

Research Matters



Research Seminars

Date: Wednesday 25 June

Time: Registration at 6 pm

Seminar commences at 6.30 pm

Post event reception at 7.30 pm

Location: Monash University Sunway campus

Monash University will be sharing some of our leading-edge research at this special free event.

Leading academics will be discussing their research in the diverse areas of climate change, micro/nanotechnology and medical research.



MONASH University

 **GROUP OF EIGHT**

Monash University Research Seminars

You are warmly invited to attend one of the three research seminars being presented. A reception for guests will be held after the seminars to enable you to meet Monash University staff.

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Location: Monash University Sunway campus,
Jalan Lagoon Selatan, Bandar Sunway,
46150, Selangor, Malaysia

Parking: Parking is available in an open car park located next to the campus entrance.
Entry to the car park is RM2.

Seminar topics

Responding to climate change: Avoiding the unmanageable and managing the unavoidable	Small Matters: Medical diagnostics and devices driven by micro/nanotechnologies	Diabetes, Cardiovascular Diseases and Obesity – the Metabolic Syndrome: synergy in form and action
<p>Presented by Professor Amanda Lynch, School of Geography and Environmental Science, Faculty of Arts, Monash University Australia</p>	<p>Presented by Dr Leslie Yeo, Department of Mechanical and Aerospace Engineering, Faculty of Engineering Monash University Australia</p>	<p>Presented by Professor Anuar Zaini and Professor Khalid Kadir, Tan Sri Jeffery Cheah School of Medicine, Monash University Sunway campus, Malaysia</p>
<p>Seminar outline</p> <p>There is an understanding that the climate system has a large degree of inertia. This means it will take time to respond to actions that reduce the concentration of greenhouse gases.</p> <p>The consequence of this inertia is that we are already committed to a certain degree of climate change beyond that already observed, even if atmospheric greenhouse gas concentrations were stabilized today. Further, the vulnerability to impacts of climate change is increasing for reasons that have nothing to do with emissions, including unsustainable and rapid development and economic inequity. It is inevitable that damaging and even catastrophic events will continue to occur regardless of efforts to mitigate emissions.</p> <p>A good approximation to the common interest in response to climate change is to reduce the vulnerability of things valued in the world's many and diverse communities. Stabilization of concentrations is one means for reducing vulnerability. Making adaptation to inevitable climate change is another. The context matters: reducing vulnerability is a somewhat different problem for each community, ecosystem, sector and nation.</p>	<p>Seminar outline</p> <p>The emerging fields of microfluidics and nanotechnology have the potential to revolutionise a wide range of industries from pharmaceuticals and medical diagnostics to energy and counter-terrorism strategies.</p> <p>The Micro/Nanophysics Research Laboratory at Monash University is actively working on novel methods to drive fluid actuation and bioparticle manipulation at very small scales for the development of miniaturised portable devices for pulmonary drug delivery and point-of-care medical diagnostics as well as autonomous swimming microrobots for minimally-invasive surgery.</p>	<p>Seminar outline</p> <p>Malaysian National Health and Morbidity data between 1996 and 2006 showed a 6.6% increase in the prevalence of diabetes among adults over the age of 30 years and a shocking escalation rate of 78% of obesity/overweight individuals within the same period. This is in keeping with the WHO's prediction of an epidemic of these conditions within the Asia Pacific region by the year 2025.</p> <p>It is common knowledge that arteriosclerosis leading to acute coronary events and strokes is pivotal within a constellation of related conditions called metabolic syndrome (eg., hypertension, type 2 diabetes mellitus, hyperlipidaemia and obesity). One of the research clusters within the Tan Sri Jeffery Cheah School of Medicine is focusing on various aspects of research ranging from genetic and molecular markers and predictors to clinical efficacies in the management of Metabolic Syndrome, diabetes and cardiovascular diseases.</p> <p>Taking advantage of the ethnic diversity of the Malaysian population, they envisage genetic predisposition in certain community groups, whereas others, like the peninsular aboriginal tribes are protected. Ongoing epidemiological studies are being done in collaboration with several public universities and staff of the Ministry of Health.</p>

Registration is free

To register visit www.monash.edu/research-events-malaysia

For more information please email HDR@adm.monash.edu.au