



**WESTERN SYDNEY**  
UNIVERSITY

School of Computer, Data and Mathematical Sciences

## HDR Seminar 12

# Program

### 22 September 2021

4:00pm - 4:10pm	<b>Briefing</b> <b>Topic: Policy update and announcements</b> A/Prof Dongmo Zhang
4:10pm - 4:40pm	<b>Invited Speech</b> <b>Topic:</b> Strategic Career Planning for HDRs and ECRs <b>Speaker:</b> Dr Celia Harris - Director of Impact & Engagement, MARCS Institute for Brain, Behaviour & Development and Dr Hannah Sarvasy - ARC DECRA Research Fellow, MARCS Institute for Brain, Behaviour & Development
4:40pm - 5:00pm	<b>Library Service Talk</b> <b>Topic:</b> Preparing to Publishing <b>Speaker:</b> Linda Thornely - School Librarian, School of Computer, Data and Mathematical Sciences, School of Engineering, Design and Built Environment, The Academy
5:00pm - 5:20pm	<b>Candidature Research Presentation</b> <b>Topic:</b> Reconstructing most recent common ancestors of bacterial genomes using transformation semigroups <b>Speaker:</b> Chad Clark (PhD candidate 17485151) <b>Supervisory panel:</b> Prof Andrew Francis and A/Prof James East
5:20pm	<b>Closing</b>

Venue: Online Zoom

Zoom ID: 886 7872 4041

Next Event: HDR Forum – 27th October 2021

## **Strategic Career Planning for HDRs and ECRs**

**Speaker: Dr Celia Harris and Dr Hannah Sarvasy**

**Abstract:**

This workshop will involve an interactive conversation about career pathways in academia and strategies for success, productivity, and happiness in your career.

**Biography:**

**Doctor Celia Harris:**

Director of Impact & Engagement,  
MARCS Institute for Brain, Behaviour & Development  
Director of Impact & Engagement,  
MARCS Institute for Brain, Behaviour & Development  
Vice-Chancellor's Senior Research Fellow - Cognitive Neuroscience,  
MARCS Institute for Brain, Behaviour & Development

**Doctor Hannah Sarvasy:**

ARC DECRA Research Fellow,  
MARCS Institute for Brain, Behaviour & Development  
Hannah Sarvasy (PhD 2015, James Cook) has conducted primary linguistic fieldwork on Nungon (Papuan), Kim and Bom (Atlantic; Sierra Leone), and Tashelhit Berber (Morocco) and ran a pioneering longitudinal study of children's acquisition of Nungon. Her publications include *A Grammar of Nungon: A Papuan Language of Northeast New Guinea* (Brill, 2017), *Word Hunters: Field Linguists on Fieldwork* (John Benjamins, 2018), and numerous articles and book chapters on topics in Nungon grammar, linguistic typology, Bantu syntax, fieldwork methodology, and ethnobiology, as well as Kim and Bom language primers. She taught at UCLA, served as a Research Fellow at the Australian National University, and currently holds an Australian Research Council Discovery Early Career Researcher Award for the crosslinguistic study of clause chains from typological, acquisition, and psycholinguistic angles.

## **Reconstructing most recent common ancestors of bacterial genomes using transformation semigroups**

**Speaker:** Chad Clark (PhD candidate 17485151)

**Abstract:** Two of the evolutionary operations contributing to the variation among bacterial genomes are inversions and deletions. In order to reconstruct the most recent common ancestor of two bacterial genomes we require a method of calculating an inversion-deletion distance between them. In this talk we will investigate the problem of calculating this distance. We also introduce some of the novel algebraic structures that play a key role in this problem.