

**RESEARCH OF ACADEMICS**  
Faculty of Agricultural and Food Sciences  
Universiti Putra Malaysia Bintulu Sarawak Campus

**NICHE AREA: BORNEO ECOSYSTEM AND HEALTH**

<b>RESEARCH CLUSTER 1: AGRICULTURE ECONOMICS</b>			
<b>Lead: Neilson Teruki, PhD</b>			
<b>No.</b>	<b>Name of Academics (Email)</b>	<b>Field of Expertise</b>	<b>Current Research Interest</b>
1	Adrian Daud, PhD (adrian@upm.edu.my)	Environmental Economics	<ul style="list-style-type: none"> <li>Valuation of natural resources and sustainable development in relation to agricultural economics</li> </ul>
2	Aryaty Alwie, PhD (aryaty@upm.edu.my)	Agribusiness	
3	Make Jiwan (make@upm.edu.my)	Farming Production System	<ul style="list-style-type: none"> <li>Natural farming system</li> <li>Sustainable rural community development</li> </ul>
4	Neilson Teruki, PhD (neilson@upm.edu.my)	Accounting	<ul style="list-style-type: none"> <li>Financial disclosure practices</li> <li>Financial disclosure management</li> <li>Cost management</li> <li>Management control system</li> <li>Government accounting</li> <li>Corporate social responsibility</li> </ul>
5	Suraya Hanim Mokhtar, PhD (surayahanim@upm.edu.my)	Finance	<ul style="list-style-type: none"> <li>Agriculture finance</li> <li>Micro finance</li> </ul>
6	Wong Tze Jin, PhD (w.tzejin@upm.edu.my)	Mathematics	<ul style="list-style-type: none"> <li>Cryptography in RSA</li> </ul>
<b>RESEARCH CLUSTER 2: ANIMAL SCIENCE</b>			
<b>Lead: Juriah Kamaludeen, PhD</b>			
<b>No.</b>	<b>Name of Academics (Email)</b>	<b>Field of Expertise</b>	<b>Current Research Interest</b>
7	Juriah Kamaludeen, PhD (juriahk@upm.edu.my)	Veterinary Parasitology	<ul style="list-style-type: none"> <li>I am interested in all aspects of parasitology and animal production in general. I have worked with a range of animal species including chickens, fish and ruminant animals. Central to my research is the detection of endoparasites, their epidemiology and the mechanisms of drug resistance combined with improving diagnostics to detect drug resistance in the field. My current research interest includes the understanding of the developmental program of buffaloes and how to improve their production and performance while also pursuing a strong interest in food security into the study of (re-) emerging zoonotic disease.</li> </ul>
8	Leong Sui Sen, PhD (leongsuisen@upm.edu.my)	Molecular Microbiology	<ul style="list-style-type: none"> <li>Identification and characterization of potential probiotic bacteria in poultry</li> </ul>
9	Masnindah Malahubban, PhD	Animal Feed Technology	<ul style="list-style-type: none"> <li>Developing new feed formulation for sustainable livestock production</li> </ul>

	(masnindah@upm.edu.my)		
10	Mohammad Nasir Hassan (mnasirh1@upm.edu.my)	Ruminant Production System	<ul style="list-style-type: none"> <li>• Halal in animal feeds</li> <li>• Milk production</li> <li>• Buffalo production</li> </ul>
11	Zamri Rosli, PhD (zamrirosli@upm.edu.my)	Birds Study	<ul style="list-style-type: none"> <li>• Bird ecology and population</li> <li>• Wildlife ecology and management</li> </ul>
<b>RESEARCH CLUSTER 3: AQUATIC SCIENCE</b>			
<b>Lead: Mohd Zafri Hassan, PhD</b>			
No.	Name of Academics (Email)	Field of Expertise	Current Research Interest
12	Abu Hena Mustafa Kamal, PhD (abuhena@upm.edu.my)	Aquatic Environment	<ul style="list-style-type: none"> <li>• Aquaculture pond ecology, culture systems and production performance of aquatic organisms in different techniques, habitat and soil types</li> <li>• Ecology and biology of mangrove, seagrass and seaweed in the tropical and sub-tropical coasts</li> <li>• River, coastal, estuarine and marine biodiversity and ecology (marine biology)</li> <li>• Climate change and sea level rise impacts on the marine, estuarine and coastal ecosystems and mitigation measures</li> <li>• Ecosystem sciences and services of coastal, estuarine and marine resources and their valuation processes</li> <li>• Blue carbon sequestration in the coastal and estuarine ecosystems</li> </ul>
13	Amy Halimah Rajae, PhD (amyhalimah@upm.edu.my)	Aquaculture Genetics and Breeding	<ul style="list-style-type: none"> <li>• Selective breeding for aquaculture species</li> <li>• Application of genetic markers</li> <li>• Quantitative trait analysis</li> </ul>
14	Hadi Hamli, PhD (hadihamli@upm.edu.my)	Aquatic Biology	<ul style="list-style-type: none"> <li>• Biology and potential culture of bivalvia in Sarawak</li> </ul>
15	Johan Ismail (ijohan@upm.edu.my)	Aquatic Environment	<ul style="list-style-type: none"> <li>• Estuarine, coastal and marine ecosystems</li> <li>• Biodiversity and ecology of marine zooplankton</li> <li>• Water quality assessment and environmental health</li> </ul>
16	Mohd Zafri Hassan, PhD (mzafri@upm.edu.my)	Fish Biology and Ecology	<ul style="list-style-type: none"> <li>• Species invasion in freshwater and marine ecosystems</li> <li>• Species occupancy in headwaters and their associated low stream orders</li> </ul>
17	Nurdiyana Ahmad Denil, PhD (nurdiyana@upm.edu.my)	Fish Neurobiology	<ul style="list-style-type: none"> <li>• Aquaculture</li> <li>• Sensory systems in fish</li> <li>• Neurobiology and physiology of fishes</li> </ul>
<b>RESEARCH CLUSTER 4: CROP SCIENCE</b>			
<b>Lead: Franklin Ragai Kudat, PhD</b>			
No.	Name of Academics (Email)	Field of Expertise	Current Research Interest
18	Franklin Ragai Kudat, PhD (franklin@upm.edu.my)	Plant Protection	<ul style="list-style-type: none"> <li>• Beneficial microbes</li> <li>• Biological control</li> <li>• Management of tropical plant pests and diseases</li> </ul>

19	John Keen Chubo, PhD (johnkeen@upm.edu.my)	Plant Improvement	<ul style="list-style-type: none"> <li>Diversity of Versicular Arbuscular Mycorrhiza (VAM) in different terrestrial environment</li> <li>Extent of VAM infection in various tropical plants</li> <li>VAM potentials in promoting plant growth and disease resistance</li> </ul>
20	Joseph Bong Choon Fah, PhD (josephbcf@upm.edu.my)	Plant Protection	<ul style="list-style-type: none"> <li>Biological control</li> <li>Entomopathogens for termite management in oil palm</li> <li>Ganoderma diseases of oil palm</li> <li>Biodiversity of termites in oil palm, pest and diseases of field crops</li> </ul>
21	Kwan Yee Min, PhD (yeemink@upm.edu.my)	Plant Biotechnology	<ul style="list-style-type: none"> <li>Detection, characterization and management of fungal plant pathogens</li> <li>Plant-microbe interaction</li> </ul>
22	Wong Sie Chuong, PhD (wongsie@upm.edu.my)	Molecular Microbiology	<ul style="list-style-type: none"> <li>Study of endosperm tissues specific promoter for seed based bioreactor design</li> <li>Regulated endocellulase expression for biofuel production from cereal plant biomass</li> <li>Biomangement of oil palm <i>Ganoderma</i> infection using <i>Tricoderma</i></li> <li>Identification of microbial source that lead to fusarium wilt-like disease on oil palm tree</li> <li>Development of <i>Ganoderma</i> species specific DNA marker for disease source identification in oil palm plantation</li> <li>Development of <i>Metarhizium</i> species specific DNA marker and quantification protocol</li> <li>Study of Sarawak banana biodiversity and fusarium resistant potential</li> <li>Developing recombineering protocol (homologous recombination) using local <i>E. coli</i> isolates</li> <li>Antimicrobial and cytotoxic potential of Sarawak indigenous plants</li> </ul>
<b>RESEARCH CLUSTER 5: ENVIRONMENTAL HEALTH</b>			
<b>Lead: Geoffery James Gerusu, PhD</b>			
No.	Name of Academics (Email)	Field of Expertise	Current Research Interest
23	Azira Sanusi (azirasanusi@upm.edu.my)	Environmental Technology	<ul style="list-style-type: none"> <li>Water quality</li> <li>Biosystems waste management technology</li> </ul>
24	Geoffery James Gerusu, PhD (geoffery@upm.edu.my)	Forest Hydrology and Management	<ul style="list-style-type: none"> <li>Rainfall-Runoff</li> <li>Surface water flow</li> <li>Water quantity and quality</li> <li>Sedimentation and Bedload</li> <li>Hydrograph Separation</li> <li>Isotopic study</li> <li>Interception Loss and Storage</li> <li>Sub-surface flow</li> <li>Non-point source pollution</li> </ul>
25	Mohammad Saufi Mohammad Ramli (m_saufi@upm.edu.my)	Environmental Biology	<ul style="list-style-type: none"> <li>Marine fish larvae distribution</li> </ul>
26	Suziana Hassan, PhD (suzi@upm.edu.my)	Applied Economics and Recreation	<ul style="list-style-type: none"> <li>Environmental economics</li> <li>Parks and recreation management</li> <li>Environmental conservation</li> </ul>

27	Syarifah Kamariah Wan Mohammad, PhD (k_syarifah@upm.edu.my)	Environmental Management	<ul style="list-style-type: none"> <li>Ecology and ecological modelling</li> </ul>
28	Walter Charles Primus, PhD (walter@upm.edu.my)	Materials Science	<ul style="list-style-type: none"> <li>Advance materials</li> <li>Solid State Theory</li> <li>Composite materials</li> <li>Dielectric Science</li> </ul>
<b>RESEARCH CLUSTER 6: FORESTRY SCIENCE</b>			
<b>Lead: Semsolbahri Bokhari</b>			
<b>No.</b>	<b>Name of Academics (Email)</b>	<b>Field of Expertise</b>	<b>Current Research Interest</b>
29	Norul Izani Md. Alwi, PhD (norulizani@upm.edu.my)	Wood Technology	<ul style="list-style-type: none"> <li>Wood/fibre composite</li> <li>Bio-composite technology</li> <li>Wood science and properties</li> </ul>
30	Ong Kian Huat, PhD (okhuat@upm.edu.my)	Plant Physiology	<ul style="list-style-type: none"> <li>Plant physiology</li> <li>Forest management</li> </ul>
31	Philip Lepun (philip@upm.edu.my)	Forest Botany	<ul style="list-style-type: none"> <li>Endemic plant of Borneo</li> <li>Agroforestry management</li> <li>Ethnobotany</li> </ul>
32	Roland Kueh Jui Heng, PhD (roland@upm.edu.my)	Forest Ecology	<ul style="list-style-type: none"> <li>Forest conservation and management</li> </ul>
33	Semsolbahri Bokhari (semsul@upm.edu.my)	Wood Science and Technology	<ul style="list-style-type: none"> <li>Bio-composites technology</li> <li>Utilization of agricultural waste for value added wood products</li> <li>Wood properties of fast growing trees</li> <li>Agricultural waste for sustainable community development</li> </ul>
<b>RESEARCH CLUSTER 7: FOOD SECURITY</b>			
<b>Lead: Noorasmah Saupi, PhD</b>			
<b>No.</b>	<b>Name of Academics (Email)</b>	<b>Field of Expertise</b>	<b>Current Research Interest</b>
34	Ismawati Sharkawi, PhD (ismawat@upm.edu.my)	Agribusiness	<ul style="list-style-type: none"> <li>Food marketing</li> <li>Consumer behaviour</li> </ul>
35	Kamil Latif, PhD (kamill@upm.edu.my)	Aquaculture Nutrition	<ul style="list-style-type: none"> <li>My research interest is on the aquaculture nutrition, nutrient requirement and nutritional physiology of fish. My aim is to understand the impact of nutrition on fish growth and how fish can utilize feed in order to achieve sustainability in aquaculture. My current research focus into development of feeds utilizing alternative protein sources as replacements for fishmeal. The identification of alternative protein sources is essential to reduce aqua feed cost and to improve the aquaculture production.</li> </ul>
36	Noorasmah Saupi, PhD (noorasmah@upm.edu.my)	Plant Biology and Ecology	<ul style="list-style-type: none"> <li>Potential of indigenous vegetable</li> <li>Domestication of wild plant for food crop</li> <li>Biology of freshwater aquatic plants</li> </ul>
37	Patricia King Jie Hung, PhD (patricia@upm.edu.my)	Molecular Microbiology	<ul style="list-style-type: none"> <li>My current research Interests are tapping on the applications of metagenomics and metatranscriptomics to enable advances in understanding gut microbiome, and researching</li> </ul>

			<p>functional genetics and environmental biology, especially as these aspects relate to microbe-microbe and microbe-animal symbiotic interactions. One model system I have been studying for many years is the symbiotic gut microbiota of termites. Termites, which feed on some of earth's most abundant forms of biomass, i.e. lignocellulosic plant material and residues derived from it (e.g. humus) are an important group of terrestrial insects. Their gut microbiota is dense and diverse and includes representatives from all known domains of life, i.e. Eukarya (represented by cellulolytic protozoa), an assortment of Bacteria, and methanogenic Archaea. Many of these have proven to be novel genera and species. I seek to understand how such microbes cooperate with each other and with the insect to bring about digestion and to furnish termites with required nutrients.</p> <ul style="list-style-type: none"> <li>An additional area of interest is a recently-initiated, collaborative effort with Sarawak Health Department under Ministry of Health Malaysia and Malaysia Genome Institute to seek the possible relationship of carcinogenesis and human gut microbiome. Of particular interest to my team are in profiling Asian Gut Microbiome, especially Sarawakians' and identify bacteria that are enriched or suppressed in the cancer patient gut ecosystems. Currently we are focusing on breast cancer patients and hope to identify microbial marker for this cancer.</li> </ul>
38	Shahrul Razid Sarbini, PhD (shahrulrazid@upm.edu.my)	Functional Food	<ul style="list-style-type: none"> <li>Novel source for probiotics and prebiotics</li> <li>Gastrointestinal health with special focus on cancer and obesity</li> </ul>
39	Yiu Pang Hung, PhD (yiuph@upm.edu.my)	Analytical Chemistry	
<b>RESEARCH CLUSTER 8: SOCIAL AND COMMUNITY</b>			
<b>Lead: Mohamad Maulana Magiman, PhD</b>			
No.	Name of Academics (Email)	Field of Expertise	Current Research Interest
40	Abdul Halim Abdul Kadir (abd_halim@upm.edu.my)	Islamic Civilisation	
41	Fadzilah Yusof, PhD (fadzilahy@upm.edu.my)	Business Communication	<ul style="list-style-type: none"> <li>Micro business platform</li> <li>Agrotourism marketing</li> </ul>
42	Mohamad Maulana Magiman, PhD (mdmaulana@upm.edu.my)	Anthropology	<ul style="list-style-type: none"> <li>Ritual, cultural anthropologist, religion, ethno-national identity, economic development and human right, social network and performance, migration and medical anthropology</li> <li>Conducted most of field research in Borneo, Sarawak (especially among native people in Borneo Island)</li> <li>Cross-cultural research of social and cultural values that affect long-term belief and behaviours</li> </ul>
43	Petrus Bulan, PhD (petrus@upm.edu.my)	Agriculture Extension	
44	Ribka Alan, PhD (ribka@upm.edu.my)	Mass Communication	<ul style="list-style-type: none"> <li>Agriculture extension</li> <li>Development communication</li> </ul>
45	Shafinah Kamarudin, PhD (shafinah@upm.edu.my)	Industrial Computing	<ul style="list-style-type: none"> <li>Information Systems</li> <li>Usability studies and system evaluation</li> </ul>

			<ul style="list-style-type: none"> <li>• Behavioural studies</li> <li>• Human Computer Interaction</li> <li>• Mobile application</li> </ul>
<b>RESEARCH CLUSTER 9: SOIL HEALTH</b> <b>Lead: Zakry Fitri Ab. Aziz, PhD</b>			
No.	Name of Academics (Email)	Field of Expertise	Current Research Interest
46	Koo Lee Feng, PhD (leefeng@upm.edu.my)	Applied Mathematics	<ul style="list-style-type: none"> <li>• Crack analysis hypersingular integral equation</li> </ul>
47	Osumanu Haruna Ahmed, PhD (osumanu@upm.edu.my)	Soil Fertility and Management	<ul style="list-style-type: none"> <li>• Soil and plant interactions</li> <li>• Wastes management and utilization</li> <li>• Humic substances studies</li> <li>• Fertilizer technology</li> </ul>
48	Wan Asrina Wan Yahaya, PhD (asrina@upm.edu.my)	Soil Chemistry	<ul style="list-style-type: none"> <li>• Black pepper</li> <li>• Hilly rice</li> </ul>
49	Wan Nor Zanariah Zainol @ Abdullah, PhD (wnzz@upm.edu.my)	Geospatial Engineering	<ul style="list-style-type: none"> <li>• Terrestrial Mapping</li> <li>• Habitat Modelling</li> <li>• Precision Agriculture</li> </ul>
50	Zakry Fitri Ab. Aziz, PhD (zakryfitri@upm.edu.my)	Soil Microbiology	<ul style="list-style-type: none"> <li>• Exploiting plant associated bacteria to enhance crop productivity</li> </ul>