

# **TUESDAY, May 30**

PLENARY Tuesday, May 30 09:00 - 10:40 Auditorium 1 Chair: Jennifer Blair

#### 09:00 WELCOME WORDS AND AWARDS

- 09:20 Dan Richards, CEO of Humpty Doo Barramundi PERSPECTIVES OF A 30-YEAR PIONEERING AQUACULTURE ENTERPRISE
- 10:00 David Whyte, Managing Director BioMar Australia WHAT WILL AUSTRALIA HAVE TAUGHT THE WORLD ABOUT AQUACULTURE IN 2050?

#### 10:40 STUDENT SPOTLIGHT

#### Charles Sutherland

A NOVEL LOW-COST SPECTRAL SYSTEM TO SENSE APPROACHING ECDYSIS IN CULTURED JUVENILE TROPICAL ROCK LOBSTER *Panulirus ornatus* University of Tasmania, Australia charles.sutherland@utas.edu.au

#### Jessica Hintzsche

GETTING AI INTO AQUACULTURE: A DIGITAL TWIN PLATFORM TO OPTIMISE GENOMIC SELECTION IN AQUACUTURE – A TEST CASE USING BARRAMUNDI Lates calcarifer Queensland Alliance for Agriculture and Food Innovation (QAAFI), Australia j.hintzsche@uqconnect.edu.au

#### Flavia Bandero Hoffling

DHA-RICH PROTIST MICROORGANISM Aurantiochytrium sp.: IN VITRO ANTI-INFLAMMATORY POTENTIAL UFSC, Brazil flaviabandh@gmail.com

## IOT, AUTOMATION AND MACHINE LEARNING

Tuesday, May 30 11:20 - 13:00 Room 3 Chair: Regis Bador

- 11:20 Maxime Paris, Nicolas Prost, Arthur Tré-Hardy, Hege Gjesdal, Charlotte Dupont USING IOT-POWERED IN SITU AND EARTH OBSERVATION DATA TO IMPROVE FARMERS' ANTICIPATION CAPACITIES OF ANOXIA AND HARMFUL ALGAE BLOOMS IN AQUACULTURE
- 11:40 Lukman Hakim, Syauqy Nurul Aziz, Liris Maduningtyas PREDICTING DISEASE OCCURRENCE IN SHRIMP PONDS USING GENERATIVE NETWORK AND ENSEMBLE LEARNING
- 12:00 Lukman Hakim, Farid Inawan, Syauqy Nurul Aziz, Liris Maduningtyas YOLO V8 FOR ESTIMATION OF SHRIMP BODY WEIGHT FROM IMAGES
- 12:20 Dino Milotic, Alan Lymbery, Graham Gardner, Fiona Anderson, Gavin Partrdige HOW TO BREED FAT, EXPENSIVE FISH – DEVELOPING CT SCANNING FOR YELLOWTAIL KINGFISH Seriola lalandi

## THE GREAT DEBATE ON ARTIFICIAL INTELLIGENCE AT THE SERVICE OF AQUACULTURISTS

Tuesday, May 30 14:20 – 15:40 Room 3 Chair: Regis Bador

Andrew Campbell, CEO at AQ1 Systems (dedicated to prawns farming). Paw Peterson, CEO of OxyGuard, serving all kind of aquaculture. Lukman Hakim, Data scientist at JALA Tech, focused on prawn/shrimp aquaculture. Jean-Yves Beninger, Southeast Asia Manager at BiOceanOr

Main focus:

Lets try to demystify Artificial Intelligence and focus on its positive impacts so far and on what it can bring in the future to help aquaculturists", exchanging technical information.

- Brief summary of what is Al
- Examples of what is already does in aquaculture
- What can AI do for aquaculturists? What do aquaculturists need in the near future?
- What aquaculturists should pay attention about AI

DISCUSSION

# PRAWN NUTRITION

Tuesday, May 30 11:20 - 17:20 Waterfront 1 Chairs: Cedric Simon, Artur Rombenso, Romi Novriadi

- 11:20 Cedric Simon, Matt Briggs, Ha Truong, Omar Porras, Tansyn Noble, Artur Rombenso, Nick Wade, Simon Irvin, Simone Osborne, James Wynne, Richard Smullen, Ricardo Esquerra THE SCIENCE BEHIND NOVAQPRO<sup>™</sup>, A NATURAL FUNCTIONAL FEED ADDITIVE FOR PRAWNS
- 11:40 Ricardo Esquerra, Matthew Briggs, Camila Marinelli Martins, Cedric Simon, Artur Rombenso A META-ANALYSIS ON THE GROWTH PROMOTING EFFECT OF FEEDING NOVAQPRO™ TO *P. vannamei* AND *P. monodon*
- 12:00 Richard Smullen, Matthew Briggs, Tony Charles, Matt West FARM TRIAL USING NOVAQPRO® MICROBIAL BIOMASS FOR TIGER SHRIMP *Penaeus monodon*: PERFORMANCE, PROFITABILITY AND REDUCTION OF USE OF MARINE RESOURCES
- 12:20 Matthew Briggs, Richard Smullen, Nathan Atkinson, Artur Rombenso, Cedric Simon EFFECTS OF USING NEW NOVAQPRO® MICROBIAL BIOMASS IN COMMERCIAL DIETS FED TO WHITELEGGED SHRIMP *Penaeus vannamei*
- 12:40 D. Allen Davis, Magida Tabbara, Adela Araujo, Sidra Nazeer, Silvio Peixoto, Richard Smullen, Matthew Briggs EFFICACY OF NOVACQPRO<sup>™</sup> BACTERIAL BIOMASS AS A BIOACTIVE COMPONENT OF PACIFIC WHITE SHRIMP *Litopenaeus vannamei* FEEDS
- 13:00 LUNCH
- 14:20 Rawiwan Limwachirakhom, Supawit Triwutanon, Orapint Jintasataporn EFFECTS OF DIETARY LYSOPHOSPHOLYPIDS TO PARTIAL REPLACE OF FISH OIL ON GROWTH PERFORMANCE AND CHOLESTEROL STATUS IN PACIFIC WHITE SHRIMP *Litopenaeus vannamei*
- 14:40 Flavia Bandero Hoffling, Isabela C. Pinheiro, Delano D. Schleder, Nicholas Bourne, Artur N. Rombenso, Mateus A. Martins, Ramon F.S. Carneiro, Ivanilson Santos, Ivanilson Santos, Camilla Miranda, Felipe N. Vieira PROTIST MICROORGANISM Aurantiochytrium sp. AS AN ADDITIVE TO P. vannamei IN SUBOPTIMAL TEMPERATURE: PRELIMINARY RESULTS
- **15:00 Petch Chaisirikul**, Supawit Triwutanon, Orapint Jintasataporn APPLICATION OF BILE ACID ON GROWTH PERFORMANCE AND IMMUNITY OF WHITE SHRIMP *Penaeus vannamei*

15:20 Yanbing Qiao, Fenglu Han, Xuhan Peng, Artur Rombenso, Erchao Li DIETARY &-GLUCAN PARTIALLY PROTECTS WHITE SHRIMP *Litopenaeus vannamei* FROM ANTIBIOTICS-INDUCED SIDE EFFECTS IN INTESTINAL MICROBIAL COMPOSITION

#### 15:40 BREAK

- 16:00 Flavia Bandero Hoffling, Wei Chen, Simone Osborne, Felipe N. Vieira, Cedric Simon, Artur N. Rombenso DHA-RICH PROTIST MICROORGANISM Aurantiochytrium sp.: IN VITRO ANTI-INFLAMMATORY POTENTIAL
- 16:20 Nattakul Yaemsooksawat, Srinoy Chumkam, Orapin Jintasataporn EFFICACY OF PHYTOCEE IN VIT-C PHOSPHATE REDUCTION DIETS ON THE PERFORMANCE OF WHITE SHRIMP *Penaeus vannamei* UNDER DENSITY STRESS CONDITION, AND DISEASE CHALLENGE AGAINST *Vibrio parahaemolyticus* 
  - 16:40 Yathish Ramena, Femi J. Fawole, Frank Martorana, Thomas Bosteels, Krishna Singha, Amit Yadav, Vikas Kumar ASSESSING THE IMPACT OF ENHANCED DIETARY LEVELS OF BRINE SHRIMP Artemia franciscana CO-FED WITH MICROPARTICLE DIET ON THE REARING OF Litopenaeus vannamei LARVAE
  - 17:00 Orapint Jintasataporn, Srinoy Chumkam, Supawit Triwutanon BILE ACID IMPROVING GROWTH PERFORMANCE AND HEPATOPANCREASE HEALTH OF WHITE SHRIMP *Penaeus vannamei* UNDER NUTRITIONAL STRESS

#### GENOMICS

Tuesday, May 30 11:20 - 17:20 Waterfront 2 Chairs: Roberta Marcoli, Jan Strugnell, Wong Li Lian

- 11:20 Roberta Marcoli, David B. Jones, Cecile Massault, Megan Moran, Paul J. Harrison, Holly S. Cate, Dean R. Jerry REVEALING THE MOLECULAR DRIVERS BEHIND GOLDEN COLOURATION IN BARRAMUNDI Lates calcarifer: A TRANSCRIPTOME APPROACH
- 11:40 Jarrod Guppy, David Jones, Maria Nayfa, Shannon Kjeldsen, Dean Jerry, Kyall Zenger CONSTRUCTION OF AN INTEGRATED GENOMIC RESOURCE FOR GENOME WIDE INVESTIGATION OF ECONOMICALLY IMPORTANT TRAITS IN BLACK TIGER SHRIMP Penaeus monodon

- 12:00 Li Lian Wong, Zulaikha Mat Deris, Md Asaduzzaman, Wang Min, Liang Yantao, Yeong Yik Sung, Shumpei lehata SKIM-SEQUENCING BASED GENOTYPING REVEALS GENETIC DIVERGENCE OF THE WILD AND DOMESTICATED BROODSTOCK POPULATIONS OF BLACK TIGER SHRIMP Penaeus monodon IN THE INDO-PACIFIC REGION
- 12:20 Luxin Wang, Anita Kelly, Luke Roy, Xiran Li, Hongye Wang, Hisham Abdelrahman FACTORS SHAPING THE MICROBIAL POPULATIONS PRESENT ON FISH AND FISH PRODUCTS
- 12:40 Lachlan Dennis, Tomer Ventura, Stewart Fielder, Abigail Elizur DEVELOPMENT OF A SEX-SPECIFIC MOLECULAR MARKER IN NSW MULLOWAY Argyrosomus japonicus
- 13:00 LUNCH
- 14:20 Miguel Angel Pardo, Ane del Río-Lavín, Elisa Jimenez OXFORD NANOPORE SEQUENCING FOR RAPID IDENTIFICATION OF THE GEOGRAPHICAL ORIGIN OF FARMED MEDITERRANEAN MUSSELS *Mytilus* galloprovincialis
- 14:40 Jorge M.O. Fernandes, Golam Rbbani COMPREHENSIVE ANALYSIS OF CIRCULAR RNA EXPRESSION AND THEIR REGULATORY NETWORK IN NILE TILAPIA MUSCLE
- 15:00 Nick Robinson, Lene Sveen, Rose Daniels, Torstein Tengs, Sarah Salisbury, Marianne Vaadal, Aleksei Krasnov, Ross Houston, Diego Robledo SPATIAL GENE EXPRESSION IN ATLANTIC SALMON SKIN – DISCOVERING FUNCTIONAL GENETIC MECHANISMS GIVING RESISTANCE TO SEA LICE
- 15:20 Roberto Carvalheiro, Wagdy Mekkawy, Lewis Rands, Brad Evans, Mehdi Sargolzaei, Curtis Lind CRYOBANK GENETIC DIVERSITY ASSESSMENT AND STORAGE OPTIMIZATION USING GENOMIC IMPUTATION AND HAPLOTYPE ANALYSIS
- 15:40 BREAK
- 16:00 John Buchanan, Klara Verbyla, Debbie Plouffe, Alan Tinch GENOME EDITING FOR GENETIC IMPROVEMENT IN FISH AND SHELLFISH AQUACULTURE
- 16:20 Sajad Nazari, Mahdi Golshan, Salman Malekpour Kolbadinejad META-ANALYSIS OF QUANTITATIVE TRAIT LOCI (QTLS) REVEALS THE GENETIC CONTROL OF REPRODUCTIVE TRAITS IN FARMED RAINBOW TROUT (Onchorhynchus mykiss)

# ECHINOCULTURE, CORALS AND INTEGRATED AQUACULTURE

Tuesday, May 30 11:20 - 17:20 Room 2 Chairs: Mark Cyrus, Anton Krsinich

- 11:20 Fletcher Warren-Myers, Stephen E. Swearer, Tim Dempster ROE ENHANCEMENT AQUACULTURE: A SOLUTION TO CONTROLLING AN OVERABUNDANT URCHIN SPECIES IN SOUTHERN VICTORIA
- 11:40 Jay R. Gorospe, John Rey Gacura, Raisa Castel, Marie Antonette Juinio-Meñez, Nicholas McClean, Paul C. Southgate, Michael Fabinyi INTERACTIONS BETWEEN SEA CUCUMBER MARICULTURE AND CAPTURE FISHERIES SECTORS IN THE PHILIPPINES
- 12:00 Manoj Nair, Justino Smith, Belenko Halverson, Clayton Maluiwegie, Selven Wolemal SANDFISH SEA CUCUMBER *Holothuria scabra* FARMING TECHNOLOGY DEVELOPMENT IN U.S. AFFILIATED MICRONESIAN ISLAND COUNTRIES
- 12:20 Julie Clarice Salva, Marie Antonette Juinio-Meñez EFFECTS OF STOCKING DENSITY AND SHELTER ON THE BEHAVIOR, GROWTH, AND SURVIVAL OF *Stichopus* cf. *horrens* JUVENILES
- 12:40 Luke Turner, Anton Krsinich EFFECT OF LARVAL STOCKING DENSITY ON THE POST SETTLEMENT NURSERY PRODUCTION OF SANDFISH SEA CUCUMBER *Holothuria scabra* FOR STOCK ENHANCEMENT
- 13:00 LUNCH
- 14:20 Nabeel Alikunhi, Zenon Batang, Paul Muller PROSPECTS OF DEEP-SEA CORALS REARING: A SUCCESS STORY AT SEALABS
- 14:40 Sophie Dyer, Jonathan Moorhead, Daniel Kimberley ADVANCES IN LAND-BASED CORAL AQUACULTURE FOR REEF RESTORATION AND THE AQUARIUM TRADE
- 15:00 Rachel Neil, David Bourne, Andrew Heyward, Craig Humphrey EXPLORING CO-CULTURE METHODS IN CORAL AQUACULTURE
- 15:20 Regina Singh, Ravinesh Ram, Paul Iji GROWTH YIELD OF CO-CULTURED SEAGRAPES Caulerpa lentillifera WITH BLACKLIP OYSTER Pinctada margaritifera FROM NAMARAI VILLAGE, FIJI ISLANDS

15:40 Mark Cyrus, John J. Bolton, Joseph A. De Prisco, Marissa Brink-Hull, Brett M. Macey THE EBB AND FLOW OF CRITICAL WATER QUALITY PARAMETERS WITHIN A COMMERCIAL ABALONE/ULVA IMTA SYSTEM: EFFECTS OF INCREASED RECIRCULATION

#### BLUE ECONOMY: HOW TO OFFSHORE AQUACULTURE

Tuesday, May 30 11:20 - 13:00 Waterfront 3 Chair: Chris Carter

- 11:20 Chris Carter, Sarah Ugalde, Lindsey White THE BLUE ECONOMY COOPERATIVE RESEARCH CENTRE PATH TO SUSTAINABLE INTEGRATED SYSTEMS FOR OFFSHORE AQUACULTURE 3: BUILDING BLOCKS FOR MULTISPECIES SYSTEMS
- 11:40 Glenn R. Shiell, Amber Evans, Toby Devlin, Mohammad Tabish, Hamad Al Mansoori, Mohamed Al Marzooqi A MULTICRITERIA APPROACH TO OFFSHORE AQUACULTURE DEVELOPMENT: A RARE CASE STUDY OF INTERGOVERNMENTAL COLLABORATION LEADING TO MUTUALLY BENEFICIAL OUTCOMES
- 12:00 Katherine Hawes THE BLUE \$: HOW TO KEEP IT!
- 12:20 Vaughan Higgins, Penny Cooke, Maree Fudge SOCIAL LICENCE AND THE DEVELOPMENT OF ONSHORE AQUACULTURE IN AUSTRALIA

### AUSTRALIAN AQUACULTURE DEVELOPMENT

Tuesday, May 30 11:20 - 17:20 Auditorium 2 Chairs: David Francis, Curtis Lind

- 11:20 Emma Wilkie, Ian Lyall, Ryan Jefferson NEW SOUTH WALES AQUACULTURE: TRENDS, OPPORTUNITIES AND STRENGTHS
- 11:40 Paul Hardy-Smith, Joy Becker, Rob Jones A REVIEW OF AUSTRALIA'S FISH WELFARE LAWS AND INDUSTRY PERSPECTIVES
- 12:00 Duncan Leadbitter, Chi Chi Menendez MARKETING THE ROLE OF AQUACULTURE – HOW THE AQUACULTURE STEWARDSHIP COUNCIL IS USING ITS BRAND TO EDUCATE THE COMMUNITY ABOUT THE IMPORTANCE OF AQUACULTURE

#### 12:20 Andy Myers

SURVEYING OYSTER CONSUMERS AND HOW THESE INSIGHTS CAN INFLUENCE PROMOTIONAL CAMPAIGNS

#### 13:00 LUNCH

#### 14:00 Lisa Elliott INTENSIVE CULTURE OF REDCLAW CRAYFISH Cherax quadricarinatus USING VERTICAL FARMING TECHNOLOGIES

- 14:20 Evan F. Goulden, Kelli C. Anderson RISE OF THE EMPEROR: AQUACULTURE POTENTIAL OF Lethrinus laticaudis
- 14:40 Brian Paterson, Paul Exley POST-HARVEST QUALITY OF FARMED BARRAMUNDI Lates calcarifer IN AUSTRALIA
  - 15:00 Charles Pan WORLD HERITAGE OYSTERS - A CULTURAL STORY FROM REGIONAL AUSTRALIA

#### WOMEN IN AQUACULTURE

Tuesday, May 30 14:20 - 17:20 Room 1 Chair: Heidi Mumme

- 14:20 Heidi Mumme, Kirsten Abernethy, James Garde, Tarun Richards, Sam Nowland, Julie-Anne Kerandal, Jay R. Gorospe HOW CAN THE AQUACULTURE INDUSTRY ATTRACT AND RETAIN WOMEN?
- 14:40 Kirsten Abernethy, Emily Ogier WOMEN IN THE AUSTRALIAN AQUACULTURE INDUSTRY – CHALLENGES AND OPPORTUNITIES
- 15:00 Ann Fleming WOMEN IN AQUACULTURE
- 15:20 Abhiniti Vats, Bibha Kumari LEGAL ASSISTANCE IS REQUIRED FOR WOMEN FISH VENDORS TO OVERCOME OBSTACLES IN THE FISH MARKET
- 15:40 BREAK
- 16:00 Heidi Mumme WOMEN IN AQUACULTURE

16:20 James Garde

CAN TRAINING BE A VEHICLE TO DRIVE CULTURE CHANGE IN AN INDUSTRY?

- 16:40 Julie-Anne Kerandel WOMEN IN AQUACULTURE
- 17:00 Tarun Richards WOMEN IN AQUACULTURE
- 17:20 Jay R. Gorospe WOMEN IN AQUACULTURE

#### INDIGENOUS AQUACULTURE AND LIVELIHOODS

Tuesday, May 30 14:20 - 17:20 Waterfront 3 Chair: Matthew Osborne

- 14:20 Samantha Nowland, Bunug Galaminda, Mitchell Beagley, Steve Westley, Brando Westley, Matthew Osborne TWO WAY APPROACH TO AQUACULTURE DEVELOPMENT: TROPICAL ROCK OYSTER FARMING IN THE NORTHERN TERRITORY
- 14:40 Simon Irvin, Tansyn Noble, Cass Hunter, Ron Poantimului, Anthony Venes, Murray Knyvett, Greg Coman, Tim Perrin IS LOW INPUT PRAWN QUACULTURE AN OPTION FOR INDIGENOUS COMMUNITIES IN THE NORTH OF AUSTRALIA?
- 15:00 Sumilesh Wati Pal, Paul Southgate, Paul Ede Iji, Ravinesh Ram POTENTIAL BIOCONVERSION OF BLACK LIP AND MAB'E PEARL OYSTER WASTE INTO AN ORGANIC FERTILIZER
- 15:20 Michael Phillips, Christine Maxwell BUSINESS SOLUTIONS FOR SMALLHOLDER AQUACULTURE LIVELIHOODS
- 15:40 BREAK
- 16:00 Lucas Mead, Trisha Olayon, Cybil Glendon-Baclig, Lea-Carol Glennon, Skyler Chong KUMUOLA: A SOURCE OF KNOWLEDGE; TRADITIONAL HAWAIIAN FISHPOND CAPTURES MAGNITUDE AND TEMPORAL PATTERN OF AN INTRODUCED MULLET Osteomugil engeli INVASION THROUGH STUDENT GENETIC BARCODING RESEARCH
- 16:20 Cara Jeffrey, Nesha Dushani, Nirooparaj Balachandran, Ajith Kumara, Wayne O'Connor, Charitha Pattiaratchi, Grant Vinning, Byron Pakula, Joy Becker SUSTAINABLE MARINE AQUACULTURE DEVELOPMENT FOR SRI LANKA

## SEAWEED AND MICROALGAE

Tuesday, May 30 16:00 - 17:20 Room 3 Chair: Mike Steer

- 16:00 Ruth Garcia Gomez, Jamie Whitford OVERVIEW OF CURRENT STATUS, CHALLENGES AND FUTURE TRENDS ON SEAWEED FARMING IN THE PACIFIC REGION
- 16:20 Shane Roberts, Mandee Theil, Kaine Jakaitis, Kate Rodda, Matt Hoare, Matthew Bansemer, Gavin Gegg ECOLOGICALLY SUSTAINABLE DEVELOPMENT OF NEW AQUACULTURE SPECIES (SEAWEED) IN SOUTH AUSTRALIA
- **16:40** Sasi Nayar, Maylene Loo BIOFOULING MARINE MACROALGAE: A BOON OR A BANE?

# WEDNESDAY, May 31

## DISEASE DIAGNOSIS AND MANAGEMENT

Wednesday, May 31 09:00 - 13:00 Auditorium 2 Chairs: Kate Hutson, Kelly Condon

- 09:00 Melony J. Sellars THE ROLE OF SHRIMP MULTIPATH IN DISRUPTING HOW WE THINK ABOUT AND MANAGE PATHOGENS IN SHRIMP CULTURE
- 09:20 James Fensham, Matt Landos, Ian Anderson, Charles Caraguel POSITIVE PRAWN PRODUCTION THROUGH INVESTIGATION OF EMERGING CAUSES OF DISEASE IN A COMMERCIAL AUSTRALIAN BLACK TIGER PRAWN Penaeus monodon FARM
- 09:40 Mathew Mitchell, Griffin O'Driscoll, Margaret Riley BACTERIOCIN-INFUSED SHRIMP FEED PREVENTS ACUTE HEPATOPANCREATIC NECROSIS DISEASE (AHPND)
- 10:00 Timothy Bruce, Allison Wise, Benjamin LaFrentz, Anita Kelly, Mark Liles, Benjamin Beck
  ASSESSMENT OF BACTERIAL COINFECTIONS IN JUVENILE CHANNEL CATFISH Ictalurus punctatus
- 10:40 BREAK
- 11:00 Joy Becker, Paul Hick EFFECTIVE DISEASE CONTROL FOR INFECTIOUS SPLEEN AND KIDNEY NECROSIS VIRUS (ISKNV): REDUCING THE RISK OF TRANSBOUNDARY SPREAD
- 11:20 Kate Hutson, Allan Mooney, Ingo Ernst, Alexander Brazenor, Max Scheel, Javier Atalah FISH ECTOPARASITE MANAGEMENT ON A PHONE
- 11:40 Susan Gibson-Kueh, Sunita Awate, Markus Schrittwieser THE PATHOLOGY OF *Lates calcarifer* HERPESVIRAL DISEASE – DISSEMINATED INTRAVASCULAR COAGULATION EXPLAINS MORTALITY SPIKES

- 12:00 Mohammad Noor Azmai Amal, Jumria Sutra, Lukman Basri, Ina Salwany Md Yasin, Mohd Zamri Saad, Annas Salleh, Kok Mun Keong, Norhariani Mohd Nor, Rozi Rozi, Nurliyana Mohamad AN OUTBREAK OF LYMPHOCYSTIS DISEASE VIRUS INFECTION IN CULTURED JUVENILE JOHN'S SNAPPER Lutjanus johnii IN SELANGOR, MALAYSIA
- 12:20 E.H.T. Thulshan Jayathilaka, Chamilani Nikapitiya, Mahanama De Zoysa WOUND HEALING PROPERTIES AND MICRO-RNA PROFILE OF EXTRACELLULAR VESICLES (EVS) ISOLATED FROM BACTERIA Streptococcus parauberis CHALLENGED OLIVE FLOUNDER Paralichthys olivaceus PLASMA
- 12:40 Chamilani Nikapitiya, E.H.T. Thulshan Jayathilaka, Mahanama De Zoysa APPLICATION OF IMMUNE CHALLANGED EXTRACELLULAR VESICLES (EVS) FROM OLIVE FLOUNDER *Paralichthys olivaceus* PLASMA FOR FISH MEDICINE
- 13:00 LUNCH
- 14:00 Shane Roberts, Matthew Bansemer, Jo-Anne Ruscoe, Jessica Buss IMPROVING THE AVAILABILITY OF SAFE AND EFFECTIVE VETERINARY MEDICINES TO SUPPORT AQUACULTURE GROWTH IN AUSTRALIA

#### THE GREAT DEBATE: DISEASE DIAGNOSIS AND MANAGEMENT

Wednesday, May 31 14:20 - 15:40 Auditorium 2 Chair: Regis Bador

Kate Hutson, Senior Scientist, Cawthron Institute, Nez Zealand Melony Sellars, CEO at GENICS, Australia

Roberto Cascione, Key Account Manager Aquaculture - Southeast Asia & Middle East, Virbac, Thailand

**Prakan Chiarahkhongman** DVM.,CertAqV. Aquatic animal health care products specialist and solution provider (AAHCPS), CPG-Advance Pharma Private Company, Representative of Charoen Pokphand Foods Public Company (CPF)

Main focus: "Lets update on the best ways to reduce impacts of diseases for both shrimp and fish aquaculture", exchanging technical information.

- How to avoid diseases, how to prevent diseases?
- How to most efficiently diagnostics diseases, in order to make best and earliest possible decisions to avoid disease spreading (if possible)?
- How to manage aquaculture when the disease cause is present at least in the environment and/or in the aquaculture facility?

DISCUSSION

# FEED RAW MATERIALS AND TECHNOLOGY

Wednesday, May 31 09:00 - 17:20 Waterfront 1 Chairs: Michael Salini, Fanny Yasumaru

- **09:00 Kevin Fitzsimmons**, Kelly Campbell, Ewen McLean, Frederic Barrows F3: ACCELERATING THE RACE TO REPLACE THE FISH IN FISH FEED
- 09:20 D. Allen Davis, Khanh Nguyen, Adela Araujo, Trenton Corby, Leila Strebel, Melanie Rhodes, Timothy Bruce THE EFFECTS OF DIFFERENT SOYBEAN PROTEIN SOURCES ON GROWTH PERFORMANCE, FEED UTILIZATION EFFICIENCY, INTESTINE HISTOLOGY, AND GENE EXPRESSION OF PACIFIC WHITE SHRIMP *Litopenaeus vannamei*
- 09:40 Abigail Bockus, Wendy M. Sealey, Scott Tilton, T. Gibson Gaylord EXAMINATION OF CORN FERMENTED PROTEINS TO REPLACE FISHMEAL IN JUVENILE RAINBOW TROUT DIETS
- 10:00 Brian Small, Jeongwhui Hong, Jose Ortiz REPLACING FISHMEAL WITH CORN FERMENTED PROTEIN WITH SOLUBLES (CFPS) IN DIETS FOR ATLANTIC SALMON Salmo salar
- 10:20 Luke Pilmer, Lindsey Woolley, Md Reaz Chaklader EXPLORING THE USE OF INNOVATIVE SUSTAINABLE PROTEINS IN MARINE FINFISH DIETS
- 10:40 BREAK
- 11:00 Jordan Pennells, Artur Rombenso, David Blyth, Cedric Simon, Maria Teresa Viana, Dana Nelson, Michael Salini, Danyang Ying THE STATE-OF-THE-ART OF AQUACULTURE FEED EXTRUSION: CHALLENGES AND OPPORTUNITIES
- 11:20 Cedric Simon, Artur Rombenso, Ha Truong, Filip Janakievski, Borce Trajkovski, Olga Glagovskaia, Greg Aylward DEVELOPMENT OF NOVEL AUSTRALIAN PLANT PROTEIN INGREDIENTS FOR AQUAFEEDS
- 11:40 Ha Truong, Myintzu Hlaing, Paula Lima, Parveen Sangwan, Artur Rombenso, Carol Hartley, Cedric Simon, Pablo Juliano YEAST ARE POWERFUL MICRO-OGRANISMS TO UPCYCLE WASTE AND VALUABLE INGREDIENTS FOR AQUAFEEDS
- 12:00 Pamudi, Levy Manalac, Lukas Manomaitis THE ROLE OF U.S. SOYMEAL INCLUSION IN FEEDS TO THE PERFORMANCE OF POND-RAISED Pangasius hypophthalmus IN TULUNGAGUNG, INDONESIA

- 12:20 Benjamas Bootkinaree, Supawit Triwutanon, Srinoy Chumkam, Orapin Jintasataporn EFFECT OF PHYTOCEE SUPPLEMENTATION ON POST LARVAE SHRIMP *Litopenaeus vannamei* GROWTH PERFORMANCE, HEPATOPANCREAS AND INTESTINAL HEALTH
- 12:40 Oyas Asimi, Irfan Ahmad Khan, Sajad Hassan FISH MEAL AND ITS ALTERNATIVES
- 13:00 LUNCH
- 14:00 Janusz Gołaszewski, Remigiusz Gałęcki THE POSITIONING OF ALGAL PROTEIN IN THE FOOD AND FEED PROTEIN MARKET
- 14:20 Ahmed S. Al-Sooti, Wenresti Gallardo ATTRACTABILITY AND PALATABILITY OF FORMULATED DIETS INCORPORATED WITH CHICKEN FEATHER AND ALGAL MEALS FOR JUVENILE GILTHEAD SEABREAM Sparus aurata
- 14:40 Sooa Yoon, Haham Kim, Abayomi Ogun, Hyuncheol Jeon, Suhyun Lee, Jiyoung Lee, Tugce Kilic, Wonsuk Choi, Seunghyung Lee EFFECTS OF FISH MEAL REPLACEMENT ON GROWTH PERFORMANCE AND STRESS AND IMMUNE-RESPONSES OF OLIVE FLOUNDER *Paralichthys olivaceus* UNDER CHRONIC AND ACUTE TEMPERATURE STRESS
- 15:00 Ainulyakin Hasan Imlani, Dedi Jusadi, Muhammad Agus Suprayudi, Julie Ekasari, Ichsan Ahmad Fauzi EVALUATION OF DIETARY CINNAMALDEHYDE SUPPLEMENTATION IN FEED ON THE GROWTH AND NUTRIENT UTILIZATION OF NILE TILAPIA Oreochromis niloticus
- **15:20** Ajay Valiyaveettil Salimkumar SCREENING AND MONITORING OF ANTIMICROBIAL RESISTANCE IN FEED (FISHMEAL, ANIMAL AND PLANT FEEDS)
- 15:40 BREAK
- 16:00 Remigiusz Galecki, Janusz Golaszewski POTENTIAL USE OF SMALL-SCALE INSECT FARMING FOR AQUACULTURE FEEDING WITH SUSTAINABILITY ASPECTS

- 16:20 Glendon Teo, Angel Joy Seah, Goh Lay Beng PELLET FORMULATION WITH RECYCLED FISH GUTS AND FRUIT WASTE AS ALTERNATIVE COMMERCIAL FISH FEED
- 16:40 Isobel Sewell, Gavin Partridge, Julian Partridge, Jan Hemmi, Craig Lawrence BLACK SOLDIER FLY *Hermetia illucens* LARVAE AND FRASS AS PROTEIN ALTERNATIVES IN BARRAMUNDI *Lates calcarifer* AQUACULTURE DIETS
- 17:00 Katarina Helena Doughty, Michael Salini, Luke Wheat, Craig Lawrence, Julian C. Partridge, Jan M. Hemmi FOOD FOR THOUGHT: A CIRCULAR PRODUCTION MODEL TO DRIVE SUSTAINABLE AQUACULTURE

#### SELECTIVE BREEDING AND QUANTITATIVE GENETICS

Wednesday, May 31 09:00 - 15:40 Waterfront 3 Chairs: Dean Jerry, James Kijas

- 09:00 Greg Coman, Phi Trinh, Andrew Foote, Fernanda Raidan, Can Nguyen DEVELOPMENT OF THE VIET UC *Penaeus monodon* BREEDING PROGRAM
- 09:20 Paul Harrison, Holly S. Cate, Marty Phillips, Nicholas Robinson, Cecile Massault, Dave B. Jones, Dean Jerry RECENT ADVANCES IN BARRAMUNDI SELECTIVE BREEDING
- 09:40 James Kijas, Dan Richards, Bob Richards, Urs Uerpmann, Rob Mills, Jason Clark, Moira Menzies, Tansyn Noble, Curtis Lind, Wagdy Mekkawy GENETIC PARAMETER ESTIMATES FOR GROWTH TRAITS IN BARRAMUNDI ASIAN SEABASS Lates calcarifer
- 10:00 Curtis Lind, Tim Luke, Leanne Bischof, Yulia Arzhaeva, Wagdy Mekkawy, Roberto Carvalheiro, Greg Coman, Nick Wade, Nguyen Ngoc Qui, Nguyen Cong Can, Lam Dinh, Vo Minh Khoi INVESTIGATING THE GENETIC PARAMETERS OF FILLET COLOUR IN VIETNAMESE STRIPED CATFISH *Pangasianodon hypophthalmus* USING HIGH-THROUGHPUT IMAGE ANALYSIS
- 10:20 Lewis Rands, Klara Verbya COMMERCIAL IMPLEMENTATION OF GENOMIC SELECTION IN TASMANIAN ATLANTIC SALMON: SCHEME EVOLUTION, VALIDATION, AND FURTHER DEVELOPMENTS
- 10:40 BREAK

- 11:00 Timothy D.W. Luke, Richard S. Taylor, Wagdy Mekkawy, Roberto Carvalheiro, Lewis Rands, Curtis E. Lind HIGH-THROUGHPUT PHENOTYPES AND GENETIC PARAMETERS OF CARDIAC TRAITS IN TASMANIAN ATLANTIC SALMON Salmo salar
- 11:20 Roberto Carvalheiro, Wagdy Mekkawy, Brad Evans, Lewa Pertl, Michael Dove, Curtis Lind GENETIC VARIATION IN RESIDUAL VARIANCE REVEALS OPPORTUNITY TO SELECT OYSTERS FOR UNIFORMITY OF PRODUCTION
- 11:40 Rose Komugisha Basiita, Trong Q. Trinh, Patience Chungu, Tom Malambo, Chad Kancheya, Buumba Hampuwo, Yobe Mtonga, John A.H. Benzie GENETIC IMPROVEMENT FOR INCREASED BODY WEIGHT IN THE THREE SPOTTED TILAPIA *Oreochromis andersonii* IN ZAMBIA
- 12:00 Cecile Massault, D.B. Jones, J. Knauer, J. Brown, K. Zenger, D.R. Jerry DEVELOPING A BREEDING OBJECTIVE FOR SURVIVAL, SHELL GROWTH AND PEARL SIZE TRAITS FOR THE SILVER-LIP PEARL OYSTER *Pinctada maxima*
- 12:20 Curtis Lind, Peter Kube, Wagdy Mekkawy, Roberto Carvalheiro, Scott Cooper, Benoit Eudeline ESTABLISHMENT OF A FAMILY-BASED SELECTIVE BREEDING PROGRAM FOR *Crassostrea gigas* IN THE PACIFIC NORTHWEST OF THE USA
- 12:40 Gopala K. Guddanti, Cecile Massault, David B. Jones, Dean R. Jerry, Kyall R. Zenger EVALUATION OF GENOMIC BREEDING VALUE ACCURACY USING PROGENY POOLS ACROSS PHENOTYPIC DISTRIBUTIONS IN COMMERCIALLY REARED BLACK TIGER PRAWN *Penaeus monodon*
- 13:00 LUNCH
- 14:00 Wagdy Mekkawy, Curtis Lind, Greg Coman, James Kijas DNA POOLING AND LOW-DENSITY SNP GENOTYPING FOR GENETIC EVALUATION OF AQUACULTURE SPECIES
- 14:20 Andrew Foote, Bryce Little, Fernanda Raidan, Greg Coman, Brad Evans, Curtis Lind, Peter Kube, Wagdy Mekkawy DEVELOPING FLEXIBLE DECISION SUPPORT TOOLS FOR AQUACULTURE BREEDING PROGRAMS
- 14:40 Scott Cooper, Nigel Valentine, Wagdy Mekkawy, Roberto Carvalheiro, Greg Coman, Andrew Foote, Fernanda Raiden, James Kijas, Peter Kube, Curtis Lind LEARNINGS AND OPPORTUNITIES IN THE DEVELOPMENT OF FIT-FOR-PURPOSE DATA SYSTEMS FOR AQUACULTURE SELECTIVE BREEDING PROGRAMS

- 15:00 Jessica Hintzsche, Paul Harrison, Holly Cate, Elizabeth Ross, Kyall Zenger, Owen Powell, Ben Hayes GETTING AI INTO AQUACULTURE: A DIGITAL TWIN PLATFORM TO OPTIMISE GENOMIC SELECTION IN AQUACUTURE – A TEST CASE USING BARRAMUNDI Lates calcarifer
- 15:20 Lewa Pertl, Peter Kube, Curtis Lind ENHANCING DISEASE RESISTANCE AND PRODUCTIVITY IN PACIFIC OYSTERS THROUGH BREEDING STRATEGIES

#### MOLLUSC CULTURE

Wednesday, May 31 09:00 - 17:20 Waterfront 2 Chairs: Nicole Anderson, Wayne O'Connor

- 09:00 Jan M. Strugnell, Benjamin Rennie, Samantha J. Nowland THE INFLUENCE OF TEMPERATURE ON THE FILTRATION RATE OF BLACKLIP ROCK OYSTERS Saccostrea echinata AND AN ASSESSMENT OF THEIR BIOREMEDIATORY ABILITY IN PRAWN AQUACULTURE WASTE WATER
- 09:20 Zarah Tinning, Samantha Nowland, Justin Seymour, Karen Gibb, Anna Padovan OVERCOMING HATCHERY BOTTLENECKS: BLACKLIP ROCK OYSTER LARVAE AND THEIR MICROBIAL HEALTH
- 09:40 Max Wingfield SUCCESSFUL HATCHERY SETTLEMENT OF BLACKLIP ROCK OYSTER Saccostrea echinata SINGLE SEED SPAT, WITHOUT THE USE OF EPINEPHRINE
- 10:00 Brien Roberts, Mitchell Beagley, Bunug Galaminda, Brando Westley, Matthew Osborne, Samantha Nowland GROWTH, SURVIVAL AND SHELL SHAPE IN BLACKLIP ROCK OYSTER Saccostrea echinata/ lineage J CULTURED UNDER DIFFERENT STOCKING DENSITIES AND TIDAL ZONE LOCATIONS IN TROPICAL AUSTRALIA
- 10:20 BREAK
- 11:00 Anna Padovan, Alison Turnbull, Samantha Nowland, Matt Osborne, Mirjam Kaestli, Justin Seymour, Karen Gibb GROWTH OF Vibrio parahaemolyticus IN BLACKLIP ROCK OYSTERS STORED AT DIFFERENT TEMPERATURES

- 11:20 Matthew Reardon, Megan Exton, Anne Rolton, Lizenn Delisle, Emmanuel Malpot, Megan Scholtens, Mena Welford, Leonardo Zamora, Natali Delorme, Norman Ragg, Serean Adams, Julien Vignier COMPARATIVE PERFORMANCE OF TRIPLOID OYSTERS, PRODUCED BY CHEMICAL INDUCTION AND MATED TRIPLOID TECHNIQUES, TO THEIR DIPLOID COUNTERPARTS
- 11:40 Matthew Bansemer, Jessica Buss, Georgia Macaulay, Tracey Bradley, Graeme Knowles, Cecile Dang, James Harris, Kathryn Wiltshire, Nick Savva, Shane Roberts RISK FACTORS FOR SUMMER MORTALITY IN AUSTRALIAN ABALONE: A CASE-CONTROL STUDY
- 12:00 Guillaume Mitta, Léo Duperret, Alejandro Valdivieso Munoz, Céline Cosseau, Julien de Lorgeril, Delphine Destoumieux-Garzón, Fabrice Pernet, Bruno Petton, Eve Toulza, Jérémie Vidal-Dupiol THE PACIFIC OYSTER MORTALITY SYNDROME: A POLYMICROBIAL AND MULTIFACTORIAL DISEASE
- 12:20 Hernan Henriquez, Penelope A. Ajani, Arjun Verma, Hazel Farrell, Shauna A. Murray DEVELOPMENT OF A NOVEL MULTIPLEX qPCR ASSAY FOR RAPID QUANTIFICATION OF HARMFUL ALGAE FOR THE SHELLFISH INDUSTRY
- 13:00 LUNCH
- 15:00 Nicholas Tuckey, Belinda A. Timms, Graham C. Fletcher, Graeme Summers, Natalí J. Delorme, Jessica A. Ericson, Norman L.C. Ragg, Poppy Miller, Reginald Wibisono, Roland Taylor, Serean L. Adams, Leonardo N. Zamora HARVEST CONDITION INFLUENCES THE PERFORMANCE OF GREENSHELL™ MUSSELS *Perma canaliculus* IN CHILLED AND REFRIGERATED SEAWATER-BASED POST-HARVEST STORAGE
- 15:20 Sarah Ugalde, Vu Van Sang, Cao Trugong Giang, Nguyen Thi Hong Ngoc, Vu Van In, Thi Kim Anh Tran, Wayne O'Connor, John D. Mullen OYSTER AQUACULTURE IN VIETNAM: STATUS, SUPPLY AND CHALLENGES
- 15:40 Steven Richards, Marzieh Motallebi U.S. EAST COAST SURVEY CAPTURES CLAM CONSUMER PREFERENCES

## INLAND SALINE AQUACULTURE

Wednesday, May 31 09:00 - 13:00 Room 2 Chairs: Geoff Allan, Steward Fielder

- 09:00 Geoff L. Allan, D. Stewart Fielder INLAND SALINE AQUACULTURE IN AUSTRALIA: PAST PROGRESS CHALLENGES AND OPPORTUNITIES
- 09:20 Tincy Varghese, Sudhir Raizada, N.P. Sahu, P.P. Srivastava, Ravishankar C.N. TWO DECADES OF RESEARCH AND DEVELOPMENT IN INLAND SALINE AQUACULTURE IN INDIA: PRESENT STATUS AND PROSPECTS
- 09:40 D. Stewart Fielder, Geoff L. Allan, Grant Webster INLAND SALINE AQUACULTURE IN NSW: 10 YEARS OF RESEARCH & DEVELOPMENT
- 10:00 Wayne Hutchinson

PAST RESEARCH AND BARRIERS TO COMMERCIAL AQUACULTURE UTILISING SALINE GROUNDWATER FROM SALT INTERCEPTIONS SCHEMES IN SOUTH AUSTRALIA

- 10:20 Brett Ingram, Geoff Gooley, Fiona Gavine INLAND SALINE AQUACULTURE IN VICTORIA – A RETROSPECTIVE VIEW AND FUTURE OPPORTUNITIES
- 10:40 BREAK
- 11:00 Gavin J. Partridge INLAND SALINE AQUACULTURE IN WESTERN AUSTRALIA; PAST, PRESENT AND FUTURE?
- 11:20 Kevin Fitzsimmons, Yair Kohn INLAND SALINE AQUACULTURE – USA AND ISRAEL PERSPECTIVES
- 11:40 Geoff L. Allan, D. Stewart Fielder INLAND SALINE AQUACULTURE IN AUSTRALIA: PANEL DISCUSSION

#### CRUSTACEAN AQUACULTURE

Wednesday, May 31 09:00 - 13:00 Room 3 Chair: Quinn Fitzgibbon

- 09:00 Quinn Fitzgibbon, Greg Smith, Chris Carter, Andrew Trotter, Basseer Codabaccus, Jennifer Blair, Scott Parkinson SUSTAINABLE TROPICAL LOBSTER AQUACULTURE – OVERVIEW OF THE RESEARCH FOCUS
- 09:20 Andrew Trotter, Katarzyna Kropielnicka-Kruk, Tara Kelly, Quinn Fitzgibbon, Alan Henderson, Dean Giosio, Gregory Smith CULTURE SYSTEMS FOR MANAGING CANNIBALISM IN *Panulirus ornatus*
- 09:40 Tara Kelly, Quinn Fitzgibbon, Andrew Trotter, Dean Giosio, Tomer Ventura, Gregory Smith CANNIBALISM IN TROPICAL ROCK LOBSTER *Panulirus ornatus* JUVENILE AQUACULTURE
- 10:00 Eleanor Spencer, Quinn P. Fitzgibbon, Ryan D. Day, Andrew J. Trotter, Gregory G. Smith THE EFFECTS OF ACUTE SALINITY STRESS ON THE SURVIVAL AND HAEMOLYMPH BIOCHEMISTRY OF JUVENILE TROPICAL ROCK LOBSTER Panulirus ornatus
- **10:20** Quinn Fitzgibbon, Theodore Uy, Basseer Codabaccus, Gregory Smith THERMAL PHYSIOLOGY OF TROPICAL ROCK LOBSTER *Panulirus ornatus*; DEFINING PHYSOLOGICAL CONSTRAINTS TO HIGH TEMPERATURE
- 10:40 BREAK
- 11:00 Rachel Breslin, Andrew Trotter, Gregory Smith, Andrew Bridle UNCOVERING THE MECHANISMS OF TRAINED IMMUNITY IN *Panulirus ornatus*: INSIGHTS FROM IMMUNE GENE EXPRESSION AND ANTIMICROBIAL ACTIVITY
- 11:20 Alan Henderson, Ryder Jamson, Dean Giosio, Greg Smith COMPUTER VISION IDENTIFICATION OF INDIVIDUAL ADULT TROPICAL ROCK LOBSTERS *Panulirus ornatus* FROM DORSAL SURFACE MARKINGS
- 11:40 Charles Sutherland, Alan Henderson, Andrew Trotter, Dean Giosio, Greg Smith A NOVEL LOW-COST SPECTRAL SYSTEM TO SENSE APPROACHING ECDYSIS IN CULTURED JUVENILE TROPICAL ROCK LOBSTER *Panulirus ornatus*

12:00 Jennifer Blair, Scott Parkinson, John Breen, Sandra Infante-Villamil, Tony Barton, Steven Gill, Quinn Fitzgibbon, Chris Carter, Andrew Trotter, Basseer Codabaccus, Greg Smith

THE COMMERCIALISATION JOURNEY OF TROPICAL ROCK LOBSTER PRODUCTION FROM HATCHERY TO GROW-OUT

#### WELFARE IN AQUACULTURE

Wednesday, May 31 09:00 - 13:00 Room 1 Chairs: Krishna R. Salin, Marius Nicolini, Belinda Yaxley

- 09:00 Marius Nicolini, Kelly Watson, Amanda Deakin THE EVOLUTION OF FARM ANIMAL WELFARE: UNDERSTANDING AND EXPECTATIONS OF THE SUPPLY CHAIN FROM RETAILERS, INVESTORS, NGOS AND CONSUMERS
- 09:20 Kenidas Lukman, Anton Immink MAKING WAVES: ADVANCEMENTS IN AQUACULTURE WELFARE
- 09:40 Belinda Yaxley APPLIED WELFARE IN FINFISH AQUACULTURE
- 10:00 Win Surachetpong, Tuchakorn Lertwanakarn, Pau Badia Grimalt, Ana Silvia Pedrazzani, Murilo Quintiliano TACKLING WELFARE CHALLENGES IN TILAPIA FARMS IN SOUTHEAST ASIA
- 10:20 Salin Krishna R., Gabriel Arome Ataguba THE WELFARE OF FARMED GIANT FRESHWATER PRAWN *Macrobrachium rosenbergii*: FROM CULTURE TO THE TABLE
- 10:40 BREAK
- 11:00 Sunil Kadri, Johannes Kvam MONITORING WHOLE POPULATION WELFARE STATUS IN CAGES USING HYDROACOUSTICS
- 11:20 Alistair Douglas, Allan H. Bremner ANIMAL WELFARE: THE LINK BETWEEN HARVEST STRESS, QUALITY AND VALUE CHAIN PERFORMANCE
- 11:40 Sara Barrento, Murilo Quintiliano, Carla Molento, Ana Silvia Pedrazzani USING E-LEARNING TO IMPROVE FISH WELFARE
- 12:00 Maria Filipa Castanheira, Meritxell Diez-Padrisa THE USE OF CERTIFICATION SCHEMES TO ENSURE GOOD WELFARE PRACTISES IN THE AQUACULTURE INDUSTRY

# RAS AND CONTROLLED SYSTEMS

Wednesday, May 31 14:00 - 17:20 Room 2 Chairs: Ravi Fotedar, Ben Pope

14:00 Hyunsoo Choi, Taeho Kim APPLICATION OF CHITOSAN-BASED 4-HYDROXYBENZOIC ACID HYDROGEL TO REMOVE AND DETECT AMMONIUM FOR WASTEWATER TREATMENT IN RECIRCULATING AQUACULTURE SYSTEM (RAS)

#### 14:20 Mark Oliver

COMMERCIAL VIABILITY OF A MODIFIED PARTITIONED AQUACULTURE SYSTEM (PAS) CULTURING MURRAY COD *Maccullochella peelii peelii* IN SOUTH WESTERN QUEENSLAND

#### 14:40 Wilson Lennard

FEEDING PLANTS NUTRIENTS GENERATED BY FISH WASTE IN AQUAPONIC SYSTEMS POTENTIALLY COSTS UP TO FIVE TIMES MORE THAN STANDARD HYDROPONIC NUTRIENTS

#### 15:00 Mauricio G.C. Emerenciano, Cathryn O'Sullivan, Paula Lima, Joel Slinger, Chris Stratford, Tim Perrin, Johannf Zip, Steven Kakonyi, Dean Mussonc, Nicholas Bourne, Donna Glassop, Maya Arsic RECENT ADVANCES ON AQUAPONICS RESEARCH AT CSIRO: CHALLENGES AND FUTURE PERSPECTIVES

- 15:20 Cheng-Yuan Kuo, Tzong-Yueh Chen, Yi-Min Chen, Sheng-Chih Shen DEVELOPMENT AUTOMATED ALGAE DILUTION DEVICE FOR INTELLIGENT FRY PRODUCTION SYSTEMS
- **15:40** Nurul Amin, Md. Eilious Hosain, Aziz Arshad, Mohd Salleh Kamarudin EFFECT OF DIFFERENT CARBON SOURCES ON THE CULTURE OF A ROTIFER Brachionus plicatilis IN BIOFLOC SYSTEM

# SALMON AND TROUT

Wednesday, May 31 14:00 - 17:20 Room 3 Chair: Brad Evans

- 14:00 Leteisha Prescott, Jane Symonds, Seumas Walker, Matthew Miller, Jayson Semmens, Chris Carter LONG-TERM SUSTAINED SWIMMING IMPROVES SWIMMING PERFORMANCE IN CHINOOK SALMON Oncorhynchus tshawytscha WITH AND WITHOUT SPINAL SCOLIOSIS
- 14:20 Meredith Burke, Dragana Nikolic, Pieter Fabry, Hemang Rishi, Trevor Telfer, Sonia Rey Planellas INVESTIGATING SALMON BEHAVIOUR AND INTERACTIONS WITH THE ENVIRONMENT TO AUTOMATE FEEDING AND IMPROVE WELFARE IN AQUACULTURE FARMS
- 14:40 Vincent Lugert, Felix Teitge, Karina Klase, Dieter Steinhagen, Stefan Reiser A RELIABLE SET OF WELFARE INDICATORS FOR FARMED RAINBOW TROUT Oncorhynchus mykiss WITH PROVEN INTRA-, AND INTER-OBSERVER RELIABILITY
- 14:40 Luke T. Barrett, Jon Albretsen, Anne Sandvik, Tina Oldham COMMUNICATING APPLIED RESEARCH: A SHINY-BASED WEB APP FOR SALMON FARMERS
- 15:00 Petra Quezada, Richard Taylor, Khattapan Jantawongsri, Barbara Nowak, James Wynne GILL HISTOLOGY AND MICROBIOME ASSOCIATIONS ACROSS DIFFERENT HATCHERY REARED ATLANTIC SALMON
- 15:20 Morgan Brown, Roberto Carvalheiro, Richard Taylor, Wagdy Mekkawy, Timothy Luke, Lewis Rands, Damien Nieuwesteeg, Brad Evans, Nicholas Wade, Curtis Lind, Pollyanna Hilder PERFORMANCE THRESHOLDS FOR SEXUAL MATURATION ONSET IN ATLANTIC SALMON Salmo salar: A CANDIDATE FOR SELECTION ON REPRODUCTION?
- 15:40 Curtis Lind, Richard Taylor, Roberto Carvalheiro, Amanda Patchett, Klara Verbyla, Jeremy Carson, James Wynne, Brad Evans, Harry King LABORATORY TANK CHALLENGE PROVIDES CONSISTENT GENETIC AND GENOMIC ESTIMATES OF RESISTANCE TO YERSINIOSIS IN ATLANTIC SALMON Salmo salar

## **SKILLS AND TRAINING**

Wednesday, May 31 14:00 - 17:20 Room 1 Chairs: Geoff Barbaro, Morris Pizzutto

- 14:00 Morris Pizzutto, Leo Nankervis SETTING THE SCENE, RESULTS AND NEW APPROACHES FROM THE COOPERATIVE RESEARCH CENTRE FOR NORTHERN AUSTRALIA 2022 STUDY FUTURE PROOFING THE NORTHERN AUSTRALIAN AQUACULTURE INDUSTRY
- 14:20 David J. Cline AQUAPONICS AS A CROSS CURRICULAR TEACHING TOOL
- 14:40 Sheridan Wakefield THE IMPORTANCE OF INDUSTRY ENGAGEMENT IN MIDDLE SCHOOL EDUCATION PROGRAMS
- **15:00** Brando Westley, Bunug Westley, Rachel Mara GETTING THE WORKFORCE AND KEEPING THEM ONBOARD FOR NOW AND THE FUTURE: EXPERIENCES IN AQUACULTURE PROGRAMS IN THE TOP END
- 15:20 Steve Harrison INDUSTRY-DRIVEN VOCATIONAL TRAINING PARTNERSHIPS WITH SCHOOLS
- 15:40 BREAK
- 16:00 Geoff Barbaro, Morris Pizzuto, Leo Nankervis, James Garde, Rachel Mara, Brando Westley, Sally Roberts, Peter Cheesman HELP, I NEED SOMEBODY! HELP, NOT JUST ANYBODY! GETTING THE BEST OF TALENT INTO AQUACULTURE – THE OPPORTUNITY TO ASK YOUR QUESTIONS AND EXPLORE THE OPTIONS TO ATTRACT AND RETAIN FARMING, TECHNICAL, MANAGEMENT AND SCIENTIFIC STAFF, AND TRY TO IDENTIFY WHAT MAY BE THE BEST APPROACHES IN A VARIETY OF SITUATIONS

## QUARANTINE, CERTIFICATION AND BIOSECURITY

Wednesday, May 31 16:00 - 17:20 Auditorium 2 Chair: Kelly Condon

- 16:00 Brian Murphy, Melony J. Sellars THE ROLE OF BIOSECURITY IN HIGH DENSITY SHRIMP PRODUCTION
- 16:20 Jennifer Blair, Sandra Infante-Villamil, Scott Parkinson BIOSECURITY BEYOND COMPLIANCE TO DEVELOP A RESILIENT TROPICAL ROCK LOBSTER AQUACULTURE INDUSTRY IN AUSTRALIA
- 16:40 James Fensham, Matthew Landos, Paul Hick, Alison Tweedie, Jo-Anne Ruscoe ASSESSING THE BIOSECURITY RISK OF IMPORTED UNCOOKED, WHOLE AND HEAD-ON EVISCERATED, BARRAMUNDI AND NON-SALMONID FINFISH IN RELATION TO EXOTIC VIRUSES

## APPLIED ECOPHYSIOLOGY

Wednesday, May 31 16:00 - 17:20 Waterfront 3 Chair: Dean Jerry

- 16:00 Omar Mendoza-Porras, Simone Osborne, David Beale, Cedric Simon, Nicholas Wade POWERFUL INSIGHTS INTO NUTRITIONAL AND MOLECULAR RESPONSES IN SHRIMP AND SALMON USING PROTEOMICS AND METABOLOMICS
- 16:20 Sarah R. Catalano, Thibault P.R.A. Legrand, Melissa L. Wos-Oxley, Andrew P.A. Oxley COMPARING THE GUT MICROBIOME OF WILD YELLOWTAIL KINGFISH Seriola Ialandi TO FARMED INDIVIDUALS WITH UNDERLYING DISEASE CONDITIONS AND EXPLORING THE USE OF MODULATION TO MANIPULATE THE MICROBIOME TO IMPROVE HEALTH OUTCOMES

# **THURSDAY, June 1**

# **PRAWN / SHRIMP CULTURE**

Thursday, June 01 09:00 - 12:40 Waterfront 2 Chairs: Tony Charles, Zuridah Merican

- 09:00 Neil Arvin Bretaña, Maria Rosario Marin Marmol Kilrain, Vishwa Vijaysheel, Masum Patel, Yee Ting Chung, Mary Ann Solis, Neslly Marie Bretaña MODELLING HIGH SURVIVAL OUTCOMES IN VANNAMEI PRAWN FARMING USING DATA FROM CENTRAL PHILIPPINES
- 09:20 Barney Hines, Artur Rombenso, Minh Hoang Duong, Tùng Mã, Mauricio Emerenciano, Cedric Simon THE EFFECTS OF AMOUNT OF FEED AND STOCKING DENSITY ON THE INTENSIVE PRODUCTION OF *Penaeus vannamei*
- 09:40 Mauricio G.C. Emerenciano, Cedric Simon, Greg J. Coman INNOVATIONS, OPPORTUNITIES AND CHALLENGES WITH THE INTENSIFICATION OF *Penaeid* SHRIMP CULTURE
- 10:00 D. Allen Davis, Melanie Rhodes, Silvio Peixoto, Roberta Soares PASSIVE ACOUSTIC MONITORING AS A TOOL TO ASSESS FEED RESPONSE AND GROWTH OF SHRIMP IN PONDS AND RESEARCH SYSTEMS
- 10:20 Quyen Banh, James Wynne, Tung Hoang TREATMENT OF SLUDGE FROM INTENSIVE Penaeus monodon PONDS BY PROBIOTICS
- 10:40 BREAK
- 11:00 Paula C. Lima, Francisca Samsing Pedrals, Pollyanna Hilder, Mauricio Emerenciano, Artur Rombenso, James Wynne, Stuart Arnold, Tung Hoang THE ROLE AND MECHANISMS OF ACTION OF PROBIOTICS: PERSPECTIVES AND IMPLICATIONS IN PRAWN FARMING
- 11:20 Sarah Berry, Nick Wade, Artur Rombenso, Dana Campbell, Caroline Lee, Greg Coman DECAPOD CRUSTACEAN WELFARE – CONSIDERATIONS FOR AN EMERGING FIELD
- 11:40 Tansyn Noble, Tim Perrin, Greg Coman, James Kijas, Jess Langridge, Cass Hunter, Dorian Rondot, Simon Irvin TIGERS IN THE TOPEND: CHALLENGES AND OPPORTUNITIES FOR EXTENSIVE PRAWN FARMING IN NORTHERN AUSTRALIA

## ENVIRONMENTAL ISSUES AND MANAGEMENT

Thursday, June 01 09:00 - 15:40 Auditorium 2 Chairs: Catriona Macleod, Vaughan Higgins, Bibha Kumari

09:00 Bibha Kumari THE CURRENT STATUS OF ECOLOGY AND FISH DIVERSITY OF THE RIVER GANGES

#### 09:20 Fatima Zulfiqar BIOACCUMULATION AND HEALTH RISK ASSESSMENT OF TOXIC ELEMENTS IN MUSCLES OF DIFFERENT FISH SPECIES FROM DIFFERENT AREAS OF ASIA

- 09:40 Guillaume Drillet, Hua Juan Mo, Su Ting Ng, Shoofiyah Nur, Cheong Yan Ong, Sara Nur, Shumin Yu, Boon Seng Kong, Niranjala Perera, Raymond Ong, Wei Chern Foong, Umid Joshi ANALYSING MICROPLASTICS IN WATERS AND SEDIMENTS AROUND FARMS IN URBANIZED AREAS
- **10:00 Qiao-Fang Cheng**, Bo-Kai Liao, Hsiao-Chun Tseng AQUACULTURE MIGHT INCREASE THE AQUATIC GREENHOUSE GASES CONCENTRATIONS, CASE STUDY OF *Litopenaeus vannamei*
- 10:20 Gayan Gunaratne, Emma Lofthouse, Emma McCall, Harrison Carmody, Louise Bruce FROM INERT TRACERS TO DECISION SUPPORT: UNDERSTANDING CHEMICAL AND VIRAL DISPERSION IN AQUACULTURE USING MATHEMATICAL MODELS
- 10:40 BREAK
- 11:00 Camille White, Dianne Maynard, Gabrielle Walley, Megan Hartog, Jeff Ross DEVELOPMENT OF REMOTE METHODS FOR FACILITATING ENVIRONMENTAL BASELINES FOR AQUACULTURE
- 11:20 James Raeside, Anders Tengburg, Jarle Heltne, Penelope A. Ajani, Shauna A. Murray, Stefano Gargioli INNOVATIONS IN REMOTE TELEMETRY WATER QUALITY MONITORING AND ITS INFLUENCE ON IMPROVED AQUACULTURE MANAGEMENT
- 11:40 Heidi Alleway, Tiffany Waters, Robert Jones MONITORING FOR RESTORATIVE AQUACULTURE: MEASURING ENVIRONMENTAL BENEFITS ACROSS SPECIES, ECOSYSTEMS AND GEOGRAPHIES

- 12:00 Adam Brancher, Prue Brancher, Duncan Kreps KELP MARICULTURE'S POTENTIAL TO REDUCE NEGATIVE EFFECTS OF FINFISH AQUACULTURE ON WATER QUALITY
- 12:40 LUNCH
- 14:00 Harrison Carmody, Gayan Gunaratne, Emma McCall, Cemlyn Barlow, David Vale, Louise Bruce MARINE SPATIAL PLANNING TOOL FOR DIGITAL ENVIRONMENTAL IMPACT ASSESSMENT: CASE STUDY APPLICATION FOR THE SCOTTISH SALMON AQUACULTURE INDUSTRY
- 14:20 Catriona Macleod WHAT IS THE CIRCULAR ECONOMY, HOW DOES IT RELATE TO SUSTAINABILITY AND WHY DOES AQUACULTURE HAVE AN ADVANTAGE IN THIS SPACE?
- 14:40 Alison Turnbull, Steven Rust, Lizy Spanou, Deborah Gardner THE COSTS AND BENEFITS OF INTEGRATING MARINE BIOTOXIN RISK MANAGEMENT ACROSS MULTIPLE SPECIES IN TASMANIA
- **15:00** Binta Isyaku Usman, Rasheed Olatunji Moruf, S.M. Nurul Amin, Aziz Arshad GROWTH, MORTALITY, RECRUITMENT AND STOCK STATUS OF POTENTIAL AQUACULTURE SPECIES *Plotosus canius* IN THE COASTAL WATERS OF PORT DICKSON, PENINSULAR MALAYSIA
- 15:20 Leila Basti, Jiyoji Go, Kiyohito Nagai, Satoshi Nagai HARMFUL ALGAL BLOOMS AND AQUACULTURE: SHELLFISH, FISH, AND HUMAN HEALTH



## BROODSTOCK DEVELOPMENT AND MANAGEMENT

Thursday, June 01 09:00 - 12:40 Room 3 Chairs: Stewart Fielder, Salin Krishna

- 09:00 Artur Rombenso, Greg Coman, Steven Kakonyi, Sarah Berry, Ha Truong, Cedric Simon, Tung Hoang EFFECTS OF FEED TYPES AND FEEDING RATION ON REPRODUCTIVE PERFORMANCE OF FEMALE BROODSTOCK *Penaeus monodon*
- 09:20 Nicholas Tuckey, Sharon Ford, Warren Fantham, Annalise Runarsson, Liam Hegarty, Morgan Puklowski, Ross Jacobs, Greg Knox, Belinda Timms, Matthew J. Wylie, Damian Moran EVALUATION OF INDUCED LATE-WINTER SPAWNING ON THE GROWTH PERFORMANCE OF AUSTRALASIAN SNAPPER Chrysophrys auratus IN THE MARLBOROUGH SOUNDS
- 09:40 Kodai Fukunaga, Chihiro Yamauchi, Akihiro Takemura ARTIFICIAL MOONLIGHT INDUCES SPAWNING IN THE HONEYCOMB GROUPER Epinephelus merra, A LUNAR-SYNCHRONIZED SPAWNER
- 10:00 Elsa Cabrita, Francisca Félix, Elvira Fatsini, Daniel Duarte, Paulo J. Gavaia, Catarina C.V. Oliveira POSITIVE IMPACTS OF NUTRITIONAL SUPPLEMENTATION WITH DIFFERENT ANTIOXIDANT SOURCES IN MARINE FISH GAMETOGENESIS AND SPERM TRAITS
- 10:20 Adrien Marc, Jarrod L. Guppy, Julie Goldsbury, Donna Rudd, Holly S. Cate, Damien B.B.P. Paris, Dean R. Jerry THE INFLUENCE OF MALE FERTILITY ON SPAWNING PERFORMANCE AND LARVAL SURVIVAL DURING BARRAMUNDI *Lates calcarifer* MASS-SPAWNING EVENTS
- 10:40 BREAK
- 11:00 Pollyanna Hilder, David Blyth, Dean Musson, Chris Stratford, Nik Duyst, Stuart Arnold, Cedric Simon, Mat Cook GROWING AUSTRALIA'S PROTEIN PRODUCTION – DEVELOPMENT OF A NEW WHITE FLESH FISH SPECIES FOR AUSTRALIA: POMPANO *Trachinotus anak*

#### 11:20 Andrea Taylor

CAPTIVE SPAWNING AND REARING OF BLACK JEWFISH Protonibea diacanthus A NEW CANDIDATE FOR AQUACULTURE IN NORTHERN AUSTRALIA

### SUPPORTING WELL-BEING THROUGH MENTAL HEALTH AND PSYCHOLOGICAL SAFETY INITIATIVES

Thursday, June 1 09:00 – 12:40 Room 1 Chair: Jo Marshal

During this interactive session attendees will be taken on a journey to deepening understanding of well-being in the workplace. The session will be led by Jo Marshall who will share the story of success of key programs in Seafood including a Culture of Safety Program at the South Australian Research and Development Institute and the National Seafood Industry Mental Health Program – Stay Afloat. The Stay Afloat Program recently received a significant boost with Australia's Federal Government committing to a significant expansion and extension for two years. A fully immersive workshop will see participants develop knowledge on key aspects of mental health and how mental health intersects with physical and psychological safety at work. From the basics of looking after ourselves, to the role of team and leadership in creating a mentally healthy and safe workplace, through to a highly interactive introduction to the innovative world first industry led Sensemaking program, audience members will be engaged at every stage. Expert panellists from across the Seafood Industry will help guide participation through sharing their experiences and learnings along the way. Panellists will include

- Taryn Richards Owner Humpty Doo Barramundi
- Veronica Papacosta CEO Seafood Industry Australia
- Katherine Winchester CEO Northern Territory Seafood Industry Council
- Rikki Chesson National Workplace Health and Safety Leader Paspaley Pearling Company
- Lauren Thornton Extension Officer Fisheries Research and Development Corporation
- Heidi Mumme President Women in Seafood Australasia

Participants will leave not only with a greater understanding of the work that is being done in Australia, but methods of evaluation, emerging technologies and most importantly practical tools to action for their own wellbeing and safety and that of their teams.

### PACIFIC ISLAND AQUACULTURE

Thursday, June 01 09:00 - 15:40 Waterfront 1 Chairs: Geoff Allan, Leo Nankervis, Michael Phillips

- 09:00 Timothy Pickering, Steve Lindsay, Robert Lindley, Michelle Lam, Hugo Lassauce AQUACULTURE NEEDS, PRIORITIES, AND FUTURE DIRECTIONS IN THE PACIFIC ISLANDS REGION
- 09:20 Jesmond Sammut, Jes Sammut, Joshua Noiney, Debashish Mazumder, Joe Alois, Mike Aranka, Billy Kerowa, Jacob Wani ADDRESSING THE CHALLENGES OF INLAND FISH FARMING IN PAPUA NEW GUINEA

- 09:40 Joshua Noiney, Jes Sammut, Jacob Wani ESTABLISHMENT OF NILE TILAPIA Oreochromis niloticus SATELLITE HATCHERIES FOR IMPROVED FINGERLING PRODUCTION IN PAPUA NEW GUINEA
- 10:00 Jharendu Pant, Acacio Guterres, Silvino Gomes, Mario Pereira, Adrianu Dani F. Du Karmu, Lucas S. De Jesus, Angelo Pereira, Shwu Jiau Teoh, Ram C. Bhujel, Jagadish Timsina SUSTAINABLE SCALING OF AQUACULTURE IN TIMOR-LESTE: CURRENT STATUS, CHALLENGES AND FUTURE PRIORITIES
- 10:20 Daykin Harohau, Reuben Sulu, Billy Meu TILAPIA AQUACULTURE IN SOLOMON ISLANDS: STATUS, SUCCESSES, CHALLENGES AND OPPORTUNITIES
- 10:40 BREAK
- 11:00 Chinthaka Hewavitharane, Melody Vanukon, Timothy Pickering TWO PROMISING INDIGENOUS CANDIDATES FOR DIVERSIFICATION OF AQUACULTURE IN THE PACIFIC ISLANDS: TROPICAL FRESHWATER EELS Anguillidae AND MANGROVE OYSTERS Crassostrea/Saccostrea
- 11:20 Jamie Whitford, Karibanang Tamuera INVERTEBRATE MARICULTURE MINI HATCHERY DESIGN AND DEVELOPMENT IN THE PACIFIC NATIONS
- 11:40 Michael Phillips BUSINESS SOLUTIONS FOR SMALLHOLDER AQUACULTURE IN THE PACIFIC REGION
- 12:00 Salote Waqairatu-Waqainabete, Monal Lal, Laisiasa Cavakiqali, Theo Simos, Paul Southgate, Mai Alagcan, Howard. Hall NAVIGATING CHALLENGES AND OPPORTUNITIES IN TILAPIA ENTERPRISE DEVELOPMENT: LESSONS FROM A FIJI AGRIBUSINESS PROJECT
- 12:20 Kevin Fitzsimmons TILAPIA PRODUCTION AND MARKETS - A GLOBAL PERSPECTIVE
- 12:40 Geoff L. Allan, Leo Nankervis, Michael Phillips ACIAR REVIEW OF THE BARRIERS TO THE EXPANSION OF TILAPIA AQUACULTURE FOR DEVELOPMENT IN PNG, SOLOMON ISLANDS AND TIMOR LESTE
- 13:00 LUNCH
- 14:00 Geoff L. Allan, Leo Nankervis, Michael Phillips PACIFIC ISLAND AQUACULTURE PANEL SESSION

# REGULATION

Thursday, June 01 09:00 - 12:40 Room 2 Chair: Ian Dutton

- 09:00 Hamish McDonagh-Aiken, Luis Filardi Carneiro CLIMATE RISK, FINANCIAL DISCLOSURES AND AUSTRALIAN AQUACULTURE
- 09:20 Cameron Scadding A CONVERSATION ON THE AUSTRALIAN SEAFOOD INDUSTRY: ITS COMMITMENT TO TRANSPARENCY AND ENVIRONMENTAL, SOCIAL AND GOVERNANCE TOPICS (ESG)
- 09:40 Nisha Sharma, Leah Macdonald, Rodney Edmundson THE ROLE OF CHEMICAL REGULATION IN THE AQUACULTURE INDUSTRY
- 10:00 Jeff Ross, Beth Strain, Camille White, Megan Hartog, James Hortle, Alex Coutts, Scott Hadley, Adam Davey, David Moreno ENVIRONMENTAL MANAGEMENT OF AQUACULTURE: THE DEVELOPMENT OF 'FIT FOR PURPOSE' ENVIRONMENTAL MONITORING FOR SALMONID FARMING IN TASMANIA, AUSTRALIA
- 10:20 BREAK
- 11:00 Ian Dutton, Lynn Albert, John Adams, Eric Brain, Laura Fatovich THE 2023 TASMANIAN SALMON PLAN: PROCESS AND REGULATORY IMPLEMENTATION PRIORITIES
- 11:20 Matthew Hoare, Lauren Holmes, Leonardo Mantilla, Kate Rodda, Mark Doubell, Gavin Begg, Mehdi Doroudi, Shane Roberts UTILISING AQUACULTURE ZONE POLICIES TO STRENGTHEN SOUTH AUSTRALIAN MARINE AQUACULTURE DEVELOPMENT
- 11:40 Matthew Hoare, Lambertus Lopez, Kate Rodda, Leonardo Mantilla, Shane Roberts STREAMLINING THE ASSESSMENT AND APPROVAL PROCESS FOR TOURISM DEVELOPMENTS WHICH PROMOTE SOUTH AUSTRALIAN AQUACULTURE

## FISH GROWOUT, NUTRITION AND POST-HARVEST TECHNOLOGY

Thursday, June 01 09:00 - 10:40 Waterfront 3 Chair: Igor Pirozzi

- 09:00 Beichen Yang, Matthew Jago, Thomas Mock, Michael Salini, Giovanni Turchini, David Francis ENERGY FORTIFICATION STRATEGY: EFFECT OF DIETARY OLEIC ACID SUPPLEMENTATION ON ADIPOGENESIS AND ENERGY DEPOSITION IN ATLANTIC SALMON Salmo salar L.
- 09:20 Ade Kurniawan, Abdul Gani, Endang Muhammad, George M. Numberi, Endang Y. Papare, Asti Asti, Otto Sada CHARACTERISTICS OF THE IMPACT OF THE USE OF FEED ON TILAPIA Oreochromis niloticus CULTIVATION USING A DYNAMICS SYSTEM APPROACH
- 09:40 Vincent Lugert, Felix Teitge, Karina Klase, Dieter Steinhagen, Stefan Reiser OF RELIABILITY, COMPLEXITY, AND PERSPECTIVE: THE CASE OF FIN CONDITION AS A WELFARE INDICATOR IN FARMED FISH – RESULTS FROM A DOUBLE-BLIND STUDY ACROSS DIFFERENT STAKEHOLDER GROUPS
- 10:00 Ram C. Bhujel, Anusha D. Perera REPLACE OF FISHMEAL BY FIELD CRICKET (*Gryllus bimaculatus*) MEAL (FCM) IN THE DIETS FOR SEX-REVERSAL AND NURSING OF NILE TILAPIA (*Oreochromis niloticus*)
- 10:20 Ram C. Bhujel DISSEMINATION OF TILAPIA HATCHERY TECHNOLOGY WORLDWIDE

# FUNCTIONAL FEED INGREDIENTS

Thursday, June 01 11:00 - 15:40 Waterfront 3 Chairs: Louise Adams, Giovanni Turchini

- 11:00 Barbara Nuic Vidigal, Artur Rombenso, Alyssa Bowden, Craig Franklin, Rebecca Cramp THE EFFECTS OF AMINO ACID BALANCE BY GLUTAMINE SUPPLEMENTATION ON THE COST OF DIGESTION AND GROWTH OF ATLANTIC SALMON Salmo salar L.
- 11:20 Thi Minh Thu Vo, Marianne Aag, Florence P. Willora, Gabriel Ossenkamp, Mette Sørensen, Jørgen Lerfall EFFECTS OF ASTAXANTHIN FROM *Haematococcus pluvialis* AS SUBSTITUTE FOR SYNTHETIC ASTAXANTHIN IN ATLANTIC SALMON Salmo salar
- 11:40 Sekhou Cisse, Rôger Oliveira e Silva, José Fernando Bibiano Melo, Joseph Bernot, Julia Laurain, Guillaume Le Reste, Mohamed el Amine Benarbia EFFECTS OF GRADED LEVELS OF STANDARDIZED NATURAL CITRUS EXTRACTS IN FEED ON GROWTH AND SURVIVAL OF NILE TILAPIA Oreochromis niloticus BEFORE AND AFTER A CHALLENGE WITH Aeromonas hydrophila
- 12:00 Ruth Garcia Gomez, Maria-Merce Isern Subich, Waldo Nuez Ortin IMPROVED PERFORMANCE OF TROPICAL MARINE FISH *Epinephelus fuscoguttatus* THROUGH THE APPLICATION OF A HEALTH PROMOTING ADDITIVE INTENDED FOR THE PREVENTION OF ECTOPARASITE INFESTATIONS
- 12:20 Amine Chaabane, Marion Allaoua, Jean-François Gabarrou, Loc Tran, Khin Khit, Khanh Nguyen, YIN Thant, Saw Yadanar, Trang Nguyen, Tuat Nguyen PLANT EXTRACTS AS AN ALTERNATIVE TO FIGHT EMS
- 13:00 Ruth Garcia Gomez, Maria-Merce Isern Subich, Waldo Nuez Ortin, Martha Mamora PREVENTIVE STRATEGIES BASED ON HEALTH PROMOTING ADDITIVES TO COPE WITH MULTIPLE INFECTIONS IN SHRIMP FARMING

# **BREAKING THE BARRIERS – WISA**

Thursday, June 01 14:00 - 15:40 Room 2 Chair: TBA

Women in Seafood Australasia (WISA) is hosting a free Workshop designed to Break Barriers to Women in Aquaculture.

This workshop is open to all women and men from all parts of the aquaculture industry, whether you work in getting seafood to the table, or work with the industry to help it thrive. In this facilitated workshop, we will discuss shared critical issues impacting aquaculture women. We will problem solve together to find tangible recommendations that you, your community, organisation, and the broader industry can implement.

# AFRICAN AQUACULTURE

Thursday, June 01 14:00 - 15:40 Room 3 Chair: Blessing Mapfumo

14:00 John Walakira, Etienne Hinrichsen, Victoria Boit, Heike Baumüller AFRICAN AQUACULTURE: THE FUTURE FOR SMALL-SCALE FISH FARMING