



DIRECTORY OF EXPERT

School of Fisheries and Aquaculture Sciences

www.fisha.umt.edu.my

Directory of Expert
School of Fisheries and Aquaculture Sciences
Universiti Malaysia Terengganu

Directory of Expert is a database of research interests of PPSPA academic staff. This directory lists names of academic staff who are eligible to supervise research students in different areas of expertise. Universities, Research Centre and Agencies, Research Grant Funder, prospective postgraduate students, members of the media and general community can use this directory to identify PPSPA's research experts.

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School of Fisheries and Aquaculture Sciences
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Malaysia





Dean's Foreword

*"We learn, we share,
we research & we discover -
Moving towards an excellent
academic centre in Fisheries
and Aquaculture Sciences"*

The School of Fisheries and Aquaculture Sciences (FiSHA), Universiti Malaysia Terengganu (UMT) comprises a family of highly motivated academicians, supporting staffs and students who are ardent towards the advancement of knowledge in the field of fisheries and aquaculture sciences. Our school upholds the vision to be a centre of academic excellence in fisheries, aquaculture, conservation ecology and aquatic environment by providing quality teaching, research, and outreach programs to enhance fisheries resource and management nationally and internationally. We are offering seven degree programs which includes of Diploma in Fisheries, Bachelor Degree in Fisheries Science, Bachelor Degree in Aquaculture, Master of Sustainable Tropical Fisheries and Master of Aquaculture (by Coursework), Master of Science and PhD (by research) in either fisheries or aquaculture. As a leading institution in academic excellence in fisheries and aquaculture, our school FiSHA is well equipped with modern teaching facilities with fully air-conditioned lecture halls, advance laboratories and hatcheries complex for teaching and research to disseminate recent advance knowledge in fisheries and aquaculture sciences. FiSHA has a strong expertise in the field of Fisheries and Aquaculture as listed in this directory with more to return from study leave in this coming years. FiSHA is responsible to serve the nation through the dissemination of knowledge and sharing experience all over the world. Together, worldwide networking and mutual globalize collaboration with others excellent international institution, FiSHA strive to provide excellence in teaching, research and knowledge sharing, thus remains FiSHA as a productive and vibrant centre for fisheries and aquaculture studies in Malaysia. We 'FiSHA' always look forward to work together with relevant parties to bring the School of Fisheries and Aquaculture Sciences of UMT to greater heights globally.

Prof. Dr. Mazlan Abd. Ghaffar

Dean

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Major Field

Aquaculture

Expertise

Hatchery Technology

Specialization

Fish Breeding, Larval Rearing

Research Interest

Main research is on the propagation of Malaysian mahseer, *Tor tambroides*, a high value as well as the endangered fish species due to over exploitation either for food or sport fishing. The focus is on female broodstock since the gonad did not develop in captivity. For marine organism, studies on the fry production of mud crab, *Scylla* sp. through enhancement of broodstock maturation and larval rearing improvement has been undertaken. For both projects, the primary objective is to produce fry for restocking purposes before development of aquaculture for both species.

Publication

1. Scopus ID : 26666488900
2. Google Scholar : Abol Munafi Ambok Bolong

Professional Membership

1. Asian Fisheries Society
2. World Aquaculture Society
3. Malaysian Fisheries Society

Networking

1. Can Tho University, Vietnam
2. Prince of Songkla University, Thailand



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Major Field Aquaculture
Expertise Fish Breeding Technology
Specialization Fish Breeding

Publication

1. Scopus ID : 39961482800

Professional Membership

1. Malaysian Fisheries Society
2. Bulletin of Japanese Society of Scientific Fisheries

Networking

1. Prince of Songkla University, Thailand

Research Interest

My research interest in aquaculture focuses on fish breeding technology that includes induced breeding, cross-breeding, triploidy induction, fish sperm cryopreservation and larval rearing. I pioneered the study of cross-breed Keli (*Clarias gariepinus*) and baung (*Mystus nemurus*) to produce KEBANG as well as *Pangasionodon hypophthalmus* and *Pangasius nasutus*. My research also involves the effect of probiotic bacteria on the slow growing grouper and other fish species.



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Field

Fisheries

Expertise

Fish Biology

Specialization

Ichthyology, Fish Behaviour, Fish Physiology

Research Interest

My research interest is focused on the physiology and biology of fishes in response to climate changes. This field of research required detail understanding of fishes biology and physiology and specific organ function. Development of resiliency in response to climate changes parameters such as temperature and salinity in many fishes are species specific. Conducting this research in the field are cumbersome due to many un-control variable in the surrounding. Therefore laboratory validation of the fishes response to various climate changes parameters has expanded greatly due to the development of high-throughput experimental methodologies. These experimental methods provide the keys to a greater understanding of resiliency in response to climate changes parameters. These approaches can discover truly novel bio-physiology, and I am committed to apply the results of the experiment in the real world system. Other research interests I have explored in the past few years were the eco-biology of our fascinating giant mudskipper and it associated co-existing smaller mudskipper species and development of resiliency amongst the selected estuarine fishes species.

Publication

1. Scopus ID : 6508246447
2. Researchgate : Mazlan A.G.
3. Google Scholar : Dr Mazlan Abd Ghaffar

Professional Membership

1. Ichthyological Society of Japan
2. Marine Biology Association of United Kingdom
3. Malaysian Fisheries Society
4. Asean Fisheries Society

Networking

1. Mie University, Mie Japan
2. National Museum for Science and Nature Tokyo, Japan
3. University of Kagoshima, Japan
4. University of Hokkaido, Japan
5. Institute for East China Sea Research, Japan



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Major Field Veterinary
Expertise Immunology, Histology
Specialization Immunopathology, Vaccinology

Publication

1. Scopus ID : 6507445852
: 55957435300
2. Researchgate : Mohd Effendy Abd Wahid
3. Google Scholar : Effendy, A.W.M.

Networking

1. South Bretagne University, France
2. Soka University, Japan
3. Tokyo University, Japan
4. Herriot Wyatt University, UK
5. Cambridge University, UK

Research Interest

Development of marine natural bio-prospecting for mucosal immunology in small ruminant against respiratory bacteria pathogens (i.e. pneumonic pasteurellosis, haemorrhagic septicaemia). This includes adjuvant and compounds from aquatic resources to improvise the vaccine delivery system. My team also focuses on studying the potential of innate immune responses in protection against aquatic bacteria pathogen in shellfish and teleost. The reactions and reverse effects of host tissues towards the application these compounds were also studied. The safe and sound formulation of marine natural products, as well as the bio-prospecting derived products for nutraceutical, cosmaceutical were of interest, especially for the compounds that expedite the wound healing process. At the moment, I am also studying the potential of different microalgae species as marine-based bioproduct in collaboration with UPM, UniSel, Tokyo University, Technology Institute of Tokyo and Soka University under COSMOS Sastreps Research Interest Group from 2016 to 2020.



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Major Field

Veterinary

Expertise

Microbiology

Specialization

Aquatic Animal Health, Bacteriology

Research Interest

My research largely focuses on aquatic animal health, involving disease surveillance, pathogen isolation, identification and characterization, diagnostic (detection), therapy, disease control and prevention. The aquatic animal pathogens that my team has worked on include *Vibrio* spp, *Mycobacterium* spp, *Streptococcus* spp, *Edwardsiella tarda*, *Aeromonas hydrophila*, *Elizabethkingia* spp, *Aphanomyces* invadans (epizootic ulcerative syndrome, EUS) and viruses (KHV, ISKNV, RSIV, NNV, WSSV, MBV, IHNV, HPV, TSV, IMNV, YHV, etc). My team has done extensive works on the extraction of bioactive compounds from mangrove and herbs as alternative antimicrobials. We are currently working on highly effective probiotic against early mortality syndrome (EMS)/ acute hepatopancreatic necrosis disease (AHPND) due to *Vibrio parahaemolyticus*, as well as other vibrio infections. We are also working on broad-spectrum vibriolytic bacteriophage cocktail as potential biocontrol of vibriosis in shrimp and marine fish cultures, including EMS and luminous vibriosis.

Publication

1. Scopus ID : 6505727629
2. Google Scholar: Najiah Musa

Networking

1. Centex Shrimp, Mahidol University, Thailand
2. Yellow Sea Fisheries Research Institute, China
3. Center for Coastal Fisheries and Habitat Research, USA
4. University of Aberdeen, UK
5. Prince of Songkla University, Thailand



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Major Field Zoology
Expertise Parasitology, Marine Biology
Specialization Fish Parasitology, Fish Disease

Publication

1. Scopus ID : 12796764300
2. Researchgate : Faizah Shaharom
3. Google Scholar : Faizah Shaharom-Harrison

Networking

1. Hungarian Academy of Science, Hungary
2. Can Tho University, Vietnam
3. Universitetet i Bergen, Norway
4. National Institute of Oceanography, India
5. University College of London, UK

Research Interest

My research focuses on the parasites of fish, particularly their identification, description and ecology. My research examines the species richness of fish parasites from a range of hosts and sites within hosts (in particular parasites of the intestines, gills and body surface). I am also currently interested in the potential utility of parasite species as biological indicators of heavy metal pollution in aquatic and marine ecosystems and elucidating the physiological mechanism of metals uptake by parasites from their hosts.



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Major Field

Fisheries

Expertise

Fish Biology and Ecology

Specialization

Taxonomy, Fishery Management and Stock Assessment

Research Interest

My research interests focus on fisheries population dynamics assessment, fisheries management and aquaculture. With aquatic food resources under pressure and declining it is vital to ensure their long-term sustainability and develop sustainable green aquaculture for selected species to ensure aquatic food security.

Publication

1. Scopus ID : 7801528575
2. Researchgate : M. Azmi Ambak
3. Google Scholar : M. Azmi Ambak

Networking

1. University of Rhode Island, USA
2. Bangor University, UK
3. University of Stirling, UK
4. University of Tokyo, Japan



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Major Field Marine Science
Expertise Pollution Studies
Specialization Water and Sediment Quality Management, Marine Pollution

Publication

1. Scopus ID : 23009008600
2. Researchgate : Yiisang Hii
3. Google Scholar: Yii Siang Hii

Professional Membership

1. Society of Environmental Toxicology and Chemistry
2. American Chemistry Society

Networking

1. Simon Fraser University, Canada
2. Heriott Watt University, UK
3. Universitas Hasanuddin, Indonesia
4. National University of Singapore, Singapore

Research Interest

Marine pollution has become one of the most critical problems of mankind in the last century. The problem has impacted sustainability of the food chain and poses serious threat to the food security, both the sufficient supply and food safety. The problem involves vast disciplines and expertise, from fundamental toxicants dose responses mechanisms, environmental management and modeling down to policy-making, conservation and awareness. Our research team is interested in investigating the effect of organic pollutants on ecological resilience especially the coral reef ecosystem, particularly on the effect of the xenobiotic compounds on the homeostatic balance of antioxidants and the importance of polyunsaturated fatty acid in counteracting the pollutants toxicity. Other than laboratory simulation, we also monitored the level of pollution in and its impact on organisms across different trophic levels in marine environment. We also research into bioremediation of pollutants. The research outputs were used to assist the policy maker in managing the marine environment.



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Major Field Veterinary
Expertise Parasitology, Pathology
Specialization Fish Parasitology, Histopathology

Research Interest

My main interests focus on the fish health specializing in the fish parasite and pathology. My recent research is to understand the biology, taxonomy and lifecycle of *Acanthocephalan* from freshwater fish in Kenyir Lake. Besides, my team work on the other fish parasites diversity from native and introduced fish population from the lake. I am also developing an antiparasite and wound healing product from *Melaleuca cajuputi* extraction. The recent research on *Melaleuca* is still ongoing on fish and freshwater prawn health. As a parasitologist, I also work on identification of parasites from other animals. I have discovered two new reports such as *Amblyomma javanense* in Malaysia and *Lernaea cyprinacea* which infected native fish from Western Australia as well as 2 new species of parasites from Australia, *Pseudocapillaria nannupensis* and *Dermoergasilus occidentalis*.

Publication

1. Scopus ID : 35183049700
2. Researchgate : Marina Hassan

Professional Membership

1. Australian Society for Parasitology
2. Veterinary Association Malaysia
3. Malaysian Association of Veterinary Pathology
4. Malaysian Nature Society

Networking

1. Murdoch University, Australia



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Major Field Aquaculture
Expertise Aquatic Invertebrate Culture and Biology
Specialization Hatchery and Seed Production Technology

Publication

1. Scopus ID : 26666814000
2. Researchgate : Mhd Ikhwanuddin
3. Google Scholar: Mhd Ikhwanuddin

Professional Membership

1. Asian Council Science Editor
2. Asian Fisheries Society
3. Malaysian Fisheries Society
4. Live DNA Society
5. Malaysian Invention and Design Society

Networking

1. Tokyo University of Science and Technology, Japan
2. Prince of Songkhla University, Thailand
3. Hasanuddin University, Indonesia
4. University of the Philippines Visayas, Philippines
5. James Cook University, Australia

Research Interest

My research primarily focuses on aquatic invertebrate culture, reproductive biology, breeding and reproduction. Invertebrate's aquaculture refers to crustaceans cultivated in freshwater, marine and brackish environments to enhance seed production. The information of fundamental biology and culture technology can offer better understanding in grow out and seed technologies towards sustainable management strategies of aquaculture production. My current projects involve the crustacean culture such as Portunid's crab, spiny lobster, shrimp and prawn.



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Major Field

Fisheries Science

Expertise

Aquatic Biology

Specialization

Ecology of Aquatic Fauna (Bivalvia)

Research Interest

My research is focused mainly on ecology of aquatic fauna in marine and estuarine habitats particularly on marine molluscs ecology relevant to environmental aspects of the area. I am also particularly interested in holistic study of marine bivalve. Assessing an impact of physical construction such as wave barriers and artificial reefs along coastal area on faunal assemblage and distribution is another angle of my current work. I have published more than 60 papers and two books. Apart from doing research on aquatic ecology, I am also interested in community development project to improve life quality of villagers living under vulnerable conditions. Projects on healthy fishing community financially supported by Ministry of High Education Malaysia (MoHE) under project of Knowledge Transfer Programme (KTP) developing model for fishing village are under operation.

Publication

1. Scopus ID : 26029151500
2. Researchgate : Mohd_Hanafi_Idris
3. Google Scholar: Mohd Hanafi Idris

Professional Membership

1. Asian Fisheries Society
2. National Shellfisheries Association
3. Malaysian Fisheries Society

Networking

1. Japan Society for Promotion of Science, Japan
2. Universiti Putra Malaysia, Malaysia



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Major Field

Biological Science

Expertise

Physiology

Specialization

Crustacean Reproductive Physiology and Osmoregulation

Publication

1. Scopus ID : 7801631802
2. Researchgate : Safiah Jasmani
3. Google Scholar: Safiah Jasmani

Networking

1. The University of Tokyo, Japan

Research Interest

My research interest is in crustacean physiology, especially reproductive physiology/endocrinology and nutrition of crustacean/fish species as they relate to management in both culture and natural environments. The primary focus of my research program is on basic and applied aspects of crustacean reproductive physiology and endocrinology. A major obstacle for development and intensification of shrimp and crab aquaculture industry is the failure of captive broodstock to reproduce predictably. By manipulating the environmental factors such as diet/nutrition the reproductive performance of broodstock in captivity is studied. Formulation of suitable feed for the maturation of broodstock is crucial in crustacean aquaculture. Acquiring a reliable alternative protein source in replacement of fish meal will contribute to the sustainability of crustacean aquaculture industry.



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Major Field

Aquaculture

Expertise

Immunology

Specialization

Molecular chaperones, disease and stress management

Research Interest

My research centers on studying the functional role of heat shock proteins (Hsps) in aquatic organisms and recent work in my laboratory revealed that induction of Hsps promotes thermotolerance and protects fish and shellfish against a wide variety of abiotic and biotic stressors. In the latter, aquatic organisms' resistance to pathogenic bacterial infection is enhanced by stimulation of the immune response, upon elevating endogenous Hsp70 by non-lethal heat shock and through administration of heat-shocked bacteria enriched in DnaK. We have revealed that both techniques represent efficient strategies to control bacterial infection and may serve as useful alternatives to antibiotic use in aquaculture. My lab has embarked on studying the relationship between Hsps, pathogen resistance and the immune system in aquatic organisms, with application of new tools and existing molecular methodologies to dissect their complex integration. The framework of my studies involves international collaborators from Ghent University in Belgium. Findings obtained and the novel method used for disease control in aquaculture has been filed for WIPO patent application in 2009, which the patent is now pending for approval. Work on RNA interference in the brine shrimp *Artemia* and the White-leg shrimp to study the putative role of Hsp70 in disease tolerance had started recently and this is conducted in a collaboration framework with Dalhousie University, Canada.

Publication

1. Scopus ID : 55421413800
2. Researchgate : yik sung Yeong
3. Google Scholar : Yeong Yik Sung

Professional Membership

1. ASEAN-Fisheries Education Network
2. World Aquaculture Society

Networking

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2. Dalhousie University, Canada
3. University of Stirling, UK
4. Tianjin Agricultural University, China
5. Kasetsart University, Thailand



Alfian Zein

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Major Field Fisheries
Expertise Socio-economic of Fisheries
Specialization Socio-economic of Fisheries

Research Interest

My research interest focuses on the socio-economic of fisheries and their environment; study about socio-economic of fishery house hold (house hold structure, income and expenditure), fisherwomen study, poverty alleviation studies, empowerment of fishermen and fish farmer, fisheries development studies; feasibility study of fisheries project (fishing industry and aquaculture bussiness); fish marketing and exports; fishing ports studies and others. I am also interested with the fisheries regulation study, impact of fisheries industry into the environment.

Publication

1. Researchgate : Alfian Zein
2. Google Scholar : Alfian Zein

Professional Membership

1. Indonesia Fisheries Professional Organization
2. Professional Scientist of Rural Regional Development, Indonesia
3. Padang Chambers and Commerce
4. Professional Scientist of Oceanography, Indonesia

Networking

1. University of Bremen, Germany
2. Bogor Agricultural University, Indonesia
3. Bung Hatta University, Indonesia
4. Fisheries and Marine Affairs Ministry, Indonesia



Emienour Muzalina Mustafa

Dr.



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Major Field Aquatic Botany
Expertise Algae Physiology and Biochemistry
Specialization Algae genetic ecotoxicology, Agro-Industrial waste bioremediation

Research Interest

My research interest is in the area of algal ecophysiology. The primary research is on the impact of global change on the algae that form the basis of most freshwater and marine food chain, that aims to elucidate how algae response and adapt with the stress environment. Most recently, my research is focused on the effect of environmental stress such as chemical contamination and climate change on the growth, biochemical composition, DNA damage and oxidative stress enzymes activity in the microalgae and seaweed collected from the tropical and polar region. I also have interest in more applied aspects of algal biology such as using algae for bioremediation of agro-industrial wastewater and growing algae for biofuel and other useful products.

Publication

1. Researchgate : Emienour Muzalina
2. Google Scholar: Emienour Muzalina

Networking

1. Cambridge University, UK
2. University Centre in Svalbard, Norway
3. University of Tasmania, Australia
4. Monash University Victoria, Australia
5. Xiamen University, China



Helena Khatoon

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Major Field Fisheries
Expertise Microalgal Production
Specialization Microalgal Utilization

Publication

1. Scopus ID : 20433538900
2. Researchgate : Helena Khatoon
3. Google Scholar: Helena khatoon

Professional Membership

1. Asian Fisheries Society
2. Malaysian Fisheries Society

Networking

1. Universiti Putra Malaysia, Malaysia
2. Universiti Sultan Zainal Abidin, Malaysia

Research Interest

My research interests include isolation and identification of microalgae and use of microalgae as bioremediator and feed for aquaculture. In addition, I am also using photobioreactors for mass culture of microalgae. Harvested microalgal biomass is being used as fish and shrimp feed. The extracted lipid and pigments from microalgal biomass are being used for biotechnology purposes. I am the co-inventor of 2 (two) bioremediation systems and 1 (one) microalgae mass production system which has been filed for patent. I am working on immobilized microalgal cells to treat aquaculture wastewater. Findings obtained and the novel methods used for wastewater treatment have been filed for WIPO patent application in 2010. Furthermore, I am also doing research on bioflocs as feed supplement for aquaculture organisms.



Ivan Koh Chong Chu

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Major Field Aquaculture
Expertise Seed Production Technology
Specialization Sperm Cryopreservation

Research Interest

My primary research focus is on aquaculture seed production with particular interest on the development of technology and the artificial breeding for fishes of commercial importance. I am particularly interested in the development of sperm preservation of marine species in Malaysia. Application of sperm preservation will spearhead sustainable and genetically sound hatchery production. My focus in artificial breeding lies in discovering the effect of internal (genetic, hormones) and external factors (temperature, photoperiod, water quality, lunar cycle) that affect broodfish maturation and reproduction. The fundamental knowledge will open doors for the successful commercialization and culture of potential aquaculture species. My interest also extends toward hybridization, and its application in current aquaculture industry. My current projects include the development of grouper breeding through understanding the establishment of cryopreservation. The effect of cryopreservation on sperm DNA integrity, the relationship between seasonal variations on sperm microbiota and sperm quality are several topics of interest.

Publication

1. Scopus ID : 36545185500
2. Researchgate : Ivan Chong Chu Koh
3. Google Scholar: ivan koh chong chu

Networking

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2. Prince of Songkla University, Thailand



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Major Field Veterinary
Expertise Microbiology
Specialization Bacteriology

Publication

1. Scopus ID : 56196359000
2. Google Scholar: Laith A. A
: Laith Razzak

Networking

1. University of British Columbia, Canada
2. University of Baghdad, Iraq

Research Interest

My research interest is on Veterinary Public Health where the emphasis is on biotechnology basis of effectiveness of mangrove plant in terms of controlling bacterial infection in fish and evaluating fish response against pathogenic bacteria through metabolomics profiles of infected fish. My work also determines the pathogenicity using histopathological approach as well as work on parasitic infestation in ruminants and the immune states of the host feed on different level of protein. I have a diversified practical and research experience in microbiology, with emphasis on metabolomic approaches to study the interactions between intracellular bacteria with host cells. I have done extensive work on the use of applied microscopy and molecular. My current research is focused on studying the potential relationships that exist between virulence and environmental fitness in food- and water-borne bacterial pathogens and biosynthesis of nanoparticles from bacteria. Plant based products, extracts from tropical plants are being used to control bacterial infections in fish and aquaculture animals as alternatives to antibiotics. Currently, the use of probiotics as a valid alternative to antibiotics in aquaculture is being conducted to prevent high mortality due to infection and diseases.



Liew Hon Jung

Dr.



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Major Field Aquaculture
Expertise Fish Physiology
Specialization Comparative Physiology and Endocrinology

Research Interest

My primary research focus is on fish physiology. My research examines the interactions of fish with their environment at all levels from the molecular to the ecological. I am particularly interested in the sublethal effects of natural factors (temperature, oxygen, water chemistry, swimming, feeding, social interactions) and anthropogenic pollutants (ammonia and climate change) on organismal function, and their adaptation, metabolic compromising strategies and/or evolution by which animals confront to extreme environments both in captive and wild conditions. Particular projects at present consider fuel usage, nitrogenous waste production, metabolic strategy, hormonal balancing, osmoregulation, ionoregulatory and the kinetics electrolyte transporter or co-transporter in fish challenge to different stressors as model study to understand their adaptability and/or evolutionary in order to establish a sustainable good aquaculture practice and fisheries welfare management. Addition to my personal research interest/hobby is to match around with living aquatic jewelry (ornamental fish), especially the reef fishes on their interpersonal social interaction, feeding, reproductive behaviour, reproductive performance and their adaptability to environmental change.

Publication

1. Scopus ID : 54791154700
2. Researchgate : Hon Jung Liew
3. Google Scholar : Hon Jung Liew

Professional Membership

1. Society for Experimental Biology
2. Malaysian Fisheries Society

Networking

1. University of Antwerp, Belgium
2. University of British Columbia, Canada
3. University of Messina, Italy
4. University of Alberta, Canada
5. National Museum of Marine Biology and Aquarium, Taiwan



Lilian Wong

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Major Field Fisheries
Expertise Fish Genetics
Specialization Fisheries Genomics

Publication

1. Scopus ID : 35591127600
2. Researchgate : Lilian Wong
3. Google Scholar: Li Lian Wong

Networking

1. Auburn University, USA
2. Korea Polar Research Institute, Korea
3. Research Institute for Humanity and Nature, Japan
4. Universiteit Antwerpen, Belgium
5. University of Wellington, New Zealand

Research Interest

My research interest revolves around the application of genetic and genomic approaches to the study of aquatic organisms important for aquaculture, conservation and ornamental industry. Our lab is currently developing genetic databases based on molecular markers, particularly using DNA barcoding technique to characterize and record the biodiversity of fish in both freshwater and marine environment in Malaysia. This documentation will be pioneering further research on the aspects of how biological (metabolic adaptations, social interactions, immunology, physiology, reproduction and etc.) and environmental factors (climate changes, pollutants, anthropogenic stressors and etc.) affecting the population structure and evolutionary lineages of a fish species. At present, we are employing gene expression profiling and transcriptomic approaches to discover novel and candidate genes influenced by either one of the above mentioned biological and environmental factors on various aquatic species ranging from coastal wild caught fish and coral reef fish, mud crab (*Squilla* spp.), shrimp (*Penaeus* spp.) to endangered freshwater fish (*Tor* spp.) The candidate genes will be a good biomarker in assessing the population's health and will also be an important asset to trace the quantitative trait loci (QTL) for genetic improvement program. The enhanced genetic traits in a particular species will subsequently assist in the development of sustainable population stock for both aquaculture industry and restocking program involving commercial and endangered species respectively.



Md. Abdul Kader

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(Bang. Agril. Uni.)



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Major Field Fisheries
Expertise Aquatic Animal Nutrition
Specialization Aquafeed Technology

Research Interest

I am an expert of Aquatic Animal Nutrition. Past couple of years, I have been working in the field of nutrition of freshwater, brackish water and marine fish and shrimp species. My research interest is aquafeed technology which includes alternative protein sources, environmental friendly aquafeed, healthy aquafeed, cost-effective and sustainable aquafeed development. Since protein is the most important and expensive components in compound aquafeed, my research has focused on protein nutrition in fisheries organisms. I have tried to utilize locally available conventional and unconventional protein sources to produce cost-effective and sustainable aquafeed. Different approaches such as supplementation of feeding stimulants, enzymes, amino acids etc; inclusion of complementary dietary ingredients; application of technological improvement such as fermentation of ingredients etc are trying to apply for the effective utilization of alternative protein sources. Dietary proteins are closely related to different physiological and immunological system of fish and shrimp. My current research project is focusing on the effect of quantitative and qualitative proteins on the oxidative responsiveness of giant freshwater prawn, *Macrobrachium rosenbergii*. In addition, many health supplements are currently using to enhance non specific immune response of fish. Our research group is trying to utilize nucleotide and fucoidan as growth and immune stimulants for fish. Limited researches are reported on the effect of diets in molecular mechanisms of aquatic organisms. In near future, I have keen interest to carry out researches to study the dietary effect in molecular levels of fish.

Publication

1. Scopus ID : 36856662600
2. Researchgate : Md. Abdul Kader
3. Google Scholar : Md. Abdul Kader

Networking

1. Kagoshima University, Japan
2. Texas A & M University, USA
3. University of North Carolina Wilmington, USA
4. Indiana University - Purdue University Fort Wayne, USA
5. Bangladesh Agricultural University, Bangladesh



Mohd Fazrul Hisam Abd. Aziz

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Major Field Fisheries
Expertise Fishing Technology and Ecology
Specialization Fishing Gear Technology

Publication

1. Researchgate : Fazrul_Hisam

Networking

1. Prince of Songkla University, Thailand

Research Interest

My research focuses on impact of selective fishing gear to fisheries, feeding ecology of marine communities, fish behavior towards intrinsic and extrinsic factors and management of fisheries resources.



Mok Wen Jye

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Major Field Aquaculture
Expertise Seafood Safety
Specialization Heavy Metal Contamination

Research Interest

My primary research focus is on seafood safety; which examines the heavy metals contaminations in seafood as well as interactions of aquatic animals with their environment pollution levels. I am particularly interested in the anthropogenic pollutants (heavy metals, organic pollutant and antibiotic) in seafood and the risk assessment for human consumption. I am also interested in finding solution to decrease the heavy metal contamination in the cultured seafood.

Publication

1. Scopus ID : 45861488300
2. Researchgate : Wen Jye Mok
3. Google Scholar: MOK, Wen Jye

Networking

1. Kinki University, Japan
2. Osaka Municipal Technical Research Institute, Japan



Muhd Danish Daniel Abdullah

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Major Field Ocean Science
Expertise Marine Microbiology and Biotechnology
Specialization Microbial Ecogenomics

Publication

1. Scopus ID : 54410487900
2. Researchgate : Muhd Danish-Daniel
3. Google Scholar: Muhd Danish-Daniel

Professional Membership

1. American Society for Microbiology
2. The Malaysia Society for Microbiology
3. Genetics Society of Malaysia

Networking

1. Monash University , Malaysia
2. Universiti Kebangsaan Malaysia, Malaysia

Research Interest

My research interest focuses on the diversity and functional roles of microorganisms in aquatic environments. Culture-dependent and -independent approaches are used to address “who are they” and “what are they doing”. Whole-genome study is applied to understand the adaptation mechanisms at single species level. Metagenomics technique together with various bioinformatics tools are applied to investigate the population dynamics of microbial community and their nutrients processing pathways. Other “omics” approaches are also used to reveal the functional and metabolic diversity of microbes at different circumstances.



Nadirah Musa

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Major Field Biology
Expertise Fish Physiology
Specialization Aquatic Ecophysiology

Research Interest

My research focuses on aquatic animals physiology anthropogenic and natural environmental changes impact upon physiology and behavior. Research techniques employed in my projects range from whole animal studies to molecular biology. I have extensive experience in animal production particularly of freshwater fish species and marine invertebrates (echinoderms and crustaceans), blood/haemolymph and tissues sampling. As such, all of my research projects are highly integrative and include studies of underlying biochemical and molecular mechanisms. My current research is focusing on two main issues: (1) Climate change; (2) Aquatic pollution, in terms of hormones, biochemical responses and also energy expenditure; all of these relating to the larger issue of animals production and performance which helps in sustainability of freshwater fish and marine invertebrates population.

Publication

1. Scopus ID : 23983138500
2. Researchgate : Nadirah Musa
3. Google Scholar: Nadirah Musa

Professional Membership

1. European Aquaculture Society

Networking

1. University of Stirling, Scotland
2. Institute of Zoology London, UK
3. Stellenbosch University, South Africa



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Major Field Aquaculture
Expertise Aquaculture Nutrition
Specialization Nutritional Physiology

Publication

1. Scopus ID : 56703486200
: 55125170900
2. Researchgate : Noordiyana Mat Noordin
3. Google Scholar: Noordiyana Mat Noordin

Professional Membership

1. Malaysian Fisheries Society

Networking

1. James Cook University, Australia
2. Shanghai Ocean University, China

Research Interest

My research interest revolves on nutritional requirements and its relation to metabolic and physiological effects to aquatic organism in particular to aquaculture species. These studies extended to investigate sustainable feed for aquaculture using alternative feed ingredients from different protein, lipid and carbohydrate sources. At present, our research team is manipulating level and quality of lipid, protein and vitamin in diets of *Tor tambroides*. The effects of these important nutrients will be studied against reproductive hormonal profiles, oocyte quality, digestive physiology and immune system of *T. tambroides*. The development of species-specific diet for this endangered species will boost its aquaculture production and reduce reliance to wild stock. My lab has also embarked on development of microbound diet, grow-out pellet and broodstock diet for *Scylla olivacea* and *Macrobrachium rosenbergii* by looking into binding properties of the diets, nutrients requirements, gonad maturation, energy budget and molting cycle.



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Major Field Biology
Expertise Environmental Sciences
Specialization Environmental Biotechnology

Research Interest

My research interest is in the field of green technology using beneficial microbes (bacteria, microalgae, fungi etc.) to maintain the ecological balance in both marine and freshwater ecosystems. In this role, my major research focus on the development of sustainable aquaculture system using biofloc technology (BFT). Instead of serving as supplemented live feed for aquaculture organisms, BFT offers alternative methods to treat wastewater. The project is focused on the identification of microbial compositions by morphological and molecular approaches, metabolite productions and how water quality is influenced by the anticipated waste loads to investigate the mechanism for biofloc formation. I also lead a research project on the treatment of harmful algae blooms (HABs) problem using an environmental friendly synthesized compounds, thiourea derivatives. Kenyir Lake, Terengganu was chosen as study site due to its specialty in serving as the main drinking water and an eco-tourism reservoir. The project is aimed to elucidate basic principle underlying the effectiveness of thiourea derivatives to inhibit the growth of cyanobacteria isolated from Kenyir Lake, Terengganu and its cellular response at protein level.

Publication

1. Scopus ID : 56273202700
2. Researchgate : Nor Azman Kasan
3. Google Scholar : Nor Azman Kasan

Professional Membership

1. The Institute of Research Engineers and Doctors
2. Asian Federation of Biotechnology
3. Department of Environment, Malaysia
4. Asia-Pacific Chemical, Biological and Environmental Engineering Society
5. International Water Association

Networking

1. The University of Adelaide, Australia
2. South Australian Water Corporation, Australia
3. Temasek Polytechnic, Singapore
4. Hannan Corporation Sdn. Bhd., Malaysia
5. Malaysian Biotechnology Corporation Bdn. Bhd., Malaysia



Nor Fazliyana Mohtar

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Major Field Aquaculture
Expertise Food Chemistry
Specialization Fishery By-Products

Publication

1. Scopus ID : 35590292600
2. Researchgate : Nor Fazliyana Mohtar
3. Google Scholar: Nor Fazliyana Mohtar

Professional Membership

1. International Food Technologies, USA
2. New Zealand International Food Science Technologies
3. New Zealand International Chemistry
4. Malaysian Fisheries Society

Networking

1. University of Auckland, New Zealand
2. University of Massey, New Zealand

Research Interest

My research focuses on the utilisation and innovation of fishery by-products. This involves possible mechanisms and approaches in the modification of protein extracted from the waste industry. It also covers the investigation on the potential use of physically, chemically and enzymatically cross-linked protein with improved properties that benefit the fishery and food industries. I previously studied the extraction of gelatine from fish waste, characterisation of its physico-chemical properties compared to the commercial mammalian ones, modification through physical, chemical and enzymatic cross-linkings, and their effects on the properties of the gels. The optimised condition used for the extraction of gelatine from one species was applied to several other species. Work on the application of potentially modified protein from the waste is now in progress and further investigation on the economic benefit to the coastal area community will be carried out. The idea of extracting valuable compounds from fish processing waste is of enormous benefit for Malaysia by reducing the environmental impact of the disposal of waste products.



Nur Asma Ariffin

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Major Field Fisheries
Expertise Fish Genetics
Specialization Fisheries Genomics

Research Interest

My research interests focus on 3 aspects; DNA markers, functional genomics and gene expression profiling. Various DNA markers (mitochondria DNA and nuclear DNA) are now being used to provide various scientific problem solving in fisheries and enhance the productivity in aquaculture. The application of DNA markers help to determine the population structure and genetic diversity of the fish species which are important in conservation and management of fisheries resources. My research also focuses on large scale identification of expressed genes (functional genomics) in targeted tissue to understand the pathway of various genes involves in certain processes. Isolation and characterization of specific gene from different treatment/stage/species/individual will enable researcher to determine the gene profile accurately. This will lead to the gene manipulation for specific purposes. I am currently involved in research projects dealing with shad (*Tenualosa* spp.), arowana (*Scleropages formosus*), Asian seabass (*Lates calcarifer*), grouper (*Epinephalus fuscoguttatus*), bluestreak cleaner wrasse (*Labroides dimidiatus*) and other species. Apart from that, I am also interested in DNA barcoding of fish species. Due to almost similar morphological feature and loss of specific characteristic, some fish species have not been properly identified. Not only that, the size differences between male and female can also lead to misidentification since they are identified mainly based on morphological feature. Therefore, DNA barcoding is important to accurately distinguish fish species.

Publication

1. Scopus ID : 56644541400
2. Researchgate : Nur Asma Ariffin
3. Google Scholar : Nur Asma Ariffin

Professional Membership

1. Genetics Society of Malaysia
2. Malaysian Fisheries Society

Networking

1. Prince of Songkla University, Thailand



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Major Field Fisheries
Expertise Fisheries Post Harvest
Specialization Seafood Safety and Quality

Publication

1. Scopus ID : 36698072100
2. Researchgate : Nurul Ulfah Karim
3. Google Scholar: Nurul Ulfah Karim

Professional Membership

1. ASEAN Fisheries Society
2. Malaysian Fisheries Society

Networking

1. Agri-Food and Biosciences Institute, UK
2. Queen's University Belfast, UK

Research Interest

My research interest is on fisheries post-harvest technology. This includes: 1) thermal and non-thermal processing technology; 2) traditional and modern preservation techniques; and 3) application of natural product and packaging system.. These principles are designed to provide a shelf-life extension by ensuring the fish safety and quality. I am also focusing on the post-mortem biochemical of fish and shellfish. These include studies on microbiology, chemistry, physical and enzymatic deteriorations that leads to quality loss of fish and fishery products.



Rumeaida Mat Piah

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Major Field Fisheries
Expertise Fish Population Dynamics
Specialization Fisheries Management

Research Interest

My research is mainly on fish population dynamics in relation to fisheries management. My special research experiences are on marking and tagging of fish by PIT and Acoustic tags to identify population size, growth rate, migration pattern, the diet and feeding habits, diversity and abundance of fishes. I am particularly interested in determining the age of fish through observation on the sectioned otoliths and the length frequency distributions. These two simple and chemical free techniques provide valuable information on their current and future status. Age and growth information are also the key elements in stock assessment to develop a management and conservation plan of fish resources.

Publication

1. Scopus ID : 56271924200
2. Researchgate : rumeaida mat piah
3. Google Scholar : rumeaida mat piah

Networking

1. Southern Cross University, Australia
2. Prince of Songkla University, Thailand
3. Department of Agriculture and Fisheries, Australia



Sandra Catherine Zainathan

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Major Field Fisheries
Expertise Aquatic Virology
Specialization Molecular

Publication

1. Scopus ID : 55622812600
2. Researchgate : Sandra Zainathan
3. Google Scholar: SC Zainathan

Professional Membership

1. European Associations of Fish Pathologists
2. Asian Fisheries Society
3. Malaysian Fisheries Society

Networking

1. University of Tasmania, Australia
2. Australian Animal Health Laboratory, Australia.
3. Department of Primary Industries, Parks, Waters and Environment, Australia
4. National Fish Health Research Centre, Malaysia
5. Universiti Putra Malaysia, Malaysia

Research Interest

My primary research focus is on the diagnosis of aquatic animal diseases, including finfish, molluscs and crustaceans with an emphasis on exotic (foreign) and emerging diseases. I also work on molecular virology emphasizing on the development of diagnostic tools for the detection and identification of viruses in aquatic organisms. My research focuses on health of farmed fish, in particular interactions between host, pathogen and environment. Understanding these relationships is important for health management, improving aquaculture production and ensuring sustainable development. I am interested in sustainable fish culture through disease control and investigation of fish mortalities. I am currently working on VNN (Viral Nervous Necrosis), WSSV (White Spot Syndrome Virus) in cultured and wild species, Megalocytivirus in oysters and mussels, HAV (Hepatitis Virus) and Dengue Virus.



Seah Ying Giat

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Major Field Ocean Science
Expertise Fish Taxonomy
Specialization Marine Fish Taxonomy

Research Interest

My personal main research interest is documenting the marine ichthyofauna from Malaysian waters. An update of Malaysian fish species present in Malaysian waters is probably needed because the number of existing species in the waters of Malaysia still unknown. It is to the benefit of future Malaysian research and education to keep record of our current biodiversity so as to pass knowledge onto the next generation. I also interested in revising taxonomic problems within fish species complexes using morphological characterization complementary with molecular phylogenetic approach. These analyses have provided a better understanding to the relationship of fishes at the generic and species levels. Currently, I also involve in the conservation and management of International Union for the Conservation of Nature (IUCN) Red List fish species.

Publication

1. Scopus ID : 26321197300
2. Researchgate : Y.G. Seah
3. Google Scholar: YG Seah

Networking

1. IUCN-SSC Sciaenidae Red List Authority
2. Global Sciaenidae Conservation Network, Taiwan
3. Japan Society for the Promotion of Science, Japan



Shahreza Md. Sheriff

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Major Field Fisheries
Expertise Fish Genetics
Specialization Fish Genetic Improvement

Publication

1. Scopus ID : 57112419800
: 56644326500
: 55700680100
2. Researchgate : Shahreza Md Sheriff
3. Google Scholar: Shahreza Md Sheriff

Professional Membership

1. Malaysian Genetic Society
2. Malaysian Fisheries Society

Networking

1. Prince of Songkla University, Thailand
2. Bung Hatta University, Indonesia

Research Interest

My research interest is on genetic improvement of aquaculture species through breeding and molecular approaches. This involves the use of selective breeding, crossbreeding, hybridization, chromosome manipulation techniques and use of molecular marker in breeding program. Currently our research team is working on stock identification using molecular marker on tiger grouper (*Epinephelus fuscoguttatus*) and arowana (*Scleropages formosus*) farmed broodstocks for the purpose of broodstock management and seed production. We are also focusing on the development of molecular pedigree based monitoring system for arowana breeding. Apart from that, my research also looks into isolation and molecular characterization of important genes for aquaculture such as growth hormone genes. In addition, emphasis is also given into looking at the gene regulation of some important genes related to growth in response to several biological and environmental factors in aquaculture.



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Major Field Aquaculture
Expertise Aquatic Microbiology
Specialization Aquatic Microbial Ecology

Research Interest

My research interest revolves around the application of aquatic microbial approaches and its importance in aquaculture, conservation and fisheries. I am working on the understanding of the importance of microbes in aquaculture and natural environment especially in isolating probiotics from useful microalgae, fish gut, shrimp gut and apply it to feed or direct usage for better aquaculture growth. Besides that, I am also working on bacterial isolation from endangered fish species such as *Tor* sp. to understand the important key bacteria functioning for either growth or digestion between wild and culture fish. I am also interested in bioflocs, bacterial diversification, probiotic isolation and usage, bio-friendly aquatic pathogen control and many more. My work will contribute enormously in the aquaculture and conservation world as aquatic microbes are the highest population of the aquatic environment.

Publication

1. Scopus ID : 54401720300
2. Researchgate : Sharifah Noor Emilia
3. Google Scholar : Emilia Noor Sharifah

Professional Membership:

1. The Malaysian Society for Microbiology

Networking

1. Kinki University, Japan
2. Antofagasta University, Chile
3. Mie University, Japan
4. Prince of Songkla University, Thailand



Sharifah Rahmah Syed Muhammad

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Major Field Biology
Expertise Aquaculture
Specialization Nutritional Biochemistry

Publication

1. Scopus ID : 55325427400
2. Researchgate : Sharifah Rahmah
2. Google Scholar: Sharifah Rahmah

Professional Membership

1. World Aquaculture Society
2. Malaysian Fisheries Society

Networking

1. Kinki University, Japan
2. Ibrahim Badamasi Babangida University, Nigeria

Research Interest

I revolve my research interest on feed development through understanding the biochemical mechanisms and functions of nutrition and feeding as well as integrating behaviour and environmental aspects of nutritive related processes in important aquaculture species. This involves the study of nutrient metabolism, bioenergetics, digestion and sensory organs in enhancing the quality, immunity, fertility and well-being of different life stages of fish particularly broodstocks and larvae. At present, my work emphasizes on the influence of protein and amino acids to improve the reproductive and larval performances of fish which includes stages of oocyte maturation, reproductive hormone regulation, spawning response and egg development, larval deformation and stress of fish. I also work on digestive enzymes and its digestive capabilities, protein replacements in fish feed as well as the *in vitro* and *in vivo* digestibility methods. It is crucial to understand biological requirements and provide the best feed towards the enhancement of sustainable aquaculture and food security in the future.



Shumpei lehata

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Major Field Biology
Expertise Environmental Microbiology
Specialization Aquatic Microbiology

Research Interest

Gut microbiota play an important role in food digestion, nutrient absorption, survival and health of host aquatic animals. Probiotics as a valid alternative to antibiotics provide several benefits to the modulation of the host gut environment directly or indirectly. My current research is focused on exploring the potential probiotics that have an effect on modulating host gut microbiota as well as improvement of host gut nutrition. Besides that, I am also working on bacterial community composition analysis of aquatic invertebrate and fish in order to understand the important key bacteria functioning for either growth or digestion. I am interested in investigation on food- and water-borne bacterial pathogens and relationship with human fecal indicator bacteria such as *Escherichia coli*.

Publication

1. Scopus ID : 26767820300
2. Researchgate : Shumpei lehata
3. Google Scholar : Shumpei lehata

Professional Membership:

1. The Malaysian Society for Microbiology
2. Japanese Society of Fisheries Science

Networking

1. Mie University, Japan
2. Kagoshima University, Japan
3. Universidad de Antofagasta, Chile
4. Universidad Católica del Norte, Chile
5. University of the Philippines Visayas, Philippines



Siti Ariza Aripin

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Major Field

Aquaculture

Expertise

Physiology

Specialization

Fish Reproductive Physiology

Publication

1. Researchgate : Siti Ariza Aripin
2. Google Scholar: Dr Siti Ariza Aripin

Networking

1. Kasetsart University, Thailand

Research Interest

My scientific research is in the field of teleost physiology mainly on reproductive hormones and broodstock maturation. Gonad maturation is one of the most important developmental stages during the life cycle of an animal, which undergoes reproduction. My latest work has been focused on studying some aspects of the indolamine melatonin hormone and organic zinc on the reproductive physiology to improve the broodstock performance and quality of fish larvae. Breakthrough in understanding the physiology of reproductive performance surely benefits the aquaculture industry in enhancing the fish production.



Tan Min Pau

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Major Field Aquatic Biology
Expertise Molecular Ecology
Specialization Evolutionary Ecology

Research Interest

My work and general research interest is mainly on the molecular ecology of the freshwater and marine water fishes, investigating the genetic diversity, genetic structure, phylogeography and phylogenetics of the wild populations. These studies form the base for conservation of species genetics and recommendation on the population management strategy. It is also very interesting to study the phylogeographical relationship of the aquatic organisms as it reveals palaeo-landscape rearrangements that shape the intraspecies genetic pattern that is apparent nowadays through both the mitochondrial or nuclear DNA analysis. My current research scale has been extended to the Southeast Asia and we look forward to decipher the genetic variation, structure and distribution of aquatic organisms inhabiting these regions.

Publication

1. Scopus ID : 55534859400
2. Researchgate : Min Pau Tan
3. Google Scholar: Min Pau Tan

Networking

1. Prince of Songkla University, Thailand
2. Syiah Kuala University, Indonesia
3. Universiti Sains Malaysia, Malaysia



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Major Field Aquaculture
Expertise Molecular Ecology
Specialization Population Genetic Structure

Publication

1. Scopus ID : 55510563600
2. Researchgate : Tun Nurul Aimi
3. Google Scholar: Tun Nurul Aimi

Networking

1. Bangor University, UK
2. University of East Anglia, UK

Research Interest

My primary research focus is on population genetic structure of marine and freshwater fishes. This includes the molecular analysis of population and species biodiversity using molecular methods in species identification, delimitation, revealing cryptic species, which typically have high incidence in marine environments, and detecting population structure for management and conservation of fisheries resources. I also investigate speciation and dispersal hypotheses regarding patterns of biodiversity inside and outside Indo-Malay Archipelago which is the centre of maximum marine biodiversity. The species-level work will include phylogenetic analyses and DNA barcoding studies to quantify diversity at the COI gene at both intra- and inter-species levels, while analyses at population-level will examine population structuring and phylogeography utilizing additional genetic markers. My work will also focus on molecular analyses of stock structure of exploited fishes, the impact of genetics on stock recovery and conservation of genetic resources, traceability of fish and fish products. My current research is focusing on molecular systematic and phylogeny study in combination with taxonomic technique to discriminate commercially-important fish species complex and resolve their taxonomic ambiguities. Such information, while testing the accuracy of existing taxonomic frameworks, will assess the extent of cryptic species in Malaysian waters, and enable the development of an integrated taxonomic framework, thus informing management strategies for subsequent conservation and management.



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Major Field

Fisheries

Expertise

Benthic Ecology

Specialization

Benthic Community and Ecosystem Function

Research Interest

My principal research interests lie in the field of benthic ecology with the emphasis on the biodiversity and ecosystem function. I am particularly interested in assessing how natural and anthropogenic activities affect benthic communities and how long these communities take to recover. I use different approaches in assessing the communities namely traditional (i.e. based on structural response) and a more novel approach (i.e. based on functional traits analysis). For the traditional approach, I normally apply several structural indices related to total number of individual, number of species, diversity indices and taxonomic diversity. Meanwhile, for a different perspective on benthic communities' recovery, I use several functional traits analyses which take into account the 'health capacity' of an ecosystem. I am committed to do the assessment in different scenarios related to the environmental issues. This is due to the importance of continuous and long-term assessment to find out the limit of change of different ecosystems can uphold before a permanent damage take place. My current research comprises of assessing the impacts of bottom trawling and aquaculture on the ecosystem function in Malaysia waters. In addition, my research activities are also spanned to another side of the world where I am currently studying the impacts of glacial melting due to climate change on the composition and functional diversity of seabed organisms in Antarctica.

Publication

1. Scopus ID : 37666159600
2. Researchgate : Wan Mohd Rauhan Wan Hussin
3. Google Scholar : Wan Mohd Rauhan Wan Hussin

Professional Membership

1. Asian Fisheries Society

Networking

1. University of St. Andrews, UK
2. Centre for Environment, Fishery and Aquaculture Science, UK
3. Korea Polar Research Institute, Korea



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Networking

1. Queensland University of Technology, Australia
2. Abdul Hakeem College, India

Research Interest

My research interest is on using genetic tools in improving aquaculture production particularly in developing and identifying candidate gene for traits of interest in aquaculture species. Considering that aquaculture remains the most important source of fishery production after capture fisheries with contributors to world aquaculture production include; finfish, molluscs and crustacean species. Among important culture species is *Macrobrachium rosenbergii*. It has been translocated from its natural habitats to other parts of the world and remains the most widely use *Macrobrachium* species for commercial farming. Majority of stocks used in aquaculture come from unimproved and essentially wild phenotypes. Thus research on application of genetic technologies in particular candidate gene approach has the potential to increase aquaculture production further while avoiding the problem caused by inbreeding. Our current efforts are to identify the best possible stocks from Malaysian water bodies to be utilized in our breeding program.

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“ The true sign of
intelligence is not
knowledge but
Imagination ”

Albert Einstein

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