

2018-19

Cairns Speakers Program

Looking For A Speaker?



JAMES COOK
UNIVERSITY
AUSTRALIA

Cairns
Singapore
Townsville

To
book a
speaker:

James Cook University is delighted to offer Service Clubs in Cairns a selection of contrasting, pithy, witty and serious presenters for your 2018-19 meetings. None of our speakers need high-tech equipment.

Step 1: Consult the chart at the end of the brochure which gives the contact details for each speaker and any specific times when they cannot attend meetings.

Step 2: Please email the speaker(s) of your choice direct.

Step 3: Should you have any problems contacting speakers please email alumni@jcu.edu.au and your problem will be solved.

On Offer In 2018-19:

Monitoring Australia's natural environment

Presented by Associate Professor Mike Liddell, Discipline of Chemistry

SPEAKER IS UNABLE TO PARTICIPATE

In addition Mike works with international scientists to ensure that Australia plays its part globally, and sees that *"Most of the big problems are global ones, and they generally involve chemistry."*

Indonesian health care

Presented by Susanne Brookes, Lecturer Nursing and Midwifery

In December 2017 Susanne traveled to Indonesia with 15 nursing students for 3 weeks to participate in a health care programme run by Karima Health Care in remote areas of Indonesia.

The team stayed in three remote sub-villages in the province of Delingo. This was the first international placement to Indonesia for JCU second year nursing students.

During their stay the team participated in health care clinics, home visits and women's health educational meetings while being immersed into Indonesian culture and lifestyle. This presentation includes in depth details of what the students did, the lessons they learnt, and how our health care differs.

The new frontiers of nursing and midwifery

Presented by Professor Cate Nagle,
Nursing and Midwifery

Cate Nagle is involved in a number of research projects that fall under the umbrella of translational research - work that informs clinical practice, education and health policy.

Her current projects include:

- The development of the national standards for the practice of midwifery in Australia (the Nursing and Midwifery Board of Australia Midwife Standards for Practice)
- Investigating the impact of mild-moderate alcohol use in pregnancy
- Decreasing the incidence of post-partum haemorrhage
- Decreasing unnecessary intervention in childbirth
- Identifying best practice for the care of pregnant teenagers

Collaborative innovative projects include:

- Evaluating a unique model of clinical supervision
- Preparing and supporting Nurse and Midwife Unit Managers in their role across an entire health service - Queensland first



- Exploring robotics in health promotion
- Evaluating the use of the implementation of an electronic health record within the Townsville hospital in terms of quality and safety of maternity care
- Improving health outcomes within the context of our geographical and climatic location

Cate is happy to tailor presentations to the interests and focus of the individual community organisation.

Improving infection control

Presented by Vanessa Sparke, Lecturer CNMR, Nursing and Midwifery



Vanessa has worked in critical care areas and with infection control in Melbourne, and as the infection control nurse for Derby Hospital and Fitzroy Crossing Hospital where she then moved into the position of regional infection control. After which she moved to Cairns to take up the academic position in Nursing and Midwifery and she is currently undertaking a PhD in the Solomon Islands.

Vanessa's work involves improving infection control practices in a rural hospital such as the Solomon Islands, where the challenges of a resource poor setting prevail. The challenges of language, culture, religion and spiritual beliefs all influence people's understanding of the theory behind infection (germ theory) and this impacts on their practice of infection control. Vanessa also works in disaster nursing, particularly in disaster preparedness.

Midwifery-led continuity of maternity care

Presented by Dr Karen Yates, Deputy Academic Head, Nursing and Midwifery

Mounting evidence supports that continuity of maternity care improves outcomes both clinically and psychologically for women and their babies. These include reduced interventions, complications and admissions to special care nurseries.

When properly established and supported it also leads to greater satisfaction for midwives and less burnout.

There are still only small numbers of services offering this model of care and many of those in existence have been strongly driven by consumer demand. Providing information for maternity service providers on best ways to implement these services will improve the availability of these types of services.



Malaria vaccine development programs in PNG, Guinea and Africa

Presented by Distinguished Professor Louis Schofield, inaugural Director of the Australian Institute of Tropical Health and Medicine (AITHM) and the Queensland Tropical Health Alliance (QTHA).

For 24 years Louis was an NH&MRC Research Fellow at the Walter and Eliza Hall Institute in Melbourne, has twice held an International Research Scholarship of the Howard Hughes Medical Institute, and was co-founder of Ancora Pharmaceuticals Inc.

As a recognised authority in the immunology and pathogenesis of infectious diseases, his research programs cover basic molecular sciences, product development and commercialisation, epidemiology and public health.

His approach to malaria has resulted in promising vaccine development programs, and clinical trials in Papua New Guinea and Africa. Louis has published key articles in the highest ranked international journals and received over 6,500 citations to date.



Tango Argentino - *a trinity of music, poetry and dance*



Presented by Professor Richard Stoll

Tango music, like the dance marginalized in western culture, has fascinated people all over the world from the early days of the 19th century until today.

Famous names like Carlos Gardel and Astor Piazzolla come to our mind but tango is more than just the basis of dinner shows for tourists in Buenos Aires. It is a complex social phenomenon and a sophisticated musical style, well grounded in the South American culture with extensions into contemporary art music and modern electro pop.

During the 40s of the last century, tango was at the peak of popularity in South America. Numerous small and big orchestras played the popular songs and people were dancing in the streets. Nowadays the meetings for tango dancers in Buenos Aires (so called milongas) happen more secluded and somehow like a closed society.

Nevertheless, bands playing the contemporary style (neo tango) in Argentina still can attract thousands of fans in open air concerts and traditional tango orchestras regularly play in the Sydney opera house.

Starting from the perspective of musicology this lecture wants to follow the historical path of tango and its connections with poetry and dance. Musical examples of tangos from the major orchestras will be presented.

Pioneer Australian Aviator Jessie Miller

Presented by Chrystopher Spicer, Lecturer Arts and Creative Media

Famous for having once beaten a venomous snake to death with her joystick in the cockpit of her biplane, as well as for breaking flight records, Australian pioneer aviatrix Jessie Keith "Chubbie" Miller made a significant contribution to international aviation history.

The first woman to travel from England to Australia in the air, with her friend Bill Lancaster in 1928, Jessie Miller was also the first woman to fly more than 8000 miles (further than Amelia Earhart at the time), to cross the equator in the air, to cross the South China and Timor Seas and to traverse the Australian continent by air from north to south.

Compiled after years of research and based on Jessie



Miller's own words and writing, *The Flying Adventures of Jessie Keith "Chubbie" Miller* is the first book to focus on the flying career of this pioneer aviatrix, whose important place in aviation history has up until now been largely forgotten.

Chrystopher Spicer presents a captivating 'life and times' of this pioneering Australian who flew into airspace where no woman and very few men had ever flown before, and so she left behind an important legacy as an international pioneer of flight.

Home insurance, inequality and the risks of living in Cairns

Presented by Dr Nick Osbaldiston, Senior Lecturer in Sociology

There has been a lot of attention giving to the rising insurance costs of living in Northern Australia, specifically in North Queensland along the coast. Many people report that premiums are continuously increasing yearly, some at over 200% over the past five years.

This has resulted in a number of reports including the Northern Australia Insurance Premiums Taskforce report of 2015 that highlighted some of the potential ways forward to reduce costs of premiums for home owners and renters.

In response to this, a project was conducted in 2017 that examined the rising costs of insurance amongst Cairns residents and the risks of under-insurance that might exist here.

It is found that some of the most vulnerable groups are indeed under-insuring their properties or not insuring them at all. In this presentation, these results will be given and discussion about what this means for Cairns' future will be considered.



Education for the post-millennial generation



Presented by Dr Michele Dale, Academic Developer

Post-millennial students start university with justifiable expectations of flexible delivery and connectivity, including technologies and ways of working that challenge our existing learning environments.

Dr Michele Dale is an academic developer at JCU, specialising in blended learning - working with lecturers to design face-to-face and online activities that will engage and support contemporary learners.

Michele will highlight the impact of the escalation in online technology on our approach to tertiary education and our response, demonstrating some simple and novel ways our educators can continue to support the next generation of learners.

Mitigating the impact of box jellyfish

Presented by Dr Robert Courtney

Dangerous box jellyfish, including Irukandji jellyfish, are typically present in tropical Australian waters during the warm monsoonal months. These jellyfish have a direct negative impact through painful, and potentially fatal stings, which frequently require hospitalisation for treatment.

The direct cost associated with treating envenomed victims, and the impact these jellyfish have on the Australian tourism industry through reduced revenue, are substantial.

Dr. Robert Courtney has recently finished his PhD exploring the ecology of box jellyfish to better understand the factors that contribute to when and where these animals are present.

This presentation will focus on the current state of knowledge of box jellyfish ecology, will explore previous research conducted on these animals, and provide a clear



indication of areas where further research is required.

The ultimate goal of this research is to find better ways to mitigate the impact of these jellyfish through a better understanding of these dangerous animals.

Understanding the Irukandji jellyfish

Presented by Olivia Rowley, PhD Student

Weighing in smaller than a fingernail, the Irukandji jellyfish is a household name in far north Queensland. But how do we mitigate something that we are yet to fully understand?

As a PhD student at James Cook University, Olivia is using novel, state-of-the-art physiological and genetic technology in a bid to locate Irukandji jellyfish and their polyps in the field.

Ultimately, defining the ecological characteristics of these animals and locating them in the field will further the biological understanding of these animals alongside the everyday implications of these organisms for Queensland.



Ageing and dementia in FNQ

Presented by Dr Edward Strivens, Regional Geriatrician, FNQ, Dr Sarah Russell and Rachel Quigley, Healthy Ageing Research Team JCU

The Health Ageing Research Team has been investigating issues of ageing and dementia prevalence with a focus on older Aboriginal and Torres adults living in Far North Queensland communities for many years.

Dr Edward Strivens is a regional geriatrician in FNQ and Clinical Director of Older Persons Sub-acute and Rehabilitation services at Cairns Hospital and Adjunct Associate Professor with the College of Medicine and Dentistry, James Cook University. Dr Sarah Russell is a neuropsychologist and research fellow, JCU and Rachel Quigley a physiotherapist and researcher with JCU. Topics for presentation include:

- What is dementia?
- Risk factors of dementia
- Protective factors of dementia
- Dementia diagnosis and treatments
- Culturally appropriate assessment of dementia in Aboriginal and Torres Strait Islander communities
- Findings in Torres Strait populations



Getting to know your immune system

Presented by Associate Professor John Miles, Principal Research Fellow Molecular Immunology

John Miles is a Principal Research Fellow in Molecular Immunology at the Australian Institute of Tropical Health and Medicine at James Cook University. His research is focused on the cellular immune processes which determine the host's response to infectious disease, cancer and innocuous agents.

John's laboratory uses information from these basic studies for immunomonitoring and for immunomodulation via rational vaccine design and therapeutic interventions.

State-of-the-art technology for immunisation

Presented by Denise Doolan, Professorial Research Fellow, Immunology of Infectious Diseases

Denise is a molecular immunologist and is passionate about improving the health of millions of people worldwide who are suffering from infectious and chronic diseases. Her research focuses on developing novel immunotherapeutics and immunodiagnostics for complex pathogens that cause chronic diseases, using malaria as a model. Core themes include:

- Host-pathogen immunity,
- Antigen discovery,
- Vaccine engineering, and
- Biomarker discovery, using state-of-the-art genome-based technologies and human models of disease.

Much of her career has focused on malaria immunology and vaccine development, now expanding into the area that intersects infectious and chronic disease.

She has strong expertise in the process of vaccine development, spanning the complete vaccine development pipeline from discovery to clinical testing.

Professor Doolan received her PhD from the University of Queensland in 1993 in the field of molecular immunology, working with Dr. Michael Good at the Queensland Institute of Medical Research and studying immunity to the malaria. She then completed a National Academy of Sciences postdoctoral fellowship in the USA at the Naval Medical Research Center on malaria vaccine development. After appointments as Director of Basic and Preclinical Research & Development and then Scientific Director of the US Navy Malaria Program, Doolan returned to Australia in 2007 to

establish the Molecular Vaccinology Laboratory at the Queensland Institute of Medical Research.

In 2016, she relocated to the Australian Institute of Tropical Health and Medicine at James Cook University, Cairns, in order to advance the development of treatments and diagnostics for tropical infectious diseases.

Professor Doolan has been awarded multiple highly competitive Research Fellowships since her return to Australia, including a Pfizer Australia Senior Research Fellowship, followed by a Principal Research Fellowship from the National Health and Medical Research Council of Australia which has been recently renewed.

Dr. Doolan served on the Executive Board of the Australian Society for Parasitology for 4 years, including President for 2 years, and currently serves on the Executive Board of the International Society for Vaccines.

She has published more than 150 papers and book chapters on infectious diseases and vaccine development, and is a named inventor on 13 patents in vaccinology, immunology, and antigen discovery.



More than meets the eye of vilified vermin

Presented by Dr. Tasmin Rymer College of Science and Engineering

Tasmin is a passionate animal behaviourist with a particular fondness for rodents. The rodents are a group of highly successful animals that have exploited nearly every habitat type of earth. Yet, most people consider rodents to be pests, and many are unaware of the important ecosystem services that these animals provide in their natural habitats.

In addition, most people assume that, within a species, all rodents are the same. Yet, the amount of individual variation observed is quite staggering. Tasmin's research focuses on the development of behaviour in rodents, and the mechanisms causing behaviour to be expressed.

In particular, she studies a range of behaviours, including parental care behaviour and personality. She is also fascinated by the emotion and cognitive abilities of these animals. The relationship between these different aspects is often as complex as is seen in humans. Tasmin can show you that there is so much more than meets the eye of these vilified, so called "vermin".



Running to raise awareness

Presented by Matthias Wust, Bachelor of Medicine/Bachelor of Surgery

Matthias is the coordinator of *Run To Better Days (RTBD)*, a charity made up of JCU students who fundraise and raise awareness for poverty by running down the Queensland coast every winter holidays.

The group speak at schools and community organisations on the way and give educational talks on poverty. As part of the Effective Altruism movement, the group looks primarily at the evidence-based ways that are best suited to combating poverty - essentially getting the most bang for your buck when fighting poverty.

Harnessing venom

Presented by Vanessa Neale, PhD Student

Vanessa loves venomous animals and is interested in the effects of venom on prey, predators and humans. She is intrigued by the possibilities of harnessing the power of venom for medicines, pesticides and other purposes.

Vanessa studied the composition and toxicity of sea snake venom, looking specifically at the spine-bellied sea snake (*Hydrophis curtus*), and published two papers on her results.

Sea snakes are found in the shallow tropical and subtropical waters of the Indo-Pacific, and while their bites can be deadly they are fascinating and graceful animals. As they are also found around Cairns, Vanessa will be delighted to make you feel more "at home" around such beautiful creatures.



The mystery of the Redclaw crayfish

Presented by Damian Rigg, PhD Student

Damian has been researching the juvenile Redclaw crayfish. The production of redclaw in aquaculture has experienced some ups and lows over the last 30 years but has never lived up to the potential predicted in the early 1990's.

The industry itself has literally "bounced along the bottom" and not developed in the fashion which was imagined when the species was first introduced to aquaculture, despite there being unfulfilled demand.

Highly variable outputs at harvest are seen to be the impediment to new farmers entering the industry. To this end a project funded by the Rural Industries Research and Development Corporation (now AgriFutures Australia) was initiated to look at the intensification of the production of juvenile redclaw "craylings". Damian's part in this is to attempt to "supercharge" the juveniles so they survive and grow to table size more predictably, to increase supply and to encourage new entrants into production.





Dealing with North Korea

Presented by Dr Michael Underdown
Adjunct Senior Research Fellow

Michael is a former manager of UNDP's Tumen River Area Development Programme, a multilateral trade facilitation project to develop the North Korean-Russian-Chinese border.

He has extensive first-hand experience in North Korea and, as a scholar of the region over several decades, has unique perspectives to offer.

Ship Arrest

Everyone knows how people get arrested, but what about ships? Michael has arrested a range of different ships, from iron ore bulk carriers over 200,000 tonnes in Dampier to inter-island ferries in New Zealand.

Dredging

There has been much comment on proposals to dredge in Cairns. As one of Australia's leading port lawyers, Michael was responsible for drafting dredging contracts for the Western Australian ports. The locations of dredge spoil grounds are shown on Admiralty charts precisely because they are stable.

