



INTERNATIONAL CONFERENCE AND WORKSHOP ON COMPARATIVE GENOMICS AND INTERACTOMICS FOR AGRICULTURE 2018 (ICCGIA 2018)

Universiti Putra Malaysia

29th – 31st October (Workshop)

Venue: Laboratory of Gene Technology, Department of Agriculture Technology,
Faculty of Agriculture, Universiti Putra Malaysia (UPM)

1st – 2nd November (Conference)

Venue: Mini Auditorium 1, TNCPI Building, Universiti Putra Malaysia (UPM)

Institute of Plantation Studies (IKP), Universiti Putra Malaysia will be organising an International Conference and Workshop on Comparative Genomics and Interactomics for Agriculture 2018 (ICCGIA2018) on the 29th-31st October 2018 (Workshop) and 1st-2nd November 2018 (Conference) in Universiti Putra Malaysia. The conference is jointly organised with Faculty of Agriculture and Faculty of Biotechnology and Biomolecular Sciences, UPM in collaboration with University of South Wales, United Kingdom and University of Nottingham, Malaysia Campus.

ICCGIA2018 aims to provide exposure and update on the latest development in the field of comparative genomics and interactomics for agriculture. It will serve as a platform for international networking for the advancement of research and innovations. Comparative genomics studies the common features between different genomes for understanding similar biological processes, while interactomics look at the interactions involving DNA and proteins in the regulation of biological processes. These studies have valuable applications in enhancing agriculture production. There will be three conference sessions: Comparative genomics, Interactomic and molecular regulation, and Functional genomics and Molecular diagnostics.

IMPORTANT DATES

Registration and payment deadline : **25th Oct 2018**
 Abstract submission deadline : **30th Sept 2018 (oral)/ 15th Oct 2018 (poster)**
 Notification of abstract acceptance deadline : **5th Oct 2018 (oral)/ 20th Oct 2018 (poster)**

REGISTRATION FEES

<u>LOCAL</u>	<u>INTERNATIONAL</u>
CONFERENCE	
RM 850 RM 600 (student)	USD 280 USD 200 (student)
WORKSHOP AND CONFERENCE	
RM 1850 RM 1600 (student)	USD 525 USD 465 (student)

DESCRIPTION OF CONFERENCE SESSIONS

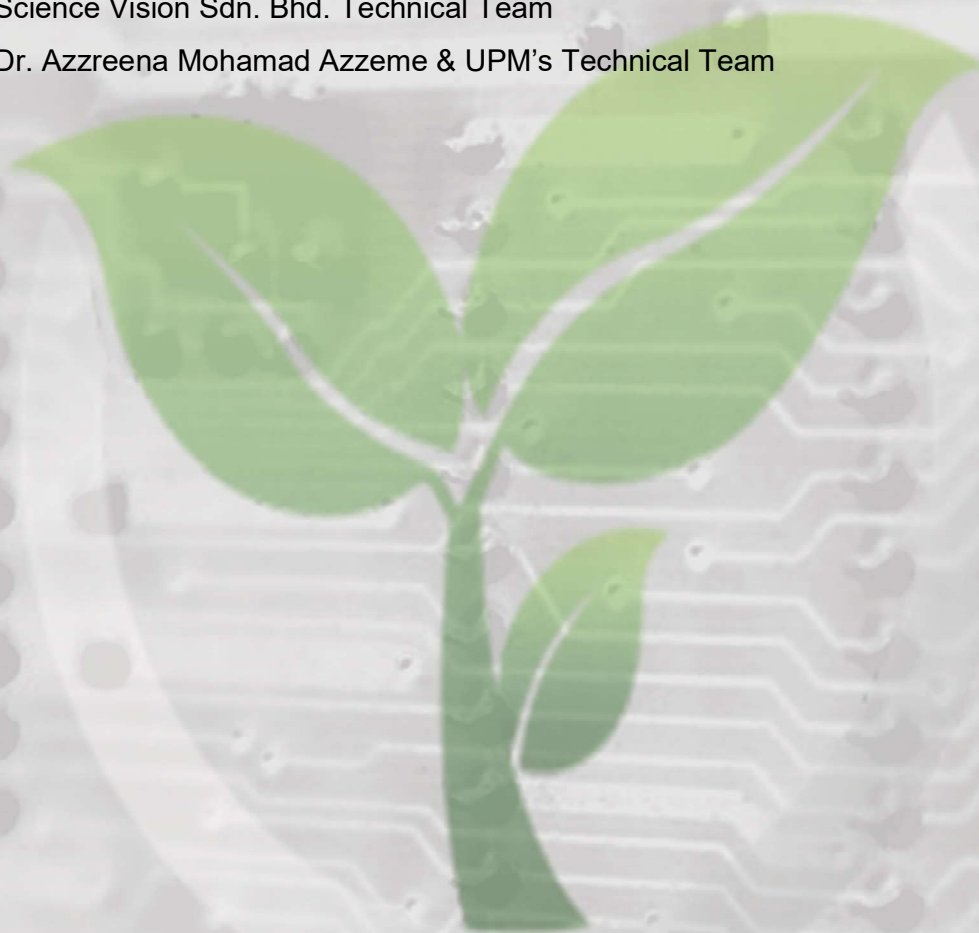
1. **Comparative genomics** compare the genomic features of different organisms. The comparisons include DNA sequence, genes, gene order, regulatory sequences, and other genomic structural landmarks. The major principle of comparative genomics is that common features of two organisms will often be encoded within the DNA that is evolutionarily conserved between them. Based on these, genome and molecular evolution are inferred and this may in turn be put in the context of, for example phenotypic evolution or population genetics
2. ***In vivo* and *in vitro* interaction between molecules (interactomics)** is concerned with interactions between genes or proteins. They can be genetic interactions, in which two genes are involved in the same functional pathway (leading to a particular phenotype), or physical interactions, in which there is direct physical contact between two proteins (or between protein and DNA). Techniques that are commonly used to study the physical interactions include but are not limited to yeast hybrid system and electrophoretic mobility shift assay.
3. **Molecular diagnostics** cover the applications of molecular tools for crop management in the detection of stress conditions or attack by pathogen or pests. Techniques that are rapid, high throughput, utilise less material and adaptable to field conditions are preferred. Many of these techniques are PCR-based but hybridisation-based or immunological assays are also useful in certain situations. Real time information generation for rapid decision making is the new features found in the more advanced technique.
4. **Functional genomics** utilize the wealth of data produced by genomic and transcriptomic projects to describe the functions and interactions of a genome and phenotype. It covers studies at the transcriptional and translational levels either performed in cell free system, *in vivo* or *in planta* (including transgenic system). A genome-wide and systems biology approaches utilising omics platform are included. The traditional approach that focuses on each gene separately may provide a more detailed information of a gene associated with an important trait is also included. Functional genomics promises to expand the practical knowledge of the effect that an organism's genome has on its biological function.

WORKSHOP CONTENT

1. Plant Genotyping by Allele Discriminating PCR (rhAmp™ SNP genotyping)
2. Protein DNA Interaction through Electrophoretic Mobility Shift Assay (EMSA)

WORKSHOP MODERATORS

1. Professor Dr. Denis Murphy (University of South Wales, United Kingdom)
2. Science Vision Sdn. Bhd. Technical Team
3. Dr. Azzreena Mohamad Azzeme & UPM's Technical Team



TENTATIVE PROGRAMME (Day 1)

THURSDAY (1 NOVEMBER 2018)

Time	Activities
8.00 am – 09.30 am	REGISTRATION
9.30 am – 10.30 am	KEYNOTE ADDRESS <u>CHAIRPERSON</u> Prof. Dr. Siti Nor Akmar Abdullah <i>Director, Institute of Plantation Studies, Universiti Putra Malaysia</i> Prof. Dr. Denis J Murphy <i>University of South Wales, United Kingdom</i> Using Genomics, Bioinformatics and Molecular Chemical Analysis to Increase the Sustainability of Oil Palm
10.30 am – 11.00 am	TEA & Poster viewing <u>SESSION A : COMPARATIVE GENOMICS</u> <u>CHAIRPERSON</u> Assoc. Prof. Dr. Delphine Fleury <i>Director, Australian Research Council (ARC) Industrial Research Transformation Hub for wheat in a hot and dry climate</i> <i>ARC & The University of Adelaide, Australia</i>
11.00 am – 11.30 am	PLENARY 1 Prof. Dr. Festo Massawe <i>University of Nottingham, Malaysia Campus</i> Comparative Genomics and Syntenic Relationships Among Selected Legumes
11.30 am – 11.50 am	Assoc. Prof. Phoebe Nemenzo Calica <i>Davao Doctors College, Philippines</i> Nodulation Genes of Chickpea (<i>Cicer Arietinum L.</i>)
11.50 am – 12.10 pm	Mrs. Rozana Rosli <i>University of South Wales, United Kingdom</i> <i>In Silico</i> Characterization and Expression Profiling of the Diacylglycerol Acyltransferase Gene Family (DGAT1, DGAT2, DGAT3 and WS/DGAT) from Oil Palm, <i>Elaise Guineensis</i>
12.10 pm – 12.30 pm	Ms. Tamunonengiyeofori Lawson <i>University of Nottingham, Malaysia Campus</i> A Comparative Transcriptomic Approach Toward Understanding Fruit Softening in Mango

12.30 pm – 2.00 pm LUNCH / Poster Session

2.00 pm – 2.30 pm **PLENARY 2**
Apical Scientific Sdn. Bhd.

SESSION B : INTERACTOMIC AND MOLECULAR REGULATION

CHAIRPERSON

Dr. Pascal Montoro

Team Leader, French Agricultural Research Centre for International Development (CIRAD)

2.30 pm – 3.00 pm **PLENARY 3**
Prof. Dr. Siti Nor Akmar Abdullah
Universiti Putra Malaysia

Interactomics in the Regulation of Stress Response and Fruit Development in Oil Palm

3.00 pm – 3.30 pm **PLENARY 4**
Dr. Yeap Wan Chin
Sime Darby Plantation Berhad, Malaysia
Understanding Oil Palm Traits Through Molecular Networks

3.30 pm – 3.50 pm **Dr. Christina Vimala Supramaniam**
University of Nottingham, Malaysia Campus
Upregulation of Lignin Biosynthesis in *Ganoderma Boninense* Infection in Young Oil Palm During Chitosan Treatment

3.50 pm – 4.10 pm **Mr. Mehdi Moradpour**
Universiti Putra Malaysia
Transcriptional Tweaking using CRISPR/dCas9 System for Heat Tolerance in Plants

4.10 pm – 4.30 pm **Mr. Wan Muhamad Asrul Nizam Wan Abdullah**
Universiti Putra Malaysia
Vacuolar Processing Enzyme Mediates Plant Susceptibility Towards *Fusarium Oxysporum Cubense* F. SP. Tropical Race 4 Infection

4.30 pm – 5.00 pm TEA

7.30 pm – 10.00 pm **CONFERENCE DINNER**
Tenera Hotel, Bangi

TENTATIVE PROGRAMME (Day 2)

FRIDAY (2 NOVEMBER 2018)

Time	Activities
9.00 am – 10.30 am	OPENING CEREMONY
10.30 am – 11.00 am	TEA & POSTER VIEWING
<u>SESSION C (i) : FUNCTIONAL GENOMICS & MOLECULAR DIAGNOSTIC</u>	
<u>CHAIRPERSON</u>	
Prof. Dr. Denis J Murphy <i>Head of Biological Sciences, University of South Wales, United Kingdom</i>	
11.00 am – 11.30 am	PLENARY 5 Assoc. Prof. Dr. Delphine Fleury <i>Australian Research Council & The University of Adelaide, Australia</i> Functional Genomics to Decipher Mechanisms Underlying Drought and Heat Tolerance in Wheat
11.30 am – 12.00 pm	PLENARY 6 Assoc. Prof. Dr. Ganesan Vadamalai <i>Universiti Putra Malaysia</i> Detection and Identification of Viroids : Coconut Cadang-cadang Viroid
12.00 pm – 12.20 pm	Prof. Jiaming Zhang <i>Chinese Academy of Tropical Agricultural Sciences, China</i> Callus-Aided Early Selection in Rubber Tree Breeding
12.20 pm – 3.00 pm	LUNCH / Friday Prayer
<u>SESSION C (ii) : FUNCTIONAL GENOMICS & MOLECULAR DIAGNOSTIC</u>	
Chairperson Dr. Noor Azmi Shaharuddin <i>Head of Technical Committee, ICCGIA2018</i> <i>Universiti Putra Malaysia</i>	
3.00 pm – 3.30 pm	PLENARY 7 Dr. Pascal Montoro <i>French Agricultural Research Centre for International Development (CIRAD)</i> Regulation of the Production and Scavenging of Reactive Oxygen Species and Antioxidant Biosynthesis in Hevea Brasiliensis Laticifers and Their Involvement in Tapping Panel Dryness

3.30 pm – 3.50 pm

PLENARY 8

Assoc. Prof. Mehdi Nasr Esfahani

Agriculture & Natural Resources Research and Education Center, Iran

Cre Genes Resistant to Iranian Wheat Cultivars Against Cereal Cyst

*Nematodes *Heterodera Filipjevi* Isfahan Pathotype*

3.50 pm – 4.10 pm

Prof. Dr. Jennifer Ann Harikrishna

University of Malaya

microRNA-Regulated Stress Responses in Banana

4.10 pm – 4.30 pm

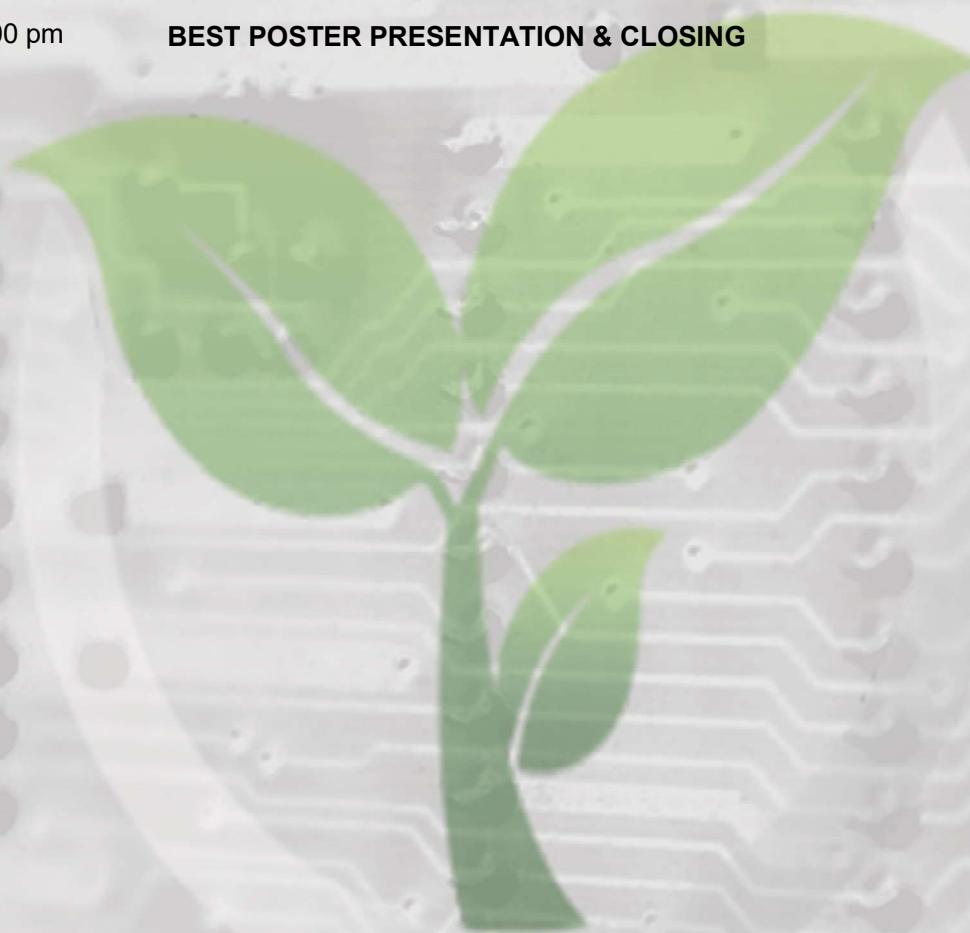
Assoc. Prof. Dr. Wong Mui Yun

Universiti Putra Malaysia

Rapid Detection of Oil Palm Leaf Pathogens Using DNA Macroarray

4.30 pm – 5.00 pm

BEST POSTER PRESENTATION & CLOSING



ORGANISING COMMITTEE

Chairperson	Prof. Datin Dr. Siti Nor Akmar Abdullah
Secretariat	Dr. Kong Lih Ling Assoc. Prof. Dr. Chin Chiew Foan (University of Nottingham) Mrs. Nurul Ain Zubaidah Mohamad Maliki
Scientific & Technical	Assoc. Dr. Noor Azmi Shaharuddin Prof. Datin Dr. Siti Nor Akmar Abdullah Prof. Dr. Denis J Murphy (University of South Wales) Prof. Dr. Festo Massawe (University of Nottingham) Prof. Dr. Ho Chai Ling Assoc. Prof. Dr. Zulkefly Sulaiman Assoc. Prof. Dr. Mohd Yusoff Abd Samad Assoc. Prof. Dr. Wong Mui Yun Assoc. Prof. Dr. Ganesan Vadamalai
Publicity & Logistic	Mr. Fariz Bin Adzmi Mr. Nuzul Shazrin Zulnaidi Mr. Norahim Bin Omar Dr. Zailani Khuzaimah Mr. Nik Muhamad Adnan Bin Mohd Nor Mr. Mohammad Nazri Abdul Bahari
Protocol & Finance	Mr. Muhammad Faiz Zakaria (Head) Mr. Nuzul Shazrin Zulnaidi

LIST OF NEARBY HOTELS

Hotel	Distance from venue	Room per night		Contact		
		Deluxe	Single	Tel	Fax	Email/Website
Le Méridien Putrajaya (*****)	4.8 km	RM448 USD111		+603 8689 6888	+603 8689 6899	www.lemeridienputrajaya.com/
Putrajaya Marriott Hotel (*****)	5.8 km	RM441 USD110		+603 8949 8888	+603 8949 8999	www.marriott.com/hotels/travel/kulpg-putrajaya-marriott-hotel
Putrajaya Shangri-la Hotel (*****)	10 km	RM343 USD98		+603 8887 8888	+603 8887 8889	www.shangrila.com/kualalumpur/putrajayashangrila/
Palace of the Golden Horses (*****)	11.1 km	RM290 USD72		+603 8946 4888	+603 8943 2666	sales@pgh.mines.com.my www.palaceofthegoldenhorses.com.my/
Hotel Bangi-Putrajaya (*****)	8.8 km	RM210 USD53		+603 8210 2222	+603 8210 2888	info@hotelbangi-putrajaya.com www.hotelbangi-putrajaya.com/en-us/home/
Palm Garden Hotel (****)	5.7 km	RM238 USD59		+603 8943 2233	+603 8943 1122	palmgarden@palmgarden.com.my www.palmgarden.com.my/
Philea Mines Beach Resort (****)	9.5 km	RM350 USD81		+603 8943 6688	+603 8943 5555	enquiry@phileahotel.com.my www.phileahotel.com.my/selangor/index.html
The Everly Putrajaya Hotel (****)	9 km	RM180 USD126		+603 8892 2929	+603 8892 2828	reservation.tep@theeverlygroup.com putrajaya.theeverlyhotel.com/
RHR Hotel @ Uniten (***)	4.1 km	RM164 USD39		+603 8922 2088	+603 8922 2080	reservationutn@rhrhotel.com www.rhrhotel.com/
Prescott Hotel Kajang (***)	8.9 km	RM150 USD29	RM88 USD21	+603 8737 5555	+603 8737 6666	reservation.phkj@everlygroup.com theeverlygroup.com/Prescott%20Hotel%20Kajang.aspx
Reko Inn (**)	9.2 km	RM88 USD21	RM68 USD16	+603 8739 8830		www.rekoinn.com/
101 Hotel Bangi (**)	6.4 km	RM120 USD28	RM80 USD19	+603 8927 4988		101bangihotel@gmail.com 101hotel.com.my/
Eco Hotel Putra Kajang (**)	8.0 km		RM78 USD18	+603 8740 3756		reservation@ecohotel.com.my www.ecohotel.com.my
Bangi Gateway Hotel (**)	11 km	RM135 USD31		+603 8920 9205		bangigatewayhotel.com/

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