30 16.15	Poster Sessions and Coffee Break		



	PORTO	D. MARIA	D. LUÍS
	MYXOZOAN DISEASES IV CHAIRS: CSABA SZÉKELY & GABOR CECH	VACCINOLOGY II CHAIRS: EANN S. MUNRO & MARIA REBECCA ELLUL	ENVIRONMENTAL AND TOXICOLOGICAL DISEASES CHAIRS: LAURA GUIMARÃES & LUÍS OLIVA TELES
16.15 16.30	223-O The STAT3/SOCS3 axis determines the outcome of whirling disease in rainbow trout MONA SALEH , Clinical Division of Fish Medicine, Department for Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna	227-O Field experiences with vaccination against <i>Yersinia ruckeri</i> in late sea phase RAGNHILD HANCHE-OLSEN , PHARMAQ AS	239-O Microcystins effects on chinook and Atlantic salmon: investigating the etiology of net pen liver disease and sub-lethal effects. STEWART JOHNSON , Pacific Biological Station, Fisheries and Oceans
16.30 16.45	224-O Hidden diversity of <i>Paramyxidium</i> (Myxozoa) species in European eel (<i>Anguilla anguilla</i>) IVAN FIALA , Institute of Parasitology, Biology Centre of the Czech Academy of Sciences	228-O Temporal immune responses induced following primary and booster mucosal vaccination regimes against <i>Vibrio anguillarum</i> in rainbow trout (<i>Oncorhynchus mykiss</i>) THARANGANI HERATH , Department of Animal Production, Welfare and Veterinary Sciences, Harper Adams University	240-O Emergence of a harmful algal species in Chesapeake Bay USA: aquatic animal health impacts and mechanisms of toxicity WOLFGANG VOGELBEIN , Virginia Institute of Marine Science, College of William and Mary
16.45 17.00	225-O Occurrence of <i>Kudoa</i> spp. in <i>Scomber colias</i> from the Portuguese mainland and Madeira archipelago BARBARA CAVALEIRO , Marine and Environmental Sciences Centre	229-O* ST-261 Adhesins are antigenic but not effective as an injectable vaccine against <i>Streptococcus agalactiae</i> in tilapia (<i>Oreochromis mossambicus</i>) MINAMI KAWASAKI , The University of Queensland, School of Biological Sciences and Centre for Marine Science	241-O Use of experimental viral infections to assess the immunotoxicity of a glyphosate chronic exposure on rainbow trout THIERRY MORRIN , French Agency for Food, Environmental and Occupational Health & Safety, Bretagne Loire University, Plouzané
17.00 17.15	WORKSHOP: STUDENT WRITING CHAIRS: BARBARA NOWAK & SARAH POYNTON	231-O Protection of Atlantic salmon immunized with a novel DNA vaccine against PD and infected with SAV3 RAGNAR THORARINSSON , Elanco Animal Health	242-O Tolerance of juvenile Atlantic salmon (<i>Salmo salar</i> L.) to dissolved gas supersaturation in freshwater TROND EINAR ISAKSEN , NORCE Norwegian Research Centre AS
	226-O Preparing for an effective poster session: content, style, and interactions BARBARA NOWAK , University of Tasmania & SARAH POYNTON , Johns Hopkins University School of Medicine		

	PORTO	D. MARIA	D. LUÍS
17.15 17.30	226-O Preparing for an effective poster session: content, style, and interactions BARBARA NOWAK , University of Tasmania & SARAH POYNTON , Johns Hopkins University School of Medicine	232-O Histopathological changes as efficacy indicators in Atlantic salmon immunized with a novel DNA vaccine against PD and infected with SAV3 JEFFREY C. WOLF , Experimental Pathology Laboratories Inc.	243-O* Identification of critical factors for escalating saprolegniosis MARCIA SARAIVA , University of Aberdeen
17.30 17.45		233-O DNA vaccination against VHS – does it work in all fish species? NIELS LORENZEN , Technical University of Denmark	ROUNDTABLE: VIBRIO ECOFF CHAIR: PETER SMITH
17.45 18.00		234-O Evaluation of gilthead sea bream (<i>Sparus aurata</i>) immune response after LCDV DNA vaccination DOLORES CASTRO , Universidad de Málaga	244-O Trans-national study to define epidemiological cut-off values (ECOFF) for <i>Vibrio</i> and other aquatic bacteria SANDRINE BARON , ANSES, Ploufragan-Plouzané-Niort Laboratory, Mycoplasmaology-Bacteriology and Antimicrobial resistance Unit & DAVID VERNER-JEFFREYS , Cefas Weymouth Laboratory
18.00 18.15		235-O Development and application of vaccine to prevent tilapia lake virus in tilapia WIN SURACHETPONG , Department of Veterinary Microbiology and Immunology, Faculty of Veterinary Medicine, Kasetsart University	
18.15 18.30		236-O Category E – vaccination against koi herpesvirus disease (KHVD) as a prophylactic measurement SVEN M. BERGMANN , Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health	
18.30 18.45		237-O* Combating KHVD with a live attenuated vaccine by oral application and/ or immersion SANDRO KLAFACK , Friedrich-Loeffler-Institut	
18.45 19.00			
20.30 Gala Dinner Port Wine Cellars Ferreira			