



Centre for Biodiversity Analysis 10th Anniversary Science Symposium

Friday 14th October 2022 | Ann Harding Centre, University of Canberra

Program

11:30am	Registration Tea, coffee and light lunch <i>Speakers - please put your talks on lectern computer in seminar room</i>
12:30pm ~10 mins	Welcome and introduction. Craig Moritz, CBA Director - ANU
12 mins	1. From rabbit poo to Sars-Cov2. Benjamin Schwessinger - ANU <i>Ignition Project (2017): Uncovering the Hare Microbiome.</i> Robyn Hall - CSIRO; Benjamin Schwessinger, Somasundhari Shanmuganandam - ANU
12 mins	2. Metabolic consequences of sex-reversal in two species of lizard: a test of the like genotype and like phenotype hypotheses. Kristoffer Wild - UC <i>Ignition Project (2019): Energetic costs of sex reversal in lizards: implications for understanding evolutionary transitions between environmental and genotypic sex determination.</i> Daniel Noble, Essie Rodgers - ANU; Stephen Sarre, Arthur Georges, Kristoffer Wild, Duminda Dissanayake - UC
12 mins	3. High Country Eucalypt Dieback Synthesis Network. Jessica Ward-Jones - ANU <i>Synthesis Group (2021): High Country Eucalypt Dieback Synthesis Network.</i> Adrienne Nicotra, Matt Brookhouse, Jessica Ward-Jones, Zachary Brown, Pieter Arnold, Jamie Pittock, Saul Cunningham, Celeste Linde, Justin Borevitz - ANU; Linda Broadhurst, David Bush, Lydia Guja - CSIRO; Duanne White, Leah Moore - UC
12 mins	4. Advances in museum genomics: how collections can accelerate evolutionary research. Clare Holleley - CSIRO <i>Ignition Project (2016): Biogeography of sex reversal and the effects of climate change on reptile sex determination.</i> Clare Holleley, Kerensa McElroy - CSIRO; Dan Rosauer, Craig Moritz, Caitlin Cherryh - ANU; Arthur Georges, Meghan Castelli, UC. <i>Ignition Project (2019): Barcoding and capture-based approaches for eggshell genomics to improve biodiversity assessment in Australian birds.</i> Alicia Greal, Naomi Langmore - ANU; Clare Holleley - CSIRO. <i>Ignition Project (2021): Non-destructive genomic identification of museum-preserved parasites and their hosts from formalin preservation media.</i> Erin Hahn, Clare Holleley - CSIRO; Alejandro Trujillo Gonzalez - UC; Linda Neaves - ANU. <i>Ignition Project (2021): Skins with thermolabile sex as sensitive indicators of environmental change.</i> Ben Kefford, Arthur Georges, Duminda Dissanayake, Sarah Whiteley, Susan Wagner - UC; Adrienne Nicotra - ANU; Clare Holleley - CSIRO; Blair Trewin - BOM; Rick Shine - Macquarie
12 mins	5. Biodiversity change: A risk factor for human health? Aparna Lal - ANU <i>Ignition Project (2017): Biodiversity change: A risk factor for human health?</i> Aparna Lal - ANU; Karel Mokany - CSIRO
12 mins	6. eDNA: The next frontier of pest and biological control detection in agriculture. Valerie Caron - CSIRO <i>Ignition Project (2018): eDNA: The next frontier of pest and biological control detection in agriculture.</i> Valerie Caron - CSIRO; Dianne Gleeson, Cat Campbell - UC
12 mins	7. Genomic consequences of island isolation in Australian mammals. Emily Roycroft - ANU <i>BioPlatforms Australia project (2016-21): Oz Mammals Genomics.</i> National consortium of over 30 partners led by Aust. Museum and ANU, and includes Sth Aust. Museum, Museum Victoria, WA Museum, QLD Museum, CSIRO NRCA, Threatened Species Recovery Hub, ALA and others.
15 mins	8. The platinum genome assembly and a quick horizon scan of genomics and transcriptomics. Arthur Georges - UC <i>BioPlatforms Australia project (2020-present): Amphibian and Reptile Genome Initiative.</i> National consortium led by University of Canberra and ANU

2:20pm	'Mini Mingle' networking & biodiversity science discussion Tea & coffee break
3:15pm 12 mins	9. Human tools for Insect Pests - applying pan-genome approaches to characterise resistance patterns in Cotton Bollworm Andreas Bachler - ANU & Amanda Padovan - CSIRO <i>Ignition Project (2019): What do humans and insects have in common? Using advances in human genetics to understand insecticide resistance in the cotton bollworm, Helicoverpa armigera.</i> Amanda Padovan, Tom Walsh - CSIRO; Dan Andrews, Angela McGaughran, Andreas Bachler - ANU.
12 mins	10. Simultaneous inference of contemporary niches and the history of niche evolution Xia Hua - ANU <i>Ignition Project (2015): Developing new methods for using distribution data to identify taxa that can tolerate extreme conditions.</i> Xia Hua, Lindell Bromham, Marcel Cardillo - ANU; Atlas of Living Australia
12 mins	11. BUCKET-Seq: Non-destructive genomic identification of museum-preserved parasites and their hosts from formalin preservation media. Erin Hahn - CSIRO <i>Ignition Project (2021): Non-destructive genomic identification of museum-preserved parasites and their hosts from formalin preservation media.</i> Erin Hahn, Clare Holleley - CSIRO; Alejandro Trujillo Gonzalez - UC; Linda Neaves - ANU
12 mins	12. New approaches to understanding trophic ecology in marine ecosystems for industry application. Dianne Gleeson - UC <i>Ignition Project (2018): New approaches to understanding trophic ecology in marine ecosystems for industry application.</i> Allen Rodrigo, Louis Ranjard, ANU; Dianne Gleeson, Elise Furlan, UC; Simon Nicol, Dept Agriculture & Water Resources
12 mins	13. Genetic assessment of bushfire-impacted vertebrate species. Rhiannon Schembri - ANU <i>NESP Threatened Species Recovery Hub project (2021): Genetic assessment of priority taxa and management priorities.</i> Craig Moritz, Renee Catullo, Rhiannon Schembri - ANU; Bioplatforms Australia; and museums, universities, and CSIRO across Australia.
12 mins	14. Genomic empowerment of Australian bee systematics, taxonomy, conservation and diversity. Simon Tierney - WSU <i>Synthesis Group (2019): Genomic empowerment of Australian bee systematics, taxonomy, conservation and diversity.</i> Juanita Rodriguez, Francisco Encinas-Viso, Liz Milla - CSIRO; Saul Cunningham, Julian Brown, Sasha Mikeyev - ANU; Simon Tierney - Western Sydney U; Katja Hogendoorn, Dona Krieta, Korjent van Dijk - U Adelaide; Lucas Hearn - Flinders U; Tobias Smith - U Queensland; Ros Gloag - U Sydney; Remko Leijs - SA Museum; Michael Batley - Aust Museum; Eduardo Almeida - U São Paulo; Olivia Bernauer - U Wisconsin; Michael Branstetter - US Dept Agriculture; Margarita Lopez-Urbe - Penn State U; Laurence Packer, Sandra Rehan - York U.
12 mins	15. Skinks with thermolabile sex as sensitive indicators of environmental change. Duminda Dissanayake - UC <i>Ignition Project (2021): Skinks with thermolabile sex as sensitive indicators of environmental change.</i> Ben Kefford, Arthur Georges, Duminda Dissanayake, Sarah Whiteley, Susan Wagner - UC; Adrienne Nicotra - ANU; Clare Holleley - CSIRO; Blair Trewin - BOM; Rick Shine - Macquarie.
12 mins	16. Eucalyptus genomics. Justin Borevitz & Scott Ferguson - ANU <i>Ignition Projects (2012): How local is local? Landscape genomics in Yellow box.</i> Justin Borevitz - ANU; Linda Broadhurst - CSIRO; and (2014) <i>Eucalyptus genomics.</i> Linda Broadhurst, David Bush, Brendan Lepschi - CSIRO; Justin Borevitz, Norman Warthmann, Megan Supple, Jason Bragg - ANU.
~10 mins	Closing words. David Yeates - CSIRO
~5:00pm	Social mixer - Celebratory drinks and canapés
6-6:30pm	End

We acknowledge the traditional custodians of the land we are meeting on today, the Ngunnawal people. We acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.