# FINAL ANNOUNCEMENT

# IMMUNOLOGY SCHOOL 2017 FLOW CYTOMETRY WORKSHOP



Venue: Faculty of Medicine and Health Sciences

Universiti Putra Malaysia

Revive and revisit your Immunology at the

# Immunology School

11-12<sup>th</sup> September 2017 Registration Fee: RM 300

- » Basic & Applied Immunology Lectures
- » Recent Breakthroughs in Immunology

Limited to 100 participants only

Update on clinical applications in allergy & immunodeficiency at the

# Flow Cytometry Workshop

13-14<sup>th</sup> September 2017 Registration Fee: RM 450

- » B cell memory panel for CVID
- » Lymphocyte proliferation assay in immunodeficiency diseases
- » Basophil activation test in food allergy
- » In vitro cell migratory assay

Limited to 30 participants only

## To register

Email immsym@gmail.com to receive an online registration form

## For more details

Ms. Marsitah Abdul Jalil | immsym@gmail.com | +603-8947 2492

# Organised by

Department of Pathology Faculty of Medicine & Health Sciences Universiti Putra Malaysia

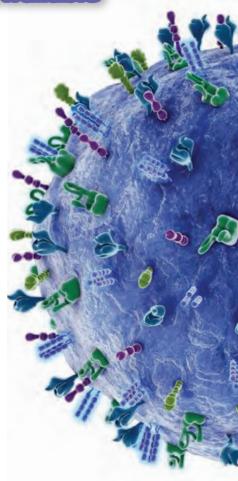


### Co-organised with

AIRC Institute for Medical Research (IMR)







# With the support of



Biomarketing Services (M) Sdn. Bhd.





#### **SPEAKERS**

#### MEMBERS OF AUSTRALASIAN SOCIETY FOR IMMUNOLOGY EDUCATION FOCUSED SPECIAL INTEREST GROUP (SIG)



**PROFESSOR DR. JEAN-PIERRE SCHEERLINCK** is Director of the Centre for Animal Biotechnology, Faculty of Veterinary and Agricultural Sciences, University of Melbourne. He is the author of over 70 articles in refereed journals and is a member of the Australasian Society for Immunology. He is also a member of the Editorial Advisory Board of "Veterinary Immunology and Immunopathology". His research interests lie in the regulation of immune responses and lymphocyte recirculation, development of protein and DNA vaccines, animal models for human diseases and infectious diseases. Dr. Scheerlinck has two Masters degrees, in Zoological Sciences and Biology & Biotechnology. He graduated cum laude with his Doctor of Sciences in 1992, with a thesis titled "Scrutiny of subunit immunogens".



**ASSOCIATE PROFESSOR DR. ROSEMARY FFRENCH** is an experienced immunologist whose research interests include studying immunity to viral infections, vaccine development and immunomonitoring of human clinical trials. She has a strong focus on education of undergraduate and postgraduate students, lecturing and tutoring in Immunology at the Department of Immunology at Monash University. She obtained her PhD in Viral Immunology from the University of Melbourne, followed by a post-doctoral fellowship at the National Institutes of Health in the USA. At the Burnet Institute in Melbourne, she established the Burnet ImmunoMonitoring Facility, which has subsequently become NATA accredited (ISO/IEC 17025) to perform immunological analyses of vaccine and immunotherapies in human clinical trials. She is currently Head of the Viral Immunology Laboratory at Monash University.



**DR. BRUCE LYONS** is a senior lecturer in the School of Medicine at the University of Tasmania. He obtained his PhD in Immunology from the University of Adelaide (1988) with subsequent postdoctoral positions at the University of Edinburgh, John Curtin School of Medical Research, Australian National University and University of Tasmania. His career spans basic and applied immunology in the fields of leukaemia research, leukocyte trafficking, vaccine development and tumour immunology, with a particular interest in applied flow cytometry methodology. Dr. Lyons took up a teaching only senior lectureship in 2008, before being appointed to a teaching/research senior lectureship in 2010. He teaches immunology and advanced immunology to medical students.



**PROFESSOR DR. SEOW HENG FONG** graduated with a BSc (Hons) degree in Biomedical Sciences from the University of London and a PhD from the University of Auckland. She was a postdoctoral fellow at Peter Parham's laboratory at Stanford University, USA, Senior Research Fellow at the Institute of Molecular and Cell Biology, Singapore, Senior Scientist at CSIRO Australia and Burnet Institute, Melbourne from 1986-1996. She is currently professor of Molecular Immunology at the Department of Pathology, Faculty of Medicine and Health Sciences, UPM and has taught Immunology to medical students over the past 20 years and Nutritional Immunology since 2014. Her research field is oncoimmunology which includes the elucidation of T cell and macrophage phenotypes in the tumour microenvironment and association of HLA types and IL-17 gene polymorphism in cancer.



**ASSOCIATE PROFESSOR DR. SHARMILI VIDYADARAN** graduated with a BSc (Hons) degree in Biomedical Science from Universiti Putra Malaysia in 2001 and obtained her PhD from Imperial College London in 2005. Her research interests lie within the field of neuroinflammation, where she studies brain macrophages and aims to modulate their inflammatory responses to reduce neuronal damage. She is currently head of the Immunology Unit, Department of Pathology at UPM and has taught Immunology to medical students since 2006.



**ASSOCIATE PROFESSOR DR. RAJESH RAMASAMY** graduated from Universiti Kebangsaan Malaysia in 2000 with a BSc in Biomedical Sciences, specialising in Immunology. He obtained his PhD in 2006 from Imperial College London in Stem Cell Transplantation/Immunology. Dr. Rajesh accepted an academic position with the Department of Pathology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia in 2006 and has a research interest in stem cell and immunity. He is currently the coordinator for the postgraduate course in Immunobiology.

#### TOPICS COVERED AND HIGHLIGHTS

- Onnate Immunity:
  - From Metchnikoff to pattern recognition theory and the danger theory, NKT cells, innate lymphoid cells
- Humoral immunity:

Discoveries that began the concept of humoral immunity Discoveries in B cell receptor and somatic recombination of immunoglobulin genes and B memory cell

Lymphocytes:

Milestones in the discovery of the thymus, positive and negative selection, clonal selection theory and TCR Historical account of discoveries of cytokines, T helper subsets, T regulatory cell and memory T and B cells

- Inflammation and inflammatory disorders
- Antigen recognition and the immune network
- Antigen processing and presentation, MHC and differences in T and B cell epitopes
- Autoimmunity:

Immune tolerance - how it occurs, differences between T and B cell tolerance and immunological consequences

- Immune response to infectious agents
- Tumour immunology
- Immune-based therapies and vaccine development
- © Current trends in Immunology

#### **WORKSHOP SPEAKERS & INSTRUCTORS**



ASSOCIATE PROFESSOR DR. MAHA ABDULLAH, PhD

Immunology Unit Department of Pathology Faculty of Medicine and Health Sciences Universiti Putra Malaysia

**Expertise:** Immunophenotyping and molecular profiling of acute leukaemias and normal lymphocytes



# DR. ADIRATNA MAT RIPEN MD, PhD

Unit Head of Primary Immunodeficiency Allergy and Immunology Research Centre Institute of Medical Research

**Expertise:** Diagnostics in primary immunodeficiency diseases Molecular and cellular typing in immune defects and functions



#### ASSOCIATE PROFESSOR DR. INTAN HAKIMAH ISMAIL MD, MMed, PhD

Head, Department of Paediatrics Faculty of Medicine and Health Sciences Universiti Putra Malaysia

**Expertise:** Clinical Immunology, food allergy & eczema. Probiotics & gut micribiota in allergic disease.



# DR. NOORMALIN ABDULLAH MD, MPath.

Head, Allergy Unit Allergy and Immunology Research Centre Institute of Medical Research

**Expertise:** Clinical Allergist. Allergen extract production and clinical application.

## **TENTATIVE PROGRAM**

#### Day 1 (Wednesday, 13th Sept. 2017)

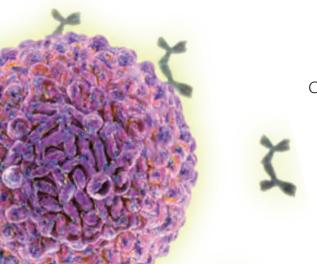
8.00	Registration & Breakfast 8.00		Break
8.30	Talk 1: Fundamentals in Flow Cytometry	8.30	Briefi
9.10	Talk 2: Clinical Aspects of Primary	9.00	Talk 4
	Immunodeficiency Diseases (PID)		Dr. N
	Assoc. Prof. Dr. Intan Hakimah Ismail, UPM		
10.10	Tea Break	10.00	Tea B
10.25	Practical 1: Basics in Flow Cytometry	10.15	Pract
12.00	Talk 3: Lab Diagnostic Requirement in PID		
	and Allergies		
13.00	Lunch	13.00	Lunc
	T II 4 5 4 1 2 1 1 E1 C 2	4400	_

14.00 Talk 4: Multi-colour Flow Cytometry
14.40 Briefing 2: Memory B Cell Panel
15.00 Practical 2: Memory B Cell Panel

16.30 Disccusion & Quiz17.00 End of Session

#### Day 2 (Thursday, 14th Sept. 2017)

8.00	Breakfast
8.30	Briefing 3: Basophil activation test
9.00	Talk 4: Challenges in Food Allergy
	Dr. Noormalin Abdullah, IMR
10.00	Tea Break
10.15	Practical 3: Basophil activation test
13.00	Lunch
14.00	Demo: Migration assay
15.00	Briefing 4: Lymphocyte Proliferation, CFSE
15.20	Practical 4: Lymphocyte Proliferation, CFSE
16.30	Discussion
17.00	Clossing & Tea



#### HIGHLIGHTS

Clinical aspects of Primary Immunodeficiency Diseases (PID) 📀

Challenges in food allergies 📀

Lab diagnostic requirements in PID and allergies 📀

Technical aspects of flow cytometry 📀