

# DETAILED PROGRAMME – LISTING OF ORAL PRESENTATIONS

## Monday, September 14

### 09:45 – 10:45 Conference keynote presentation

**KN-1 - Assessing impacts of chronic disease in fishes**

(hall Zenit)

*M. L. Kent*

### 11:15 - 13:00 Viruses and viral diseases (I)

(hall Zenit)

*Chairperson: M. Engelsma*

11:15 - 11:30 **O-001** - ISA VIRUS IN CHILE: EVIDENCE OF VERTICAL TRANSMISSION AND THE IMPORTANCE OF HORIZONTAL TRANSMISSION

*S. Vike, H. Duesund and A. Nylund*

11:30 - 11:45 **O-002** - TRANSCRIPTOMIC ANALYSIS OF ATLANTIC SALMON HOST RESPONSE TO AN EXPERIMENTALLY INDUCED SALMONID ALPHAVIRUS-1 INFECTION

*T.K. Herath\*, J. E Bron, K.D. Thompson, A. Adams, R. H. Richards and J. B. Taggart*

11:45 - 12:00 **O-003** - EXPRESSION ANALYSES OF SOME IMMUNERELATED GENES IN ATLANTIC SALMON CHALLENGED WITH SALMONID ALPHAVIRUS VIRUS

*E. Rimstad, M. Løvoll, L. Austbø, S. Braaen, J. Jørgensen, H. Thim, L. J. Reitan, E. Olaf Koppang, M. Syed, R. S. Olsen, D. Knappskog and P. Frost*

12:00 - 12:15 **O-004** - THE EFFECT OF REDUCED OXYGEN LEVELS ON THE SEVERITY OF SALMONID ALPHAVIRUS (SAV) INFECTION IN ATLANTIC SALMON (*SALMO SALAR* L.)

*L. Andersen\*, S. Skotheim, E. Sandvik Berg, K. Hodneland and A. Nylund*

12:15 - 12:30 **O-005** - DETECTION OF ANTIBODIES AGAINST VHSV AND IHNV IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*)

*N. J. Olesen\* and J. Castric*

12:30 - 12:45 **O-006** - MOLECULAR DETERMINANTS OF VIRULENCE IN INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS

*A. Ammayappan, S. LaPatra and V.N. Vakharia\**

12:45 - 13:00 **O-007** - VIROLOGICAL AND HISTOLOGICAL INVESTIGATION ON *BETANODAVIRUS* IN RED MULLET (*MULLUS BARBATUS* L., 1758)

*S. Ciulli\*, M. Grodzki, R. Sirri, G. Bignami, E. Volpe, L. Mandrioli and S. Prospero*

### 11:15 – 13:00 Myxozoa – pathology and population effects

(hall Nadir)

*Chairperson: A. Sitjà-Bobadilla*

11:15 - 11:30 **O-008** - ARE DECREASES IN BROWN TROUT CATCHES IN SWITZERLAND LINKED TO PROLIFERATIVE KIDNEY DISEASE (PKD)?

*T. Wahli\*, D. Bernet, H. Segner and H. Schmidt-Posthaus*

11:30 - 11:45 **O-009** - TEMPERATURE RELATED CHANGES OF PATHOLOGICAL LESIONS AND *TETRACAPSULOIDES BRYOSALMONAE* DNA CONCENTRATIONS IN RAINBOW TROUT SURVIVING THE CLINICAL PHASE OF PROLIFERATIVE KIDNEY DISEASE (PKD)

*H. Schmidt-Posthaus\*, K. Bettge, H. Segner and T. Wahli*

11:45 - 12:00 **O-010** - MORPHOPATHOLOGICAL AND ULTRASTRUCTURAL STUDIES ON ENTEROMYXOSIS OF TURBOT (*PSETTA MAXIMA* L.)

*R. Bermúdez, L. D. Faílde, A. P. Losada, M. J. Redondo, P. Álvarez-Pellitero and M. I. Quiroga*

- 12:00 - 12:15 **O-011** - MYXIDIUM SP. THREATENING LITORIA AUREA RECOVERY PROGRAM AND AUSTRALIAN AMPHIBIAN CONSERVATION  
*A. Hartigan, I. Fiala, I. Dyková, K. Rose, D. Phalen and J. Šlapeta*
- 12:15 - 12:30 **O-012** - A NEW SPHAEROSPORID MYXOSPOREAN FROM THE KIDNEY OF LAND-LOCKED SOCKEYE SALMON (ONCORHYNCHUS NERKA) IN WASHINGTON STATE, U.S.A.  
*S. Jones\*, I. Fiala, M. House and S. Mumford*
- 12:30 - 12:45 **O-013** - INFECTION DYNAMICS OF THE RENAL MYXOZOANS GADIMYXA ATLANTICA AND ZSCHOKKELLA HILDAE IN CULTURED ATLANTIC COD GADUS MORHUA  
*A. S. Holzer\*, R. Wootten and C. Sommerville*
- 12:45 - 13:00 **O-014** - PROLIFERATION OF THE MYXOSPOREAN GADIMYXA SPP. AND THE GROWTH OF COD FRY  
*C. Sommerville\*, S. Stewart, A. Tildesley and R. Wootten*

**11:15 - 13:00 Disease emergence and spread  
(hall Taurus)**

*Chairperson: D. Furones*

- 11:15 - 11:30 **O-015** - MOVING AWAY FROM THE PATHOGEN-CENTRIC APPROACH TO AQUATIC ANIMAL DISEASE RISK ANALYSIS  
*J. B. Jones\* and R. P. Perera*
- 11:30 - 11:45 **O-016** - ASSESSING THE IMPACT OF CLIMATE CHANGE ON INFECTIOUS DISEASES OF FRESHWATER FISH IN ENGLAND & WALES  
*E. Peeler\*, P. Gale, M. Marcos-Lopez and B. Oidtmann*
- 11:45 - 12:00 **O-017** - NETWORK MODELLING FOR EPIDEMIC CONTROL AND TARGETED SURVEILLANCE  
*D. M. Green\* and L. A. Munro*
- 12:00 - 12:15 **O-018** - ESTABLISHING A WEB-BASED GIS SERVICE FOR PRESENTING REAL-TIME SPATIAL INFORMATION ON FISH DISEASES IN NORWAY  
*A. Tarpai\*, R. T. Kongtorp, T. Lyngstad, P. Jansen and E. Brun*
- 12:15 - 12:30 **O-019** - ASSESSMENT OF THE SPREAD OF HEART AND SKELETAL MUSCLE INFLAMMATION, PANCREAS DISEASE AND INFECTIOUS SALMON ANAEMIA IN MARINE FISH FARMS IN NORWAY, BASED ON A STOCHASTIC MODEL  
*M. Aldrin\*, B. Storvik, A. Frigessi, H. Viljugrein and P. A. Jansen*
- 12:30 - 12:45 **O-020** - TRACING THE SPREAD OF INFECTIOUS SALMON ANAEMIA VIRUS (ISAV) IN SALMON FARMS IN NORWAY  
*T. M. Lyngstad, M. J. Hjortaas\*, P. A. Jansen, A. B. Kristoffersen, E. Karlsen, E. J. Johansen and C. M. Jonassen*
- 12:45 - 13:00 **O-021** - A RETROSPECTIVE CLUSTER-ANALYSIS OF THE OCCURRENCE OF VIRAL HAEMORRHAGIC SEPTICAEMIA IN DENMARK  
*B. B. Jensen\*, N.J. Olesen and A.K. Ersbøll*

**15:30 - 17:15 Host parasite interactions (I)  
(hall Zenit)**

*Chairperson: I. Dyková*

- 15:30 - 16:00 **KN-2** - GYRODACTYLUS SALARIS: A PROBLEMATIC PARASITE FOR MANAGEMENT AND SCIENCE  
*T. A. Mo*
- 16:00 - 16:15 **O-022** - RESPONSE OF STRIPED TRUMPETER TO THE INFECTION WITH CHONDRA CANTHID COPEPOD  
*J. Covello, M. Andrews, S. Battaglene, R. N. Morrison, J. Cobcroft and B. F. Nowak*

- 16:15 - 16:30 **O-023** - SEASONALITY AND EXPERIMENTAL TRANSMISSION OF THE ISOPOD *CERATOTHOA OESTROIDES* (RISSO, 1836) IN SEA BASS (*DICENTRARCHUS LABRAX*) AND SEA BREAM (*SPARUS AURATA*)  
*S. Vagianou, K. Bitchava and F. Athanassopoulou*
- 16:30 - 16:45 **O-024** - THE PATHOLOGY OF CHRONIC INFECTIONS OF *LERNAEOCERA BRANCHIALIS* (CRUSTACEA: COPEPODA) IN ATLANTIC COD  
*C. Sommerville\*, J.E. Baily, J.L. Smith and R. Wootten*
- 16:45 - 17:00 **O-025** - *PARANUCLEOSPORA THERIDION* N. GEN., N. SP. (MICROSPORIDIA, ENTEROCYTOZOONIDAE) WITH A LIFE CYCLE IN THE SALMON LOUSE (*LEPEOPHTHEIRUS SALMONIS*, COPEPODA) AND ATLANTIC SALMON (*SALMO SALAR*)  
*A. Nylund, S. Nylund, K. Watanabe, C. E. Arnesen and E. Karlsbakk*
- 17:00 - 17:15 **O-026** - CHALLENGE OF *SALMO SALAR* USING THE MICROSPORIDIAN *PARANUCLEOSPORA THERIDION* N. GEN., N. SP. (MICROSPORIDIA, ENTEROCYTOZOONIDAE)  
*I. Sævareid, S. Nylund, K. Watanabe, C. E. Arnesen and A. Nylund*
- 15:30-17:15 Diagnostic methods (I)  
(hall Taurus)**  
*Chairperson: D. Elliott*
- 15:30 - 15:45 **O-027** - MAJOR ANTIGENIC REGION SCREENING OF KOI HERPESVIRUS FROM GENOME LIBRARY  
*T. Aoki\*, T. Takano, S. Unajak, H. Kondo, I. Hirono, J. Hikima and T. S. Jung*
- 15:45 - 16:00 **O-028** - A NEW PROTEOMIC APPROACH TO DIAGNOSE ROCK BREAM IRIDOVIRUS (RBIV) PARTICLES BY COMBINING FAST PROTEIN ENZYMATIC DIGESTION WITH MATRIX-ASSISTED LASER DESORPTION IONIZATION-TIME OF FLIGHT MASS SPECTROMETRY (MALDI-TOF MS)  
*H. B. Jang\*, I. S. Cha, S. W. Noh, S. B. Park, R. S. Dalvi, Y. R. Kim, M. A. Ha, J. Hikima, K. S. Choi, M. M. Gu, S. B. Kim, H. W. Sung, T. Aoki and T. S. Jung*
- 16:00 - 16:15 **O-029** - CAN VIRAL ANTIGENS IN VACCINES GIVE FALSE POSITIVE RESULTS IN DIAGNOSTICS PERFORMED BY PCR?  
*F. Fridel\*, T. Tingbø, V. Aspehaug and M. Devold*
- 16:15 - 16:30 **O-030** - REAL-TIME TAQMAN-PCR ASSAY FOR THE DETECTION OF FISH BETANODAVIRUSES: LABORATORY AND CLINICAL VALIDATION  
*V. Panzarin\*, P. Patarnello, A. Mori, E. Rampazzo, E. Cappellozza, G. Bovo and G. Cattoli*
- 16:30 - 16:45 **O-031** - CONCRETE USE OF NODAVIRUS REAL TIME PCR AND ELISA FOR THE CONTROL OF SEA BASS BROOD STOCK SANITARY STATUS  
*A. Le Breton\*, P. Sourd and P. Y. Moalic*
- 16:45 - 17:00 **O-032** - CONSTRUCTION, CHARACTERIZATION AND USE OF *EDWARDSIELLA ICTALURI* FLAGELLA-TYPE THREE SECRETION SYSTEM PROTEIN ARRAYS  
*H. Yeh\* and P. H. Klesius*
- 17:00 - 17:15 **O-033** - DETECTION OF MAJOR FISH PATHOGENS IN RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) WITH USING MULTIPLE PCR IN TURKEY  
*T. I. Cagatay*

## Tuesday, September 15

### **09:00 - 10:45 Fish Immunology (I)**

(hall Zenit)

Chairperson: M. Galeotti

- 09:00 - 09:15 **O-034** - FLOW CYTOMETRY ANALYSES OF RESPIRATORY BURST IN ATLANTIC SALMON (*SALMO SALAR* L.) AND ATLANTIC COD (*GADUS MORHUA* L.) LEUCOCYTES  
*C. Kalgraff, H. I. Wergeland and E. F. Pettersen*
- 09:15 - 09:30 **O-035** - M CELL HOMOLOGUES IN THE TELEOST INTESTINE: AN EARLY VERTEBRATE ANTIGEN SAMPLING SYSTEM  
*B. Fuglem, E. Jirillo, I. Bjerkås, H. Kiyono, T. Nochi, Y. Yuki, M. Raida, U. Fischer\* and E. O. Koppang*
- 09:30 - 09:45 **O-036** - STUDY OF CD3<sup>+</sup> CELLS IN SALMONID FISH REVEALS MUCOSA-ASSOCIATED LYMPHOCYTE ACCUMULATIONS DOMINATED BY T CELLS IN THE GILLS  
*E. O. Koppang, U. Fischer\*, L. Moore, M. Tranulis, L. Aune, E. Jirillo, B. Köllner and I. Hordvik*
- 09:45 - 10:00 **O-037** - EXPRESSION OF CD8 $\alpha$  MOLECULES IN RAINBOW TROUT  
*F. Takizawa\*, J. M. Dijkstra, P. Kotterba, B. Köllner, T. Nakanishi and U. Fische*
- 10:00 - 10:15 **O-038** - CASPASE-1 AND IL-1 $\beta$  PROCESSING IN SEA BASS (*DICENTRARCHUS LABRAX*)  
*M. I. R. Reis\*, A. do Vale and N. M. S. dos Santos*
- 10:15 - 10:30 **O-039** - ANALYSES OF HOST RESPONSES TO CARDIOMYOPATHY SYNDROME IN ATLANTIC SALMON USING FUNCTIONAL GENOMICS  
*G. Timmerhaus, A. Krasnov, H. Takle, R. T. I. Kongtorp, M. Rode, P. Nilsen, T. T. Poppe and S. M. Jørgensen*
- 10:30 - 10:45 **O-040** - A PASSIVE IMMUNITY EFFECT OF ANTI-KHV-IGY FOR KOI HERPESVIRUS DISEASE  
*M. Yasuda\*, H. Sawada, S. Yasumoto and T. Miyazaki*

### **09:00 - 10:45 Trends in bacterial disease (I)**

(hall Nadir)

Chairperson: B. Austin

- 09:00 - 09:15 **O-041** - *FRANCISELLA* BACTERIA IN ATLANTIC COD (*GADUS MORHUA* L.) LEUCOCYTES  
*A. Furevik, H. I. Wergeland, D. J. Colquhoun and E. F. Pettersen*
- 09:15 - 09:30 **O-042** - ATTENUATION OF *FRANCISELLA NOATUNENSIS* SUBSP. *ORIENTALIS* BY MUTATION OF THE IGLC GENE  
*E. Soto\*, D. Fernandez, R. Thune and J. P. Hawke*
- 09:30 - 09:45 **O-043** - COLONIAL PHENOTYPIC VARIATIONS IN *FLAVOBACTERIUM PSYCHROPHILUM*  
*E. Högfors\* and T. Wiklund*
- 09:45 - 10:00 **O-044** - *FLAVOBACTERIUM COLUMNARE*: CHEMOTAXIS AND ADHESION TO CHANNEL CATFISH MUCUS IS MEDIATED BY LECTIN-LIKE CAPSULAR SUBSTANCES  
*P. H. Klesius\*, M. Aksoym, C. A. Shoemaker and J. J. Evans*
- 10:00 - 10:15 **O-045** - STUDIES ON AIP56, A KEY VIRULENCE FACTOR OF *PHOTOBACTERIUM DAMSELAE* SUBSP. *PISCICIDA*  
*A. do Vale\*, L. M. G. Pereira, D. S. P. Silva, C. Costa-Ramos, M. T. Silva, N. M. S. dos Santos*
- 10:15 - 10:30 **O-046** - DETECTION OF THE TYPE III SECRETION SYSTEM GENES IN *AEROMONAS HYDROPHILA* AND ITS RELATION WITH VIRULENCE IN NILE TILAPIA

*D. T. Godoy, G. A. Carvalho-Castro, H. C. P. Figueiredo, C. O. Lopes, P. G. Cardoso, C. A. G. Leal and G. M. Costa*

10:30 – 10:45 **O-047** - GENOTYPING OF *STREPTOCOCCUS AGALACTIAE* STRAINS ISOLATED FROM HUMAN, CATTLE AND FISH AND THEIR VIRULENCE POTENTIAL IN NILE TILAPIA

*H. C. P. Figueiredo, U. P. Pereira, G. F. Mian, G. M. Costa and I. C. M. Oliveira*

**11:15 - 13:00 Fish immunology (II)**  
**(hall Zenit)**

*Chairperson: A.K. Siwicki*

11:15 - 11:30 **O-048** - ASPECIFIC AND SPECIFIC IMMUNE PARAMETERS OF SEA BASS (*D. LABRAX*) JUVENILES AFTER EXPERIMENTAL VACCINE TRIAL AGAINST VIBRIOSIS

*M. Galeotti\*, D. Volpatti, C. Bulfon, B. Canavese, N. Romano, G. Ceccarelli, R. Piergentili, A. Brunetti, P. G. Tiscar, F. Mosca, D. Malatesta, F. Bertoni and L. Abelli*

11:30 - 11:45 **O-049** - CELL-MEDIATED CYTOTOXICITY, IMMUNE GENE REGULATION AND PROTEIN EXPRESSION AFTER DNA VACCINATION IN RAINBOW TROUT

*P. Kotterba, S. Wowro, F. Takizawa, B. Koellner, N. Lorenzen, K. Einer-Jensen, M. Ototake and U. Fischer\**

11:45 - 12:00 **O-050** - THE SEASONAL CHANGES OF INNATE IMMUNITY IN COMMON CARP (*CYPRINUS CARPIO*)

*S. Buchtíková\*, K. Lamková, A. Šimková, M. Flajšhans, M. Rodina, P. Hyršl*

12:00 - 12:15 **O-051** - INFLUENCE OF THE NEMATODE *ANGUILLICOLA CRASSUS* INFECTION ON THE MACROPHAGE FUNCTION OF WILD EUROPEAN EELS (*ANGUILLA ANGUILLA* L.) FROM THE WESTERN MEDITERRANEAN

*J. A. García\*, C. Martínez-Carrasco, R. Ruiz de Ybáñez, E. M. Dolores, J. Peñalver, A. García-Ayala and P. Muñoz*

12:15 - 12:30 **O-052** - MODULATION OF TURBOT INFLAMMATORY RESPONSES BY THE POLYPHENOL RESVERATROL

*J. Leiro, M. Varela, M. C. Piazzon, P. Morais, J. A. Arranz, R. Castro, M. Noya and J. Lamas\**

12:30 - 12:45 **O-053** - RESTORATION OF INNATE IMMUNITY IN FISH AFTER SUPPRESSION INDUCED BY XENOBIOTICS

*A. K. Siwicki\*, A. Rymuszko, A. Bowinik, E. Terech-Majewska and E. Glabski*

12:45 - 13:00 **O-054** - EFFECTS OF AN ACCIDENTAL EXPOSURE TO WATER SOLUBLE FRACTION OF HEAVY OIL (ARABIAN LIGHT, BAL 110) ON IMMUNE SYSTEM AND SAFETY STATE IN SEA BASS, *DICENTRARCHUS LABRAX*

*M. Danion\*, S. Le Floch, H. Thomas-Guyon, F. Lamour, A. Bado Nilles and C. Quentel*

**11:15 - 13:00 Myxozoa – Transmission and genetics**  
**(hall Nadir)**

*Chairperson: A. Holzer*

11:15 - 11:30 **O-055** - MALACOSPOREAN LIFE-CYCLES: A FISH HOST FOR *BUDDENBROCKIA*

*D. Grabner\* and M. El-Matbouli*

11:30 - 11:45 **O-056** - ROUTE OF *CERATOMYXA SHASTA* INFECTION IN THE FISH HOST USING FLUORESCENT LABELING OF ACTINOSPORES AND *IN SITU* HYBRIDIZATION

*S. J. Bjork and J. L. Bartholomew\**

11:45 - 12:00 **O-057** - ATTACHMENT AND PENETRATION OF *MYXOBOLUS CEREBRALIS* ACTINOSPORES TO NON-SUSCEPTIBLE FISH

*D. M. Kallert\*, E. Eszterbauer, D. Grabner and M. El-Matbouli*

12:00- 12:15 **O-058** - *ENTEROMYXUM LEEI* (MYXOZOA) TRANSMISSION TO GILTHEAD SEA BREAM (*SPARUS AURATA*) BY RECTAL ROUTE: WATER TEMPERATURE EFFECT

- 12:15 - 12:30 **O-059** - TRACING OF CHARACTER EVOLUTION OF MYXOZOA  
*I. Fiala\* and P. Bartošová*
- 12:30 - 12:45 **O-060** - *CERATOMYXA SHASTA* ITS-1 GENOTYPES CORRELATE WITH SALMONID HOST SPECIES  
*S. Atkinson\* and J. Bartholomew*
- 12:45 - 13:00 **O-061** - IDENTIFICATION OF PROTEIN-CODING PARASITE GENES INVOLVED IN THE HOST INVASION OF *MYXOBOLUS CEREBRALIS* (MYXOZOA)  
*E. Eszterbauer\*, D. M. Kallert, D. Grabner and M. El-Matbouli*

**11:15 – 13:00 Ranavirus  
(hall Taurus)**

*Chairperson: G. Bovo*

- 11:15 – 11:30 **O-062** - ISOLATION AND CHARACTERIZATION OF KOREAN RANAVIRUS ISOLATED FROM GOLD-SPOTTED POND FROGS (*RANA PLANCYI CHOSENICA*)  
*Y. R. Kim, M. A. Ha, R. S. Dalvi, I. S. Cha, H. B. Jang, S. B. Park, S. W. Nho, J. Hikima, A. H. Eom, T. S. Jung\* and T. Aoki*
- 11:30 – 11:45 **O-063** - EVIDENCE FOR REPEATED INTRODUCTION OF RANAVIRUSES INTO THE EU VIA IMPORTS OF ORNAMENTAL AMPHIBIANS  
*B. J. Hill\* and A. E. Bayley*
- 11:45 – 12:00 **O-064** - SUSCEPTIBILITY OF THE NATIVE UK COMMON FROG (*RANA TEMPORARIA*) TO RANAVIRUSES ISOLATED FROM IMPORTED ORNAMENTAL AMPHIBIANS  
*A. E. Bayley\*, B. J. Hill and S. W. Feist*
- 12:00 – 12:15 **O-065** - SUSCEPTIBILITY OF BLACK BULLHEAD *AMEIURUS MELAS* TO A PANEL OF RANAVIRUS ISOLATES  
*F. Gobbo\*, M. R. Pastore and G. Bovo*
- 12:15 – 12:30 **O-066** - DETECTION OF DIFFERENT RANAVIRUSES BY IMMUNOFLOUORESCENCE ASSAY (IFAT) USING TWO MONOCLONAL ANTIBODIES AND ONE POLYCLONAL ANTISERUM FROM RABBIT  
*S. M. Bergmann, D. Fichtner and M. Dauber*
- 12:30 – 12:45 **O-067** - RANAVIRUS PHYLOGENY AND DIFFERENTIATION BASED ON MAJOR CAPSID PROTEIN, DNA POLYMERASE AND NEUROFILAMENT TRIPLET H1-LIKE PROTEIN GENE  
*R. Holopainen\*, S. Ohlemeyer, H. Schütze, S. M. Bergmann and H. Tapiovaara*

**15:30 - 17:00 Trends in bacterial diseases (II)  
(hall Zenit)**

*Chairperson: P. Klesius*

- 15:30 - 15:45 **O-068** - *FRANCISELLA NOATUNENSIS*: BATH CHALLENGE EXPERIMENTS WITH JUVENILE COD (*GADUS MORHUA* L.)  
*L. M. Omdal\*, E. Karlsbakk, K. F. Ottem, I. U. Fiksdal, A. C. B. Einen, H. Rudra, Ø. Brevik, R. H. Olsen and A. Nylund*
- 15:45 - 16:00 **O-069** - CHALLENGE WITH *FRANCISELLA* SP. IN ATLANTIC COD (*GADUS MORHUA*)  
*O. Skjærvik\*; M. Bordevik and C. Maira*
- 16:00 - 16:15 **O-070** - BACTERIAL ISOLATE INFLUENCES THE SUSCEPTIBILITY OF CLONES OF RAINBOW TROUT TO *FLAVOBACTERIUM PSYCHROPHILUM* INFECTION  
*C. Michel, N. Dechamp, C. Hervet and E. Quillet*
- 16:15 - 16:30 **O-071** - ANTIMICROBIAL RESISTANCE IN ORNAMENTAL FISH: CONTRIBUTION TO THE AQUATIC RESISTOME  
*D. W. Verner-Jeffreys\*, T. J. Welch, T. Schwarz, M. J. Pond, S. J. Haig, G. S. E. Rimmer and C. Baker-Austin*

- 16:30 - 16:45 **O-072** - STRUCTURAL ANALYSIS OF R-PLASMID PP9014 ISOLATED FROM *PHOTOBACTERIUM DAMSELAE* SUBSP. *PISCICIDA* IN NAGASAKI JAPAN  
C. Kurosaka\*, H. Kondo, T. Aoki and I. Hirono
- 16:45 - 17:00 **O-073** - COMPARATIVE STUDY OF GENOTYPES AND PHENOTYPES OF *AEROMONAS* SP. ISOLATED FROM FARM CULTURED EELS IN KOREA  
S. J. Joh\*, H. Jang, L. V. Truong, M. J. Kim, M. C. Kim, Y. K. Kwon, M. S. Kang and J. H. Kwon

**15:30 – 17:15 Host parasite interactions (II)**

**(hall Nadir)**

Chairperson: T. A. Mo

- 15:30 - 15:45 **O-074** - DOES *LEPEOPHTHEIRUS SALMONIS* PLAY A ROLE IN THE EPIZOOTIOLOGY OF AMOEBIC GILL DISEASE CAUSED BY *NEOPARAMOEBA PERURANS*?  
S. R. M. Jones\*, P. B. B. Crosbie and B. F. Nowak
- 15:45 - 16:00 **O-075** - HISTOPATHOLOGICAL CHANGES OF EXPERIMENTALLY INFECTED OLIVE FLOUNDER, *PARALICHTHYS OLIVACEUS* WITH HISTOPHAGOUS SCUTICOCILIATE, *PHILASTERIDES DICENTRARACHI*  
R. Harikrishnan\*, C. Jin, Y. Moon, M. Kim, J. Kim, C. Balasundaram, I. S. Azad, M. Sakai and M. Heo
- 16:00 - 16:15 **O-076** - INSIGHTS INTO THE LIFE CYCLE AND SUSCEPTIBILITY TO *SPHAEROTHECUM DESTRUENS*  
D. Andreou\*, R. Gozlan, R. Paley, M. Hussey, R. D. Possee, D. M. Stone and S. W. Feist
- 16:15 - 16:30 **O-077** - A NEW GENUS OF SANGUINICOLIDAE FROM THE BRAIN OF THE MEDITERRANEAN SPARID *DIPLODUS VULGARIS*  
G. Alama-Bermejo\*, J. A. Raga and A. S. Holzer
- 16:30 - 16:45 **O-078** - ENERGETIC ASSOCIATION BETWEEN THE LIFE-HISTORY TRAITS: GROWTH AND PARASITE RESISTANCE  
A. Voutilainen\*, J. Taskinen, E. Seppänen and H. Huuskonen
- 16:45 - 17:00 **O-079** - ANALYSING THE PROS AND CONS OF THE INTRIGUING LARVAL EUSTRONGYLIDOSIS IN FRESHWATER FISH  
L. D. Urdes\*, C. Diaconescu, D. Ianitchi and M. Hangan
- 17:00 - 17:15 **O-080** - RECOGNITION OF BODY CAVITY AND GASTROINTESTINAL HELMINTHS OF ARAS DAM (NORTHWEST OF IRAN) NATIVE FISH  
S. Kahnamooyi\*, S. Sadigh Eteghad, J. Mortazavi, Y. Gharedagi and S. Ghavami

## Wednesday, September 16

### **09:00 - 10:45 Vaccines**

(hall Zenit)

Chairperson: P. Dixon

**O-081** - WITHDRAWN

09:00 - 09:15 **O-082** - ASSESSMENT OF SAFETY AND EFFICACY IN ATLANTIC SALMON (*SALMO SALAR*) FOLLOWING DIFFERENT VACCINATION REGIMES USING A MONOVALENT VACCINE AGAINST PANCREAS DISEASE (PD) AND A MULTIVALENT VACCINE

*D. H. Knappskog\*, M. McLoughlin, N. P. Maaseide, L. Høgset, S. Villoing, T. Løvold, A. Grini, A. Berg, K. E. Christie and P. Frost*

09:15 - 09:30 **O-083** - EVALUATION OF A DNA VACCINE PROTOTYPE FOR THE CONTROL OF SALMON PANCREAS DISEASE VIRUS (SPDV) IN ATLANTIC SALMON, *SALMO SALAR*

*N. C. Simard\*, V. Hay, L. Aarflot, M. Pallapothu, V. Bangla, L. Speilberg, K. Saloniuss and O. Breck*

09:30 - 09:45 **O-084** - ENHANCED DISEASE RESISTANCE TO YERSINIOSIS IN ATLANTIC SALMON BATH VACCINATED USING A MODIFIED BACTERIN-BASED VACCINE

*A. R. Bridle\*, J. Carson and B. F. Nowak*

09:45 - 10:00 **O-085** - DEVELOPMENT OF A VACCINE AGAINST RAINBOW TROUT FRY SYNDROME

*A. L. Morgan\*, K. D. Thompson, R. M. L. Gratacap, N. A. Auchinachie, and A. Adams*

10:00 - 10:15 **O-086** - PROTECTION AGAINST HETEROLOGOUS *STREPTOCOCCUS INIAE* ISOLATES USING A MODIFIED BACTERIN VACCINE IN NILE TILAPIA *OREOCHROMIS NILOTICUS*

*C. A. Shoemaker\*, P. H. Klesius, B. R. LaFrentz and J. J. Evans*

10:15 - 10:30 **O-087** - EVOLUTION OF THE CAPSULAR OPERON OF *STREPTOCOCCUS INIAE* DRIVEN BY AUTOGENOUS VACCINATION

*J. C. F. Baiano and A. C. Barnes\**

10:30 - 10:45 **O-088** - A NEW INDUSTRY STANDARD FOR VACCINATION OF ATLANTIC SALMON – IMPACT OF REDUCED INJECTION DOSE ON SAFETY AND EFFICACY OF ATLANTIC SALMON POST VACCINATION

*F. Fridell, K. Fyrand and B. Martinsen*

### **09.00-10:45 Parasitic diseases and their control in aquaculture (I)**

(hall Nadir)

Chairperson: S. Jones

09:00 - 09:15 **O-089** - MANAGEMENT OF *ICHTHYOPHTHIRIUS MULTIFILIIS* FOUQUET, 1876 (CILIOPHORA) INFECTIONS IN A COMMERCIAL RAINBOW TROUT HATCHERY

*S. M. Picon-Camacho\*, J. E. Bron, N. G. H. Taylor and A. P. Shinn*

09:15 - 09:30 **O-090** - EFFECT OF DIFFERENT LEVEL OF VITAMIN C (INJECTION) ON PROMOTING OF RESISTANCE OF COMMON CARP, *CYPRINUS CARPIO* AGAINST *ICHTHYOPHTHIRIUS MULTIFILIIS*

*A. Hajimoradloo\*, N. Soleymani and R. Ghorbani*

09:30 - 09:45 **O-091** - TAPEWORM *KHAWIA SINENSIS*: REVIEW OF THE INTRODUCTION AND SUBSEQUENT DECLINE OF A PATHOGEN OF CARP, *CYPRINUS CARPIO*

*M. Oros\*, V. Hanzelová and T. Scholz*

09:45 - 10:00 **O-092** - EXTERNAL PARASITES PREVALENT ON RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) FROM COMMERCIAL FARMS IN MEXICO

*C. Salgado-Miranda\*, C. M. Jurado, G. R. A. Marín, S. M. E. Palomares and E. Soriano-Vargas*

- 10:00 - 10:15 **O-093** - A NOVEL PHYSIOLOGICAL MECHANISM TO REMOVE THE DIGESTIVE DIGENEAN *NICOLLA ELONGATA* (TREMATODA, DIGENEA) IN *TRACHYRHYNCHUS SCABRUS* (TELEOSTEI, GADIFORMES)  
*C. M. Moyá\**, *M. Carrassón*, *A. Fernández*, *M. Constenla*, *S. Crespo*, *F. Padrós* and *F. E. Montero*
- 10:15 - 10:30 **O-094** - DOES THE NUTRITIONAL BACKGROUND OF *SPARUS AURATA* (TELEOSTEI: SPARIDAE) AFFECT THE DISEASE OUTCOME AFTER CHRONIC EXPOSURE TO THE INTESTINAL PARASITE *ENTEROMYXUM LEEI* (MYXOZOA: MYXOSPOREA)?  
*I. Estensoro*, *L. Benedito-Palos*, *O. Palenzuela*, *P. Alvarez-Pellitero*, *S. Kaushik*, *A. Sitjà-Bobadilla\** and *J. Pérez-Sánchez*
- 10:30 - 10:45 **O-095** - *IN VITRO* AND SUSCEPTIBILITY OF KOREAN OLIVE FLOUNDER AGAINST THREE SCUTICOCILIATES  
*R. Harikrishnan*, *Y. Moon*, *M. Kim*, *J. Kim*, *C. Balasundaram* and *M. Heo\**

**11:15 – 13:00 Diseases of uncertain aetiology  
(hall Zenit)**

*Chairperson: M. Longshaw*

- 11:15 - 11:30 **O-096** - ASSOCIATION OF RED MARK SYNDROME WITH A *RICKETTSIA*-LIKE ORGANISM AND ITS CONNECTION WITH STRAWBERRY DISEASE IN THE USA  
*M. Metselaar\**, *K. D. Thompson*, *R. M. L. Gratacap*, *M. J. L. Kik*, *S. E. LaPatra*, *S. J. Lloyd*, *D. R. Call*, *P. D. Smith* and *A. Adams*
- 11:30 - 11:45 **O-097** - A HUNDRED YEARS OF X-CELL RESEARCH  
*M. A. Freeman\**
- 11:45 - 12:00 **O-098** - X-CELL PARASITES: A POTENTIAL IDENTITY  
*M. A. Freeman\**, *A. Kristmundsson*, *M. Eydal*, *M. Yoshimizu* and *K. Ogawa*
- 12:00 - 12:15 **O-099** - CARDIAC ENZYMES AS BIOMARKERS OF HEART DISEASES IN ATLANTIC SALMON (*SALMO SALAR*)  
*M. N. Yousaf\** and *M. D. Powell*
- 12:15 - 12:30 **O-100** - AETIOLOGY OF EYE LESIONS IN SALMONID FISH ON KOLA PENINSULA  
*T. Karaseva*
- 12:30 - 12:45 **O-101** - SQUAMOUS CELL PAPILLOMA OF *RUTILLUS FRISII KUTUM* IN THE CASPIAN SEA: HISTOPATHOLOGY AND ULTRASTRUCTURE  
*M. Ghasemi\**, *I. Sharifpor*, *S. H. Karsidani* and *A. Nori*
- 12:45 - 13:00 **O-102** - COMPARISON OF HEMOLYMPH BETWEEN HEALTHY AND DISEASED SEA SQUIRT, *HALOCYNTHIA RORETZI*, BY APPLYING PROTEOMICS  
*T. S. Jung\**, *M. A. Ha*, *R. S. Dalvi*, *I. S. Cha*, *H. B. Jang*, *S. B. Park*, *S. W. Nho*, *J. Hikima*, *Y. R. Kim* and *T. Aoki*

**11:15 - 13:00 Modern approaches to disease control  
(hall Nadir)**

*Chairperson: P. Noguera*

- 11:15 - 12:00 **KN-03** - HUMBLE REFLECTIONS ON AQUACULTURE DRUG APPROVAL PROCESS AND PROGRESS: A 40-YEAR PERSPECTIVE  
*R. A. Schnick\**
- 12:00 - 12:15 **O-103** - AN EXPERIMENTAL VACCINE AGAINST *AEROMONAS HYDROPHILA* CAN INDUCE PROTECTION IN RAINBOW TROUT  
*S. E. LaPatra\**, *K. P. Plant*, *W. D. Shewmaker*, *R. A. Burkhart* and *A. W. Morton*
- 12:15 - 12:30 **O-104** - STRONG EVIDENCE OF EFFICACY AND HERD IMMUNITY WITH AN IPNV VACCINE IN A MULTISITE GCP TRIAL IN SCOTLAND  
*K. Salonius\**, *G. Gettinby* and *J. Marshall*
- 12:30 - 12:45 **O-105** - INFLUENCE OF FEEDING DURATION OF PROBIOTICS ON DISEASE RESISTANCE AND IMMUNE REGULATION IN RAINBOW TROUT  
*S. M. Sharifuzzaman\** and *B. Austin*

- 12:45 - 13:00 **O-106** - TREATMENTS FOR MONOGENEANS OF YELLOWTAIL (*SERIOLA* SPP.): STATUS AND THE FUTURE  
*R. E. Williams, I. Ernst, C. B. Chambers, I. D. Whittington and M. R. Deveney\**
- 11:15 - 13:00 Bivalve pathology (I)**  
**(hall Taurus)**  
*Chairperson: A. Figueras*
- 11:15 - 11:30 **O-107** - COMPARISON OF TWO POPULATIONS OF FLAT OYSTER *OSTREA EDULIS*; PRESENTING CONTRASTED SUSCEPTIBILITY TO BONAMIOSIS: STUDYING HAEMOCYTE ACTIVITIES BY FLOW CYTOMETRY AND FOLLOWING THE EXPRESSION OF TARGETED GENES  
*B. Morga\*, I. Arzul, N. Faury, C. Garcia, S. Lerond, M. Robert, B. Chollet, D. Schikorski, E. Omnes, J.F. Pepin, S. Lapegue, E. Harrang and T. Renault*
- 11:30 - 11:45 **O-108** - MOLECULAR CHARACTERIZATION AND PHYLOGENETIC ANALYSIS OF THREE IMMUNE-RELATED GENES FROM THE PACIFIC OYSTER, *CRASSOSTREA GIGAS*  
*T. Renault\* and N. Faury*
- 11:45 - 12:00 **O-109** - NEW INSIGHTS IN THE INTERACTION STUDIES BETWEEN *VIBRIO* BACTERIAL PATHOGENS AND *CRASSOSTREA GIGAS*  
*S. De Decker\*, P. Haffner, P. Soletchnik, L. Cobret, J. Normand, S. Castagnet, P. Boudry and D. Saulnier*
- 12:00 - 12:15 **O-110** - PHYLOGENY, DIAGNOSIS AND DYNAMICS OF THE OYSTER PATHOGEN *NOCARDIA CRASSOSTREAE* IN LAKE GREVELINGEN, THE NETHERLANDS  
*N. Carrasco, I. Roozenburg, I. Wijmenga, M. Voorbergen-Laarman, N. Itoh and M. Engelsma\**
- 12:15 - 12:30 **O-111** - PRESENCE OF PARASITES *BONAMIA EXITIOSA* AND *BONAMIA OSTREAE* IN EUROPEAN FLAT OYSTERS, *OSTREA EDULIS* L., COMING FROM ADRIATIC SEA  
*V. Narcisi, I. Arzul, D. Cargini, F. Mosca, A. Calzetta, M. Robert, J. P. Jolie, B. Chollet, T. Renault and P. G. Tiscar\**
- 12:30 - 12:45 **O-112** - SUMMER MORTALITY OUTBREAKS OF FRENCH PACIFIC OYSTERS, *CRASSOSTREA GIGAS*, IN 2008: RESEARCH AND DETECTION OF PATHOGENS  
*G. Allain, I. Arzul, B. Chollet, L. Cobret, S. de Decker, N. Faury, S. Ferrand, C. François, C. Garcia, P. Haffner, J. P. Joly, J. Michel, L. Miossec, B. Morga, J. L. Nicolas, E. Omnes, J. F. Pépin, M. Robert, D. Saulnier, D. Schikorski, A. Segarra, D. Tourbiez and T. Renault\**
- 12:45 - 13:00 **O-113** - SUMMER OYSTER MORTALITIES IN 2008 AND CHARACTERIZATION OF A NEW GENOTYPE IN ISOLATES OF OSTREID HERPESVIRUS  
*J. F. Pepin\*, A. Segarra, N. Faury, B. Morga and T. Renault*

## **Thursday, September 17**

### **09:00 - 10:45 Viruses and viral diseases (II)**

**(hall Zenit)**

*Chairperson: B. Hill*

- 09:00 - 09:15 **O-114** - DISTINCTION BETWEEN GENOTYPES OF VIRAL HAEMORRHAGIC SEPTICAEMIA VIRUS (VHSV) USING MONOCLONAL ANTIBODIES  
*T. Ito\*, J. Kurita, M. Sano, T. Iida, H. F. Skall, N. Lorenzen and N. J. Olesen*
- 09:15 - 09:30 **O-115** - THE EFFECTS OF ELEVATED TEMPERATURES ON VHSV STRAIN IVb VIRAL HEMORRHAGIC SEPTICEMIA DISEASE  
*A. E. Goodwin and G. E. Merry*
- 09:30 - 09:45 **O-116** - CHALLENGE OF RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) USING A VIRAL HAEMORRHAGIC SEPTICAEMIA VIRUS (VHSV) ISOLATE, GENOTYPE GIII, COLLECTED FROM FARMED RAINBOW TROUT AT A MARINE SITE ON THE WEST COAST OF NORWAY  
*H. Duesund, S. Nylund and A. Nylund*
- 09:45 - 10:00 **O-117** - MOLECULAR DETECTION OF VIRAL PATHOGENS IN EUROPEAN EEL *ANGUILLA ANGUILLA*  
*M. Engelsma\*, S. van Beurden, A. Boerlage, B. Jansen, N. Carrasco and O. Haenen*
- 10:00 - 10:15 **O-118** - INVESTIGATIONS ON DETECTION OF LOW CONCENTRATION OF KOI HERPESVIRUS (KHV)  
*S. M. Bergmann and D. Fichtner*
- 10:15 - 10:30 **O-119** - FIVE YEARS SURVEILLANCE OF KHV, SVCV AND GCRV IN SOME SOUTHEAST ASIAN COUNTRIES  
*G. D. Lio-Po\*, E. C. Amar, L. D. de la Peña, D. B. U. Tubo, J. Faisan Jr. and V. Suarnaba*
- 10:30 - 10:45 **O-120** - STUDIES ON THE RESISTANCE OF SELECTED FAMILIES OF COMMON CARP, *CYPRINUS CARPIO* (L.), TO KOI HERPESVIRUS  
*P. F. Dixon\*, C. L. Joiner, K. Way, R. A. Reese, G. Jeney and Z. Jeney*

### **09:00 - 10:45 Prophylaxis and therapy**

**(hall Nadir)**

*Chairperson: R. Schnick*

- 09:00 - 09:15 **O-121** - THE USE OF IMMUNOSTIMULANTS TO CONTROL *AEROMONAS HYDROPHILA* INFECTIONS IN RAINBOW TROUT *ONCORHYNCHUS MYKISS* (WALBAUM)  
*E. J. Nya\* and B. Austin*
- 09:15 - 09:30 **O-122** - IMMUNOSTIMULANT USE IN THE SOUTHERN BLUEFIN TUNA INDUSTRY: IMMUNE RESPONSE, HEALTH, AND PERFORMANCE  
*N. T. Kirchhoff\*, T. D'Antignana, M. J. Leef, C. Hayward and B. F. Nowak*
- 09:30 - 09:45 **O-123** - EFFECT OF DIETARY OREGANO ESSENTIAL OIL SUPPLEMENTATION ON COMBINED INFECTIONS BY PATHOGENIC BACTERIA – PARASITES (SEA LICE AND COPEPODS) IN EUROPEAN SEA BASS *DICENTRARCHUS LABRAX* L.  
*M. Yiagnisis\*, M. N. Alexis, K. Bitchava, A. Govaris and F. Athanassopoulou*
- 09:45 - 10:00 **O-124** - EFFECT OF METHISOPRINOL ON THE NONSPECIFIC CELLULAR AND HUMORAL DEFENCE MECHANISMS AND PROTECTION AGAINST CYHV-3 IN FINGERLING OF COMMON CARP (*CYPRINUS CARPIO*)  
*A. K. Siwicki\*, B. Kazuń, K. Kazuń, A. Lepa, E. Glabski and E. Terech-Majewska*
- 10:00 - 10:15 **O-125** - TREATMENT OF TURBOT ENTEROMYXOSIS WITH ANTIPARASITIC DRUGS AND BIOACTIVE NATURAL EXTRACTS-SUPPLEMENTED FEEDS  
*O. Palenzuela\*, E. López-Grandal, C. Zarza and P. Álvarez-Pellitero*
- 10:15 - 10:30 **O-126** - CHALLENGES BY INTRA PERITONEAL INJECTION – PITFALLS WHEN EVALUATING PROTECTIVE IMMUNITY IN FISH

*I. Sommerset\*, J. M. H. Riseth and D. H. Knappskog*

10:30 - 10:45 **O-127** - OPTIMIZATION OF BATH CHALLENGE MODEL FOR *MORITELLA VISCOSA*

*M. Pallapothu, L. Phillips, H. Mlynarski, V. Bangla, A. Garland and K. Saloniuss*

**09:00 - 10:45 Crustacean pathology  
(hall Taurus)**

*Chairperson: T. Renault*

09:00 – 09:15 **O-128** - CRUSTACEAN DISEASES IN EUROPE - IMPLICATIONS OF EC DIRECTIVE 2006/88 FOR IMPORTERS AND EXPORTERS

*G. D. Stentiford\* and K. S. Bateman*

09:15 – 09:30 **O-129** - THE EFFECTS OF USING A COMMERCIAL PROBIOTIC ON THE SURVIVAL AND GROWTH OF FRESHWATER CRAYFISH, *ASTACUS LEPTODACTYLUS* (ESCHSCHOLTZ, 1823) JUVENILES

*O. Diler\*, B. I. Didinen, S. K. Bahadır, S. Ekici, G. Erol, A. Dulluc and H. U. Koca*

09:30 – 09:45 **O-130** - SUSCEPTIBILITY OF EUROPEAN CRUSTACEAN SPECIES TO WHITE SPOT DISEASE

*K. S. Bateman\* and G. D. Stentiford*

09:45 – 10:00 **O-131** - GAFFKAEMIA (*AEROCOCCUS VIRIDANS* VAR. *HOMARI*) ISOLATED FROM WILD CAUGHT EUROPEAN LOBSTERS (*HOMARUS GAMMARUS*) IN THE U.K.

*P. D. Stebbing\*, M. J. Pond, D. Verner-Jeffreys, E. J. Peeler, H. Small and S. J. Greenwood*

10:00 – 10:15 **O-132** - WSSV OF PENAEID SHRIMP AND SYSTEMIC ENVELOPED NUCLEAR ROD SHAPED VIRUSES OF CRABS: POSSIBLE RELATIONSHIPS

*R. I. Hernandez-Herrera, J. Mari and J. R. Bonami\**

**11:15 - 12:45 Risk and biosecurity  
(hall Zenit)**

*Chairperson: D. Green*

11:15 - 11:30 **O-133** - A METHOD OF RANKING AQUATIC ANIMAL DISEASES FOR AQUACULTURE HEALTH MANAGEMENT IN SPAIN

*C. Rodgers, I. de Blas, F. Padros, A. Roque, K. Andree and D. Furones\**

11:30 - 11:45 **O-134** - A MODEL FOR RISK RANKING FISH FARMS TO INFORM DISEASE RISK-BASED SURVEILLANCE

*B. Oidtmann, C. Crane, M. Thrush, B. Hill and E. Peeler\**

11:45 - 12:00 **O-135** - DEVELOPMENT OF A RISK EVALUATION SYSTEM FOR *GYRODACTYLUS SALARIS* IN ENGLISH AND WELSH RIVER SYSTEMS

*D. J. Morris, N. G. H. Taylor, J. F. Turnbull and A. P. Shinn*

12:00 - 12:15 **O-136** - AQUATIC BIOSECURITY AND SUSTAINABILITY: THE WILDLIFE FARM INTERFACEM

*M. R. Deveney\* and M. S. Doroudi*

12:15 - 12:30 **O-137** - INFECTIOUS SALMON ANAEMIA (ISA) IN NORWEGIAN SALMON FARMING, A CHRONICLE OF EVENTS RELATING TO A SMALL SCALE EPIDEMIC

*E. Karlsen\*, E. J. Johansen, T. M. Lyngstad and P. A. Jansen*

12:30 - 12:45 **O-138** - CONTAINMENT OF INFECTIOUS SALMON ANAEMIA (ISA) DURING AQUACULTURE SITE CLEARANCE, SOUTH WEST SHETLAND 2009

*D. I. Fraser*

**O-139** - WITHDRAWN

**11:15 - 13:00 Parasitic diseases and their control in aquaculture (II)  
(hall Nadir)**

*Chairperson: M. Kent*

- 11:15 - 11:30 **O-140** - *ICHTHYOBODO* INFECTIONS IN NORWEGIAN FISH FARMS  
*T. E. Isaksen\**, *E. Karlsbakk* and *A. Nylund*
- 11:30 - 11:45 **O-141** - OCCURRENCE AND ASSOCIATION OF A MICROSPORIDIAN WITH SALMON DISEASES IN NORWAY  
*S. Nylund\**, *I. O. Sævareid* and *A. Nylund*
- 11:45 - 12:00 **O-142** - CUTANEOUS MUCUS AND SACCHARIDES REDUCE THE ABILITY OF WILD-TYPE *NEOPARAMOEBA* SPP. TO ELICIT AMOEBIC GILL DISEASE (AGD) IN ATLANTIC SALMON  
*B. Vincent*, *B. Nowak* and *R. Morrison*
- 12:00 - 12:15 **O-143** - A CLINICAL CASE OF AMOEBIC GILL DISEASE ON GILTHEAD SEA BREEM (*SPARUS AURATA*) GROWERS  
*A. Le Breton*, *P. Sourd*, *P. Crosbie* and *B. F. Nowak*
- 12:15 - 12:30 **O-144** - ANNUAL ELEVATED MORTALITY IN RANCHED SOUTHERN BLUEFIN TUNA WAS IMMEDIATELY PRECEDED BY CONCURRENT EPIZOOTIC HYPERINFECTIONS OF SEA LICE (PREDOMINANTLY *CALIGUS CHIASTOS*) AND BLOOD FLUKES (*CARDICOLA FORSTERI*)  
*C. J. Hayward\**, *D. Ellis*, *D. Foote*, *R. Wilkinson*, *P. Crosbie* and *B. F. Nowak*
- 12:30 - 12:45 **O-145** - EVALUATION OF BATH TREATMENT METHODS AGAINST SEA LICE IN AQUACULTURE  
*B. Bjørn*, *A. Aunsmo*, *V. Moen*, *A. Nilsen*, *F. Oppedal*, *F. Fridell* and *R. N. Grøntvedt\**
- 12:45 - 13:00 **O-146** - OPTIMIZING SEA LICE TREATMENT IN LARGE CAGES (CIRCUMFERENCE OF 157 METERS)  
*F. Fridell*, *S. Alexansersen* and *B. Martinsen*

**11:15 - 13:00 Bivalve pathology (II)**  
**(hall Taurus)**

*Chairperson: I. Arzul*

- 11:15 - 11:30 **O-147** - MOLECULAR METHODS FOR DIAGNOSIS OF BIVALVE DISEASES  
*P. Balseiro\**, *B. Novoa* and *A. Figueras*
- 11:30 - 11:45 **O-148** - VALIDATION OF DIAGNOSTIC TECHNIQUES: EXAMPLE OF THE PCR FOR *BONAMIA OSTREAE* DETECTION  
*I. Arzul\**, *M. Robert*, *B. Chollet*, *P. Haffner* and *C. Garcia*
- 11:45 - 12:00 **O-149** - DISEASE SURVEY OF COMMERCIALY EXPLOITED COCKLES UNDERGOING REGULAR AND PERSISTENT MORTALITIES IN SOUTH WALES  
*M. Longshaw*
- 12:00 - 12:15 **O-150** - A PREVIOUSLY UNKNOWN APICOMPLEXAN PARASITE RESPONSIBLE FOR MASS MORTALITY OF ICELAND SCALLOP, *CHLAMYS ISLANDICA*  
*Á. Kristmundsson\**, *S. H. Bambir*, *M. Eydal*, *M. Freeman* and *S. Helgason*
- 12:15 - 12:30 **O-151** - HAEMOCYTIC RESPONSES IN SOFT-SHELL CLAM *MYA ARENARIA* INDUCED BY *IN VIVO* CHALLENGE WITH *VIBRIO SPLENDIDUS*  
*D. Mateo\**, *A. Siah*, *M. Araya*, *F. Berthe*, *G. Johnson* and *S. Greenwood*
- 12:30 - 12:45 **O-152** - NEMATOMORPHA CYST OF INTERTIDAL SNAIL *THAIS SAVEGNYI* (THAIDEA) FROM PERSIAN GULF, IRAN  
*E. Karimi*, *J. Pazooki\** and *M. R. Shokri*

**15:30 - 17:15 Diagnostic methods (II)**  
**(hall Zenit)**

*Chairperson: A. Goodwin*

- 15:30 - 15:45 **O-153** - COMPARISON OF IMMUNOLOGICAL AND MOLECULAR METHODS WITH CULTURE FOR DETECTION AND QUANTIFICATION OF *RENIBACTERIUM SALMONINARUM* IN DIAGNOSTIC SAMPLES  
*D. G. Elliott\**, *C. L. McKibben*, *L. J. Applegate*, *S. C. Mosterd*, *J. C. Woodson* and *S. M. Badil*

- 15:45 - 16:00 **O-154** - FIELD VALIDATION OF DIAGNOSTIC METHODS FOR *RENIBACTERIUM SALMONINARUM*  
*L. M. Hall\* and A. G. Murray*
- 16:00 - 16:15 **O-155** - A NEW SEMI-NESTED PCR METHOD TO DETECT MSA GENE OF *RENIBACTERIUM SALMONINARUM* AND COMPARISON TO ESTABLISHED METHODS  
*I. Arnason\*, S. Sigurdardottir, V. Svansson, A. Kristmundsson, S. Helgason, H. Bjornsdottir and S. Gudmundsdottir*
- 16:15 - 16:30 **O-156** - KIDNEY BIOPSY OF ATLANTIC COD *GADUS MORHUA* FOR DETECTION OF FISH PATHOGENS  
*Ø. J. Brevik\*, T. E. Isaksen, P. J. Midtlyng, S. Helland and A. Nylund*
- 16:30 - 16:45 **O-157** - MOLECULAR DIAGNOSIS OF FRANCISELLOSIS, A SYSTEMIC GRANULOMATOUS INFLAMMATORY DISEASE IN ATLANTIC COD, *GADUS MORHUA* L.  
*A. Kulkarni\*, C. M. A. Caipang, M. F. Brinchmann, K. Korsnes and V. Kiron*
- 16:45 - 17:00 **O-158** - LOOKING FOR THE HAPPY CAGE-REARED TUNA  
*I. Mladineo\* and B. A. Block*
- 17:00 - 17:15 **O-159** - A NEW ATTRACTIVE IMMUNE BIOMARKER TO DETERMINE EFFECTS OF POLYCYCLIC AROMATIC HYDROCARBONS AND REFINED PRODUCTS ON EUROPEAN SEA BASS, *DICENTRARCHUS LABRAX* (LINNAEUS, 1758)  
*A. Bado-Nilles\*, C. Quentel, H. Thomas-Guyon and S. Le Floch*

**15:30 - 17:15 Non-infectious diseases  
(hall Nadir)**

*Chairperson: G. Stentiford*

- 15:30 - 15:45 **O-160** - PATHOPHYSIOLOGY OF ANAEMIA IN FISH: BLOOD CHEMISTRY AND CARDIAC TISSUE REMODELLING  
*M. D. Powell, D. Dahle and M. Burke*
- 15:45 - 16:00 **O-161** - THE EPIDEMIOLOGY OF BOTULISM OUTBREAKS IN CULTURED FISH  
*A. E. Goodwin, G. E. Merry and L. Dorman*
- 16:00 - 16:15 **O-162** - HISTOPATHOLOGICAL STUDY ON NEPHROPATHY ASSOCIATED WITH MELAMINE AND CYANURIC ACID IN FISHES  
*T. Miyazaki and R. Takahashi*
- 16:15 - 16:30 **O-163** - HISTOPATHOLOGICAL ASSESSMENT OF SUB-LETHAL EXPLOSIVE BASED INSTANTANEOUS PRESSURE CHANGE (IPC) ON FISH  
*D. R. Godard\*, B. Park and V. Palace*
- 16:30 - 16:45 **O-164** - ASSESSMENT OF FISH HEALTH STATUS UNDER LONG-TERM OIL POLLUTION OF THE PECHORA RIVER  
*A. A. Lukin\*, J. N. Sharova and L. A. Belicheva*
- 16:45 - 17:00 **O-165** - BEAUTY OR PEST – AN UNKNOWN STRUCTURE IN *HIPPOCAMPUS REIDI*  
*E. M. Lewisch and D. Abed-Navandi*