**Lunchtime Seminar speakers for October - November 2017:**

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| Wednesday, 4 October 2017 12.30pm to 1.30pm  Seminar room, John Mathews Building,  Royal Darwin Hospital Campus | Presenter: Rohan Fisher, Charles Darwin University | **Title:** Interactive, 3D scenario modelling: tools to facilitate participation in health service access analysis.  **Abstract**: The presentation initially outlines Rohan's work over the last decade developing public health information applications in Eastern Indonesia and then focuses on health service access modelling in this context. Modelling travel time to services has become a common public health tool for planning service provision but the usefulness of these analyses is constrained by the accuracy of input data and the simplistic, one-dimensional nature of the outputs. This is particularly an issue in the developing world where access to basic data is limited and travel is often complex and multi-modal. Improving the accuracy and relevance in this context requires greater accessibility to, and flexibility in, travel time modelling tools to facilitate the incorporation of local knowledge and the rapid exploration of multiple travel scenarios. Described are a number of open sources, adaptable, **interactive travel time modelling** tools to allow greater access to and participation in service access analysis. The approaches described use a unique set of tools to explore this complexity, promote discussion and build understanding with the goal of producing better planning outcomes. This work is being further developed through the use of **3D printed, projection augmented interfaces** to further increase the engagement and level of with participation with these analyses.  **Biography**: Rohan Fisher has worked with satellite data and GIS for the last 25 years, initially for CSIRO in Canberra, and subsequently for the Northern Territory government in Alice Springs and Darwin. For the last 14 years, he has worked at Charles Darwin University focusing on capacity building and geospatial applications for natural resource management, health information visualisation and good governance in Eastern Indonesia. His current research and capacity building interests are focused on developing innovative 3D data visualization tools and simulation models for exploring landscape processes and complex systems. |
| Thursday, 2 November 2017  12.30pm to 1.30pm  Seminar room 1.48, Red 9, Charles Darwin University, Casuarina campus | Presenter: Dr Philip Gillingham, University of Queensland | **Title:** Transforming information systems design and use in social welfare agencies: participatory design (or escaping the electronic cage)  **Abstract:** Information systems (IS) have been implemented across the social welfare sector over the last 20 years. However, research has shown that they undermine frontline work with service users and, overall, impair organizational efficiency. They are also costly to purchase, implement and maintain, especially at a time when the resources being allocated to social welfare services are not increasing or being reduced. In this presentation, part of a program of national and international research, started in 2011, which aims to improve how IS are designed and used in social welfare agencies is presented. It will be argued that participatory design, which involves social welfare practitioners as end users, is one way to improve how IS are designed and used. Drawing from the findings of the research so far, important areas where problems might arise during a process of participatory design are identified and solutions suggested.  **Biography:** Dr Philip Gillingham is a qualified social worker with 16 years of professional and management experience in the social welfare sectors in England and Australia. His PhD and many of his publications are about child protection policy and practice, including risk assessment. In 2013, Dr Gillingham received a Discovery Early Career Research Award from the Australian Research Council to pursue the research in this presentation for 3 years full time. In 2017, Dr Gillingham received a Future Fellowship Award from the Australian Research Council to pursue and broaden this research for 4 years. He is currently based at the University of Queensland. |
| Thursday, 30 November 2017  12pm to 1pm  Menzies Auditorium, John Mathews Building, Royal Darwin Hospital campus | Presenter: Associate Professor Jane Hill, Dartmouth College, USA | **Title:** Sniffing Pathogenesis: using small molecules to generate diagnoses and insight  **Abstract:**  **Biography:** Jane Hill is an Associate Professor of Bioengineering and the Geisel School of Medicine at Dartmouth. Her research focuses on the use of small molecules for the diagnosis of infectious diseases as well as how some of those molecules might enable communication between species. Example areas of active research includes: lung transplant, cystic fibrosis, multidrug resistance, chronic infection contexts. Some particular organisms of interest include: *Pseudomonas*, *Staphylococcus*, *Klebsiella*, Escherichia, Burkholderia, and *Mycobacteria* (though she expects more shiny things to be added to that list). |