



13th Asia Pacific Marine Biotechnology Conference (APMBC) combined with the
5th Australia New Zealand Marine Biotechnology Society Conference (ANZMBS)

PROGRAM

Adelaide Convention Centre

North Terrace, Adelaide, South Australia 5000, Australia

Please note this APMBC and ANZMBS Program is subject to change

Monday		2nd October 2023
4:00 pm	Registration Opens	Foyer C1
6:00 pm	Welcome Mixer	Hall N
6:20 pm	Welcome to Country & Welcome Addresses. Robert Taylor	Hall N
8:00 pm	End	Hall N

Tuesday

3rd October 2023

8:15 am	Registration Open		Foyer C1
8:30 am	Welcome & Conference Opening		City Rooms 1,2 & 3
9:10 am	Chairs: Prof Russell Hill , University of Maryland, USA	Plenary 1: Prof Margo HAYGOOD , University of Utah, USA Bacterial symbionts of wood-eating mollusks (shipworms) are an exciting new source of bioactive molecules and enzymes for cellulose processing	City Rooms 1,2 & 3
9:40 am	Prof Song Qin , Yantai Institute of Coastal Zone Research, China	Plenary 2: Prof You-Jin JEON , Jeju National University, Korea By-products delivered from fish processing plants in Korea and their utilizations	City Rooms 1,2 & 3
10.10 am	MORNING TEA		Hall N
Concurrent Sessions			
	City Rooms 1,2 & 3	City Room 4	Room L1
	A1. Marine Biodiversity & Resources	E1. Marine Bioprocessing & Biorefinery	H1. Aquaculture & Fisheries
10:40 am – 12:00 pm	Chairs: Chris Battershill University of Waikato, New Zealand Qi Yang CSIRO, Australia	Chairs: Kim Lee Chang CSIRO Environment, Australia Xiaoke HU Yantai Institute of Coastal Zone Research, China	Chairs: Lone Høj Australian Institute of Marine Sciences, Australia Hidehiro Kondo Tokyo University of Marine Science and Technology, Japan
10:40 am	Suhelen Egan (Keynote) Microbial communities on seaweeds and their role of bacteria for seaweed health University of New South Wales, Australia	Yu-Zhong Zhang (Keynote) Novel marine microbial enzymes: characteristics, structure, catalytic mechanism, and application potential Shandong University, China	Sasimanas Unajak (Keynote) Challenge of fish vaccine development for global aquaculture Kasetsart University, Thailand
11:00 am	Chris Battershill (212) Nutritional profiling of six New Zealand seaweeds – The many benefits within University Of Waikato	Liu Yu (57) High-efficient CO2-to-protein bioconversion by oleaginous <i>Coccomyxa subellipsoidea</i> through light quality shift and nitrogen supplementation strategy South China University of Technology, China	Qiang Wan (84) Development of effective vaccine and vaccination program for prevention scuticociliatosis in Korean olive flounder aquaculture Jeju National University, Korea
11:15 am	Po-yuan Cheng (100) Investigating the ecosystems of Plastisphere and its attractiveness to marine organisms using Oxford Nanopore Technologies National Taiwan Ocean University, Taiwan	Kuan-Yu Chen (110) Development of microbial surfactin production technology and aquaculture application National Taiwan Ocean University, Taiwan	Xianhui Ning (30) Lnc161-mediated ceRNA crosstalk regulates antibacterial responses through a dual role of autophagy and lipid metabolism in lower vertebrates Nanjing Normal University, China
11:30 am	Ying-Ning Ho (134) The investigation of the biodiversity of marine “plastisphere”: collecting and recovering novel microbial metagenome-assembled genomes by rapid Oxford Nanopore sequencing National Taiwan Ocean University, Taiwan	Sharmin Rakhi (137) Tailoring conditions for improved growth and lipid accumulation in microalgae with Aggregation-Induced Emission (AIE) based photosensitiser Flinders University, Australia	Vanity Kurnia (82) Supplementation of Exopolysaccharide from <i>Bacillus altitudinis</i> improve gut microbiota and innate immunity against pathogen infection in Nile tilapia (<i>Oreochromis niloticus</i>) National Pingtung University of Science and Technology, Taiwan
11:45 am	Caixia Wang (283) Ecological implications of heavy metal disturbance on the microbial N-transformation process in the coastal area Binzhou Medical University, China		Gen Hua Yue (157) Tbx21 gene and its association with resistance against NNV in Asian seabass National University of Singapore, Singapore
12:00 pm	Chairs: Dr Justin Coombs , Marine Bioproducts CRC, Australia	Plenary 3: Dr Pia WINBERG , Venus Shell Systems, Australia Webs of connectivity in marine biodiscovery: The glycan connection	City Rooms 1,2 & 3
12:30 pm	Prof Wei Zhang , Flinders University, Australia	Plenary 4: Prof Zhong Lin WANG , Georgia University of Technology, USA/ Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China Triboelectric nanogenerators for self-powered sensing and blue energy harvesting	City Rooms 1,2 & 3
1:00 pm	LUNCH		Hall N

Tuesday - 3rd October 2023 – continued

	City Rooms 1,2 & 3	City Room 4	Room L1
	A2. Marine Biodiversity & Resources	D1. Platform Technologies -omics in Marine Biotechnology	j1. sustainability- innovative technologies & new species
2:00 pm – 3:20 pm	Chairs: Suhelen Egan University of New South Wales, Australia Jen-Leih Wu Inst. Cellular & Organismic Biology, Academia Sinica, Taiwan	Chairs: Ben Hankamer University of Queensland, Australia Min Zhao University of The Sunshine Coast, Australia	Chairs: Mariko Iijima National Inst. Advanced Industrial Sci. & Technology, Japan Kirsten Benkendorff Southern Cross University, Australia
2:00 pm	Chris Battershill (Keynote) Phylogenetic correlates: a smart biodiscovery strategy University of Waikato, New Zealand	Bernard Degnan (Keynote) Insights into the biocontrol of crown-of-thorn starfish from environmental RNA University of Queensland, Australia	EonSeon Jin (Keynote) Harnessing the potential of microalgal strains: Advancing a sustainable industry and beyond Hanyang University, Korea
2:20 pm	Samuel Mwamburi (77) Unravelling the genomic blueprint of <i>Siganus fuscescens</i>: Insights into aquaculture potential and evolutionary signatures Tokyo University of Marine Science and Technology	Ziping Zhang (185) A genome-wide association study of growth traits in "Green Pacific hybrid abalone" (<i>Haliotis discus hannai</i> ♀ × <i>H. fulgens</i> ♂) Fujian Agriculture & Forestry University, China	Shuchuang Dong (167) Towards the development of an innovative aquaculture pen: a sub-scale fish tank utilizing flexible sheets University of Tokyo, Japan
2:35 pm	Ryota Wagatsuma (91) Comprehensive analysis of phage diversity in Suruga Bay, Japan, through droplet-based single-virus genomics Waseda University, Japan	Su Mei Wu (7) Maternal effects of EEDCs on estrogen-signaling pathways of female zebrafish and the development of the ceratohyal cartilage of its offspring National Chiayi University of Taiwan, Taiwan	Shenyi Bai (156) Experimental investigation of the motion response of a sheet fish tank in waves University of Tokyo, Japan
2:50 pm	Qi Yang (148) Unravelling the specificity and functional features of the endosymbiotic microbiome in marine sponges CSIRO, Australia	Yohei Nishikawa (87) Large-scale single-genome sequencing of microbes and bacteriophages in Suruga Bay, Japan National Institute of Advanced Industrial Science and Technology, Japan	Bowen Zhang (35) Unleashing mesopelagic zone: potential contribution to sustainable nutrition University of Tasmania, Australia
	B1. Marine Biodiscovery-Complementary Medicine	D2. Platform Technologies -omics in Marine Biotechnology	H2. Aquaculture & Fisheries
3:20 pm – 4:40 pm	Chairs: Changyun Wang Ocean University of China, China Noraznawati Ismail Universiti Malaysia Terengganu, Malaysia	Chairs: Bernard Degnan University of Queensland, Australia Kui Hong Wuhan University, China	Chairs: Han-Ching Wang National Cheng Kung University, Taiwan Sasimanas Unajak Kasetsart University, Thailand
3:20 pm	Song Qin (Keynote) Blue homology of medicine and food: from theory to practice Yantai Institute of Coastal Zone Research, China	Tetsushi Mori (Keynote) Cell-penetrating peptides: an alternative approach for efficient biomolecule delivery in bacteria Tokyo University of Agriculture and Technology, Japan	Han You Lin (Keynote) A polyamine carbon quantum dots (CQD) used for control bacterial disease in a shrimp farm National Taiwan University, Taiwan
3:40 pm	Zhiqing Liu (22) Discovery of Marine Natural Products as STAT3 Inhibitors for the Treatment of Cancer Ocean University of China, China	Min Zhao (50) A multi-OMICs resource for targeting drug chemo-resistance in cancers utilising red algae natural products University of The Sunshine Coast, Australia	Carmen Phoon (21) Understanding coral disease pathogenesis: the role of bacterial mucus penetration Newcastle University, U.K,

Tuesday - 3rd October 2023 – continued			
	City Rooms 1,2 & 3	City Room 4	Room L1
3:55 pm	Hui Li (128) Marine Traditional Chinese medicine inheritance and innovation project Shandong University of Trad. Chinese Medicine	Zhengong Sui (10) Characterization of ubiquitin system and their regulation on the tetrasporophyte development of <i>Gracilariopsis lemaneiformis</i> (Rhodophyte) Ocean University of China, China	Pongsakorn Sukonthamarn (45) Hemocytin, an innate immune protein, facilitates <i>Enterocytozoon hepatopenaei</i> spore aggregation and possibly induces prophenoloxidase activating cascade in <i>Litopenaeus vannamei</i> Chulalongkorn University, Thailand
4:10 pm	Hong Wang (282) Global analysis of the secondary metabolic potential of marine prokaryotes Zhejiang University of Technology, China	Hyun-Sik Yun (203) Screening of autonomously replicating sequences in the marine diatom <i>Phaeodactylum tricorutum</i> toward arterial chromosome development University of Tsukuba, Japan	Hidehiro Kondo (131) The challenge of developing a vaccine against skin flukes in <i>Seriola</i> fish species Tokyo University of Marine Science and Technology, Japan
4:25 pm	Prof Bin WU (Keynote) Bioactive secondary metabolites from oceanic hydrothermal vent sediments-derived fungi Zhejiang University, China	Wenli Li (107) Genome mining of marine microbial natural products and their biosynthesis Northwest Agriculture and Fisheries University, China	Rolissa Ballantyne (154) Effects of adenosine 5'-monophosphate-activated protein kinase on the immunity and resistance of white shrimp, <i>Penaeus vannamei</i> to <i>Vibrio alginolyticus</i> National Pintung University of Science and Technology, Taiwan
4:40 pm	AFTERNOON TEA		Hall N
5:00 pm	Students & ECRs Forum		City Rooms 1,2 & 3
7:00 pm	Pub Crawl		Adelaide

Wednesday

4th October 2023

8:15 am	Registration Open		Foyer C1
8:30 am	Chairs: Prof Goro Yoshizaki , Tokyo University of Marine Science and Technology Japan	Plenary 5: Prof Shugo WATABE , Suzuhiro Kamaboko Honten Co. Ltd., Japan Health benefits of fish proteins and their future prospects	City Rooms 1,2 & 3
9:00 am	Prof You-Jin Jeon , Jeju National University, Korea	Plenary 6: Prof Michéle PRINSEP , University of Waikato, New Zealand Impact of phosphate on coral skeletons and introduction of accumulated phosphate as a land-based stress Indicator	City Rooms 1,2 & 3
9:30 am	MORNING TEA & CONFERENCE PHOTOGRAPH		Hall N
Concurrent Sessions			
	City Rooms 1,2 & 3	City Room 4	Room L1
	L1. Food Security & Blue Agriculture	F1. Algal Biotechnology	J2. Sustainability: Ecosystems & Circular Economy
10:00 am – 11:25 am	Chairs: You-Jin Jeon Jeju National University, Korea Shugo Watabe Suzuhiro Kamaboko Honten Co. Ltd., Japan	Chairs: Diane Purcell CSIRO, Australia Munish Puri Flinders University, Australia	Chairs: Jian Qin Flinders University, Australia Zhijia Lin Zhejiang Wanli University, China
10:00 am	Damien Belobrajdic (Keynote) Feeding our microbes for gut health and beyond CSIRO, Australia	Iwane Suzuki (Keynote) Synthesis of Novel Modified Fatty Acids in a Cyanobacterium University of Tsukuba, Japan	Catriona Macleod (Keynote) Why aquaculture should embrace the circular economy as an opportunity to both demonstrate and improve environmental, economic and societal sustainability: This is a win-win scenario. University of Tasmania, Australia
10:20 am	Young-Sang Kim (165) Utilization of Fucoindan b from <i>Sargassum horneri</i> as functional foods ingredient for intestinal health improvements Jeju National University, Korea	Jimin Hyun (123) The potent antioxidant effect of Neutrased-assisted hydrolysate from the by-product of heat-resistant <i>Pyropia yezoensis</i> by molecular weight change Jeju National University, Korea	Cucui Feng (119) Mapping the global carbon emissions of marine sectors Zhejiang University, China
10:35 am	Jian Li (16) Large Scale Cultivation of Marine Microalgae Might Provide a Viable Solution for Sustainable Food Production Panzhuhua University, China	Xiaobo Li (176) Biosynthesis of the high-value keto-carotenoid fucoxanthin Westlake University, China	Kohju Yamakawa (129) Production of Tokyo bitterling, a species on the brink of extinction, using frozen germ cells Tokyo University of Marine Science and Technology, Japan
10:50 am	Miansong Zhang (12) Significant changes in nutritional composition & metabolite profiles of sea cucumber <i>Apostichopus japonicus</i> by microwave pretreatment Flinders University, Australia	Su Chern Foo (24) "Unveiling the Mysteries of Fucoxanthin Breakdown: Changes to colour, antioxidant activity and resultant metabolites" Monash University Malaysia, Malaysia	Melody Anne Ocampo (162) First Philippine port biological baseline survey using ecological, microbiological and molecular approaches University of The Philippines Manila, Philippines
11:05 am	Georgina Dowd (Keynote) The role of cellular agriculture in future foods from the ocean Plant and Food Research, New Zealand	Kirsten Heimann (Keynote) Exploiting the remediation potential of diazotrophic cyanobacteria for improving weathered agricultural soils Marine Bioproducts CRC, Australia	Ryan Stallard (Keynote) The role of aquafeed in driving sustainable development: trade-offs and opportunities Skretting Australia Ltd., Australia
	B2. Marine Biodiscovery- Complementary Medicine	D3. Platform Technologies -omics in Marine Biotechnology	J3. Sustainability- Seafood Safety and Toxins
11:30 am – 12:35 pm	Chairs: Michele Prinsep University of Waikato, New Zealand Zhi-Hong Wen National Sun-Yat Sen University, Taiwan	Chairs: Tsuyoshi Tanaka Tokyo University of Agriculture & Technology, Japan Tzong-Yueh Chen National Cheng Kung University, Taiwan	Chairs: Vincent Bulone Flinders University, Australia Ichiro Nakayama Japan Fisheries Research Agency, Japan

Wednesday – 4th October 2023 – continued

	City Rooms 1,2 & 3	City Room 4	Room L1
11:30 am	Changyun Wang (Keynote) Excavation and Rectification of Marine Traditional Chinese Medicinal Bioresources: Opportunities and Challenges Ocean University of China, China	Kui Hong (Keynote) Sesterterpene of mangrove fungus <i>Aspergillus ustus</i> 094102: from biosynthesis to synthetic biology Wuhan University, China	Kirsten Benkendorff (Keynote) Healthy or Hazardous? Using mass spectrometry to assess environmental impacts on seafood. Southern Cross University, Australia
11:50am	Qi Wang (160) Anti-Inflammatory Effects of C-Phycocyanin Shandong University of Traditional Chinese Medicine, China	Mika Nishimura (59) Development of bacterial single-cell RNA-seq technology to reveal bacterial transcriptional heterogeneity in response to environmental changes Waseda University, Japan	Amna Ashfaq (152) Detection of Genes possibly involved in Ciguatoxins (CTXs) production from two <i>Gambierdiscus</i> species (<i>G.polynesiensis</i> and <i>G.holmesii</i>) University of Technology Sydney, Australia
12:05 pm	Jinshan Tang (127) Chemical synthesis of sorbicillinoid analogues and their anti-inflammation potency through inducing NLRP3 protein degradation Jinan University, China	Che-Chun Chen (89) How does high-temperature environment affect cold-water fish? Temperature effects on intestinal bacteria and metabolomics in <i>Paralichthys olivaceus</i> using multi-omics technologies National Taiwan Ocean University, Taiwan	Danling Tang (260) Remote sensing of wind-pump impact on algal blooms Southern Marine Science and Engineering Laboratory, China
12:20 pm	Tianfang Wang () Identification of iodinated proteins from the red seaweed <i>Asparagopsis taxiformis</i> by proteomic analysis University of the Sunshine Coast, Australia	Kana Jitsuno (151) Comparative single-cell genomics of <i>Atribacterota</i> JS1 in the Japan Trench hadal sedimentary biosphere Waseda University, Japan	Qing Xia (214) LLTRAGL peptide alleviates zebrafish inflammatory bowel disease via regulating multiple pathways Qilu University of Technology, China
12:35 pm	LUNCH		Hall N
1:30 pm	Chairs: Prof Zhenmin Bao , Ocean University of China, China	Plenary 7: Prof Xiaoke HU , Yantai Institute of Coastal Zone Research, China Development of marine biological products based on the enzymolysis-fermentation coupling technology	City Rooms 1,2 & 3
2:00 pm	Prof Haruko Takeyama , Waseda University, Japan	Plenary 8: Prof Han-Ching WANG , National Cheng Kung University, Taiwan From Challenges to Solutions: Advancing Shrimp Aquaculture for a Sustainable Future	City Rooms 1,2 & 3
	City Rooms 1,2 & 3	City Room 4	Room L1
	B3. Marine Biodiscovery- Pharmaceuticals	E2. Marine Bioprocessing & Biorefineries	H3. Aquaculture & Fisheries
2:35pm – 3:550 pm	Chairs: Song Qin Yantai Institute of Coastal Zone Research, China Russell Hill University of Maryland, USA	Chairs: Youhong Tang Flinders University, Australia Yu-Zhong Zhang Shandong University, China	Chairs: Abigail Elizur University of the Sunshine Coast, Australia Jadranka Nappi The University of New South Wales, Australia
2:35 pm	Bomi Ryu (Keynote) Exploring the structural characteristics and potential health benefits of Fucoidan from <i>Sargassum</i> species: A study on gut microbiota modulation Pukyong National University, Korea	Colin Barrow (Keynote) Marine bioproducts and bioprocessing to promote a circular economy. Deakin University, Australia	Lone Hoj (Keynote) Prokaryote treatments to support coral aquaculture for reef restoration Australian Institute of Marine Science, Australia
2:55 pm	Junying Ma (125) The Genome Mining and Genetic Engineering of Deep Sea Derived <i>Actinomyces</i> SCSIO ZH16 South China Sea Institute of Oceanology, China	Adarsha Gupta (213) Optimisation of pineapple extract assisted cell disruption of wet thraustochytrid biomass to improve lipid extraction Flinders University, Australia	Han-jia Lin (46) Developing Marine Ciliate as A Live Feed with Biological Protective and Nutrient Concentration Effects National Taiwan Ocean University, Taiwan

Wednesday – 4th October 2023 – continued

	City Rooms 1,2 & 3	City Room 4	Room L1
3:10 pm	Russell Hill Bacterial symbionts of marine invertebrates: Potential sources of novel pharmaceuticals University of Maryland, USA	Youhong Tang (204) Aggregation-induced emission aggregates enabled microalgae studies towards commercialization Flinders University, Australia	Ichiro Nakayama (153) Development of Next Generation Sustainable Aquaculture System in Japan Japan Fisheries Research Agency, Japan
3:25 pm	Wei Zhang (121) Cytochrome P450 guided novel structure discovery from deep-sea actinomycetes, Shandong University, China	Xuekui Xia (86) Directed preparation of active substances against drug-resistant bacteria based on sea cucumber body and co-epiphytic microorganisms Qilu University of Technology, China	Ryosuke Yazawa (149) Development of surrogate broodstock technology in Scombridae species using sterile hybrid mackerel as recipients Tokyo University of Marine Science and Technology, Japan
3:40 pm	Lan Liu (70) Marine Natural product: from mangroves to coral reefs Sun Yat-sen University, China	Yong-Ting Kang (62) The molecular regulatory mechanism exploration of special polyamine on the osmotic adaptation of marine diatom <i>Phaeodactylum tricornutum</i> National Taiwan Ocean University, Taiwan	Huayong Que (194) Genetic diversity of the Fujian oyster <i>Crassostrea angulata</i> from the coast of Fujian province of China Jimei University, China
3:55 pm	AFTERNOON TEA		Hall N
4:20 pm	Women in Marine Biotechnology Leadership Forum		City Rooms 1,2 & 3
6:00 pm	Close		
7:00 pm	Conference Dinner		Ballroom

Thursday

5th October 2023

8:45 am	Registration Open		Foyer C1
9:00 am	Chairs: Prof Tadashi Matsunaga , Tokyo University of Agriculture and Technology	Plenary 9: Prof Ben HANKAMER , University of Queensland, Australia	City Rooms 1,2 & 3
9:30 am	Prof Jen-Leih Wu , National Taiwan Ocean University, Taiwan	Plenary 10: Prof Haruko TAKEYAMA , Waseda University, Japan Single cell-based multi-omics for understanding the characteristics and function of environmental microbes	City Rooms 1,2 & 3
10:00 am	MORNING TEA		Hall N
Concurrent Sessions			
	City Rooms 1,2 & 3	City Room 4	Room L1
	B4. Biodiscovery- Natural Products from Marine Fungi	F2. Algal Biotechnology	C1: Marine Biomaterials
10:30 am – 11:40 am	Chairs: Hou-Wen Lin Shanghai Jiaotong University, China Sandie Degnan University of Queensland, Australia	Chairs: Maria Barbosa Wageningen University, The Netherlands Iwane Suzuki University of Tsukuba, Japan	Chairs: Mathew Cumming New Zealand Tadashi Matsunaga Tokyo University of Agriculture and Technology, Japan
10:30 am	Pingyuan Wang (Keynote) Peniadenisteroid A, a steroid alkaloid from <i>Penicillium janthinellum</i> SH301: Isolation and semi-synthesis Ocean University of China, China	Dong Wei (Keynote) Breeding of <i>Auxenochlorella pyrenoidosa</i> mutants for protein production by fermentation South China University of Technology, China	Yoshiko Okamura (Keynote) Biogenic nanoparticles-green process for semiconductor quantum dots. Hiroshima University, Japan
10:50 am	Cui-Xian Zhang (118) Deep excavation on bioactive secondary metabolites from marine symbiotic and epiphytic filamentous fungi University of Chinese Medicine, China	Diane Purcell (135) Identified bioactive peptides for potential hypertension treatment from the brown seaweed Oarweed (<i>Laminaria digitata</i>) CSIRO, Australia	Han-Jia Lin (40) Upsized vortex fluidic device(vfd) enhancement of mechanical properties and the microstructure of biomass-based biodegradable films Zhejiang Ocean University, China
11:05 am	Jiji Kannan (155) Bioprospecting and metabolite profiling of marine fungal extracts: exploring their potential as immunostimulants National Taiwan Ocean University, Taiwan	Faezeh Ebrahimi (275) Seaweed Polyphenols and Gut Microbiome Modulation University of Melbourne, Australia	Hayley Stent (143) Electrospun salmon collagen nanofibres: Cross-linking for food and biomedical applications. University of Otago, New Zealand
11:20 am		Munish Puri (271Keynote)) Tuning oleaginous marine microbes for producing single-cell oils and high-value bioactives. Flinders University, Australia	Mathew Cumming (Keynote) Biofouling to biomaterials: Investigation into chitin-based bioplastics using marine biofouling species Plant & Food Research, New Zealand
	B5. Marine Biodiscovery	SARDI South Australian Research & Development Institute Showcase	H4. Aquaculture & Fisheries
11:45am – 1:10 pm	Chairs: Haruko Takeyama Waseda University, Japan Bin Wu Zhejiang University, China	Chairs: Mike Steer SARDI Aquatic Sciences, Australia Steven Clarke SARDI Aquatic Sciences, Australia	Chairs: Keiichiro Koiwai Tokyo University of Marine Science and Technology, Japan Kunlaya Somboonwiwat Chulalongkorn University, Thailand

Thursday – 5th October 2023 – continued

	City Rooms 1,2 & 3	City Room 4	Room L1
11:45 am	Hou-Wen Lin (Keynote) Discovery and mechanism of new drug leads from sponge symbiosis Shanghai Jiao Tong University, China	Sasi Nayar (Keynote) Phycocerythrin: A novel pigment from seaweeds for the food and beverage industry SARDI Aquatic Sciences, Australia	Kunlaya Somboonwivat (Keynote) Global expression and functional characterization of shrimp piRNAs during WSSV infection Chulalongkorn University, Thailand
12:05 pm	Noraznawati Ismail (104) Marine Bio-fouling; Does it matter? Universiti Malaysia Terengganu, Malaysia	Bryony Tucker (255) Application of seaweed polysaccharides, fucoidan and laminarin, for weaner pig health and welfare. SARDI Aquatic Sciences, Australia	Keiichiro Koiwai (51) scRNA-seq analysis of hemocytes of penaeid shrimp reveals virus infection reduces AMP-expressing hemocytes Tokyo University of Marine Science and Technology, Japan
12:20 pm	Irdeana Baharuddin (130) Discovering eco-friendly anti-biofilm agents: Novel insights into marine sediment-associated bacteria as promising anti-biofilm agents against marine microfoulers National Taiwan Ocean University, Taiwan	Shane Roberts (266) Ecologically sustainable development of a new aquaculture species (seaweed) in South Australia SARDI Aquatic Sciences, Australia	Shu-wen Cheng (175) Unveiling direct interactions between novel viral proteins and isocitrate dehydrogenase 1 during white spot syndrome virus infection National Cheng Kung University, Taiwan
12:35 pm	Fangyi Chen (190) A novel antimicrobial peptide from marine crab <i>Scylla paramamosain</i> exhibiting potent antifungal activity against <i>Cryptococcus neoformans</i> Xiamen University, China	Sarah Catalano (252) Gut microbiome of wild and farmed yellowtail kingfish - using modulation to manipulate the microbiome to improve health outcomes. SARDI Aquatic Sciences, Australia	Yun-Ru Chiang (15) Immunohistochemistry (IHC) assay was used in assisting the pathology diagnosis of infectious precocity virus (IPV) infection in <i>Macrobrachium rosenbergii</i>. National Taiwan University, Taiwan
12:50pm	Xiaotao Hou (181) Investigation on the anti-rheumatoid arthritis efficacy and material basis of <i>Ipomoea pes-caprae</i> based on its traditional use Guangxi University of Chinese Medicine, China	Penny Ezzy (250) Improvements in cryopreservation protocols for bivalve oocytes and larvae SARDI Aquatic & Livestock Sciences, Australia	Wisarut Junprung (93) HSP70 is a damage-associated molecular pattern that by binding to lipopolysaccharide and β-1,3-glucan-binding protein activates the prophenoloxidase system in shrimp Chulalongkorn University, Thailand
1:05 pm	LUNCH		Hall N
1:45 pm	Society Meetings - City Rooms 1,2 & 3	ANZMBS AGM - City Room 4	
2:15 pm	3-minute Poster Presentations		City Rooms 1,2 & 3
3:30 pm	AFTERNOON TEA		Hall N
	City Rooms 1,2 & 3	City Room 4	Room L1
	J4. Sustainability- Climate Change & Carbon Sequestration	Investment Forum	H5. Aquaculture & Fisheries
4:00 pm – 6:00pm	Chairs: Catriona Macleod University of Tasmania, Australia EonSeon Jin Hanyang University, Korea	Chairs: Pierre Erwes BioMarine, France Rob Lewis Science Without Bounds, Australia	Chairs: Gen Hua Yue University of Singapore, Singapore Yonghua Sun Institute of Hydrobiology, China
4:00 pm	Mariko Iijima (Keynote) Impact of phosphate on coral skeletons and introduction of accumulated phosphate as a land-based stress indicator National Inst. Advanced Industrial Sci. & Technology, Japan		Yonghua Sun (Keynote) Endogenous biosynthesis of docosahexaenoic acid (DHA) promotes gamete quality of zebrafish Institute of Hydrobiology, China

Thursday – 5th October 2023 – continued

	City Rooms 1,2 & 3	City Room 4	Room L1
	J4. Sustainability- Climate Change & Carbon Sequestration	Investment Forum continued*	H5. Aquaculture & Fisheries
4:20 pm	Yuka Yokoi (117) Development of growth-promoting technology for microalgae by using calcium silicate hydrate Tokyo University of Agriculture and Technology, Japan	Chairs: Pierre Erwes BioMarine, France Rob Lewis Science Without Bounds, Australia	Sho Hosoya (69) Low fishmeal diet can modify genetic architecture underlying growth performance and heterobothriosis resistance in the tiger pufferfish <i>Takifugu rubripes</i> University of Tokyo, Japan
4:35 pm	Paul Kwangho Kwon (182) Enhancement of sea forestation by providing soluble iron from a steel by-product and its chelating agent, polyphenol RIIST, Korea, Korea		Ming Fang (205) Study and application of genomic selection for multiple traits in large yellow croaker Jimei University, China
4:50 pm	Ko Yasumoto (170) An innovative CO₂ mineralization method using waste seawater and biogenic polyamines Kitasato University, Japan		Qifan Zeng (188) Development of genomic selection technologies in shrimp and scallop breeding Ocean University of China, China
5:05 pm	Russell Hill (Keynote) Bacterial symbionts associated with marine alga <i>Nannochloropsis oceanica</i> optimized for carbon dioxide sequestration from power plant flue gases University of Maryland, USA		Songlin Chen (Keynote) Biotechnological Innovation and Breeding Progress of Marine Fish in China Yellow Sea Fisheries Research Institute, China
5:25 pm	Close	6:00 Close	5:25 Close

Friday

6th October 2023

8:15 am	Registration Open		Foyer C1
8:30 am	Chairs: Prof Rob Lewis , Science Without Borders Australia	Plenary 11: Mr Pierre ERWES , Biomarine, France	City Rooms 1,2 & 3
9:00 am	Dr Pia Winberg , Venus Shell Systems Ltd.	Plenary 12: Prof Wei ZHANG , Flinders University, Australia Circular Blue Bioeconomy by Design-Empowered Marine Bioindustry 3.0+	City Rooms 1,2 & 3
Concurrent Sessions			
	City Rooms 1,2 & 3	City Room 4	Room L1
	C2. Marine Biomaterials	F3. Algal Biotechnology	L2. Food security & Blue Agriculture
9:30 am – 10:55 am	Chairs: Dietmar Hutmacher Queensland University of Technology, Australia Han-Jia Lin National Taiwan Ocean University, Taiwan	Chairs: Pia Wenberg Venus Shell Systems Ltd., Australia Jian Li Panzhuhua University, China	Chairs: Georgina Dowd Plant and Food Research, New Zealand Damien Belobrajdic CSIRO, Australia
9:30 am	Dietmar Hutmacher (Keynote) Convergence of Tissue Engineering and Marine Biology Queensland University of Technology, Australia	Helen Fitton (Keynote) By pre-recorded video (title TBC) Venus Shell Systems Ltd, Australia	Eun Kyung Park (Keynote) Prospects and Trends of Algae-derived ingredients for Cosmetic and Food industry in Korea Athena Co. Ltd, Korea
9:50 am	Caitlin Berry-Kilgour (199) Decellularised seaweed as a novel biomaterial for treatment of skin wounds University of Otago, New Zealand	Wenlei Wang (189) Identification of a candidate gene for the orange coloration of the economically important seaweed <i>Pyropia haitanensis</i> Jimei University, China	Zetty Norhana Balia Yusof (11) Seaweed Extracts with Antifungal and Biostimulatory Effects: The Next Generation Formulation Towards Sustainable Crop Production Universiti Putra Malaysia, Malaysia
10:05 am	Ryoto Tomoe (139) Control of magnetosome membrane lipid composition to improve G protein-coupled receptor activities on the magnetosomes Tokyo University of Agriculture and Technology, Japan	Person Pesona Renta (56) Condensed Molasses Solubles for Microalgae Cultivation: Feasibility and Growth Optimization of <i>Aurantiochytrium limacinum</i> BL10 National Cheng Kung University, Taiwan	
10:20am		Xiaoxiao Zou (183) Physiological and molecular responses of <i>Caulerpa lentillifera</i> to temperature stress and evaluation of a low-temperature-tolerant strain Institute of Tropical Bioscience & Biotechnology, China	Suvimol Charoensiddhi (247) Emerging prebiotics from marine macroalgae and their gut microbiome modulation and metabolite production Kasetsart University, Thailand
10:35 am	Min Zhou (Keynote) Microalgae-based drug delivery system Zhejiang University, China	Maria Barbosa (9 Keynote) Hypes, hopes and the way forward for microalgal biotechnology Wageningen University, The Netherlands	Hafiz Suleria (274) Seaweed as a functional food ingredient: digestibility, bioaccessibility, and bioavailability challenges University of Melbourne, Australia
10:55 am		MORNING TEA	Hall N
11:25 am		Awards & Prizes	City Rooms 1,2 & 3
11:50 am		Closing Ceremony	City Rooms 1,2 & 3
12:20 noon		Conference Ends	