



## CBA Ignition grants

Date	Ignition Project	Investigators	CBA \$
77 July 2023	<b>Next-generation approaches to <i>Lagovirus</i> surveillance in Australia</b>	Nias Peng, Maria Jenckel, CSIRO; Benjamin Schwessinger, Ashley Jones, ANU	21418
76 July 2023	<b>Linking soil microbial biodiversity with spectral proxies and soil chemistry</b>	Wolfram Buss, James Latimer Fenner, ANU; Uta Stockmann, Senani Karunaratne, CSIRO	41200
75 July 2023	<b>Uncovering the diverse complexity of plant and fungi transcriptomes with long-read RNA sequencing</b>	Ashley Jones, ANU; Stephanie Chen, CSIRO	36640
74 July 2023	<b>Cellular energetics of sex-reversal across life in two model lizard systems: from cells to population-level consequences</b>	Kristoffer Wild, Daniel Noble, Naomi Laven, Pablo Recio Santiago, Dalton Leibold, ANU; Simon Clulow, Arthur Georges, Duminda Dissanayake, UC	39000
73 June 2022	<b>Environmental DNA for aquaculture biosurveillance - using harmful algae <i>Heterosigma</i> as a model</b>	Tansyn Noble, Luana Lins, James Wynne, Richard Taylor, Anusuya Willis, CSIRO; Alejandro Trujillo Gonzalez, UC; Benjamin Schwessinger, ANU	45000
72 June 2022	<b>Spider wasp venoms: past and present</b>	Daniel Dashevsky, Juanita Rodriguez, CSIRO; Alexander Mikheyev, ANU; Andrew Walker, Sam Robinson, UQLD	15000
71 June 2022	<b>Do cultivars degrade genetic variation in conspecific remnant populations?</b>	William Higgisson, Stephen Sarre, UC; Joanne Bennett, ANU, Rebecca Jordan, CSIRO	15000
70 May 2021	<b>How will alpine soil invertebrate communities respond to drier soils and changing snow dynamics due to climate change?</b>	Pieter Arnold, ANU; Daniel Huston, CSIRO	10000

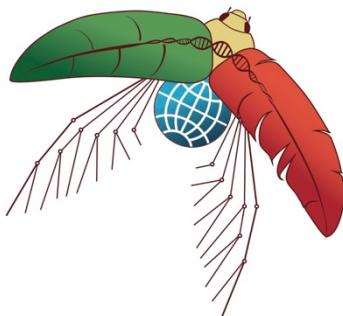
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69 May 2021	<b>Skinks with thermolabile sex as sensitive indicators of environmental change</b>	Ben Kefford, Arthur Georges, Duminda Dissanayake, Sarah Whiteley, Susan Wagner, UC; Adrienne Nicotra, ANU; Clare Holleley, CSIRO; Blair Trewin, Bureau of Meteorology; Rick Shine, Macquarie	10000
68 May 2021	<b>Comparative Hi-C of northern Australian <i>Gehyra</i>: do chromosomal rearrangements restrict gene flow in sympatric species?</b>	Emily Roycroft, Stephen Zozaya, ANU; Janine Deakin, UC	10000
67 May 2021	<b>Synthetic biology conservation approach to conserving amphibian species impacted by the amphibian-killing chytrid fungus</b>	Simon Clulow, UC; Caitlin Cooper, Anthony Waddle, Kiaran Krishnankutty Nair, CSIRO	10000
66 May 2021	<b>Assessing variation in the susceptibility of <i>E. blakleyi</i> to psyllid attack using leaf chemistry traits</b>	Madison Fink, Megan Head, ANU; David Bush, CSIRO; Hannah Windley, Greg Baines, Rosie Cooney, ACT Government	9988
65 May 2021	<b>Microbiome of <i>Eucalyptus viminalis</i> and <i>E. pauciflora</i> and its association with eucalypt dieback</b>	Celeste Linde, Leah Moore, Ara Chowdhury Hosna, ANU; Ben Gooden, Gavin Hunter, Tracey Steinrucken, CSIRO	10000
64 May 2021	<b>Non-destructive genomic identification of museum-preserved parasites and their hosts from formalin preservation media</b>	Erin Hahn, Clare Holleley, CSIRO; Alejandro Trujillo Gonzalez, UC; Linda Neaves, ANU	10000
63 Oct 2020	<b>Developing a collections-based reference dataset for species identification in environmental DNA (eDNA) monitoring</b>	Linda Neaves, Adrian Manning, ANU; Sue McIntyre, Andrew Young, Linda Broadhurst, Andreas Zwick, CSIRO	10000
62 Oct 2020	<b>Comparative phylogeography of a unique obligate pollination mutualism</b>	Liz Milla, Francisco Encinas-Viso, CSIRO; Bernd Gruber, UC	10000
61 Nov 2019	<b>A comparative approach to understanding gene flow in avian species across Sahul (student project)</b>	Craig Moritz, Heather Johnston, ANU; Leo Joseph, CSIRO	10000
60 Nov 2019	<b>Using herbarium specimens to determine the drivers of mast seeding in spinifex and hence the drivers of boom-bust growth in vertebrate populations of arid Australia (student project)</b>	Richard Duncan, Will Higgisson, Edward Calaby, Bernd Gruber, Stephen Sarre, UC; Brendan Lepschi, Linda Broadhurst, CSIRO; Tom North, DoEE	9924
59 Nov 2019	<b>Exploring Australia's diversity for pathogens of weeds (student project)</b>	Peter Solomon, ANU; Oliver Mead, CSIRO; Andrew Milgate, NSW DPI; Alexandra Tabor, Dalness Farm	10000
58 Nov 2019	<b>Biodiversity of CO2 use among toxic bloom forming cyanobacteria</b>	Anusuya Willis, CSIRO; Ben Long, ANU	9960
57 Nov 2019	<b>Energetic costs of sex reversal in lizards: implications for understanding evolutionary transitions between environmental and genotypic sex determination</b>	Daniel Noble, Essie Rodgers, ANU; Stephen Sarre, Arthur Georges, Kris Wild, Duminda Dissanayake, UC	10000

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56 Nov 2019	Using data on avian performance to enhance Mallee restoration under climate change	Lynda Sharpe, Janet Gardner, ANU; Suzanne Prober, CSIRO	9950
55 Mar 2019	Developing DNA-based non-invasive population monitoring for the threatened Broad-toothed Rat to assist in threat management outcomes	Stephen Sarre, Cat Campbell, UC; Wendy Ruscoe, CSIRO; Mel Schroder, NSW-NPWS	9108
54 Mar 2019	Arbovirus surveillance: Invertebrate-borne viruses as biocontrol agents	Leon Court, Chris Hardy, Matthew Morgan, CSIRO; Michael Frese, UC	9000
53 Mar 2019	Can environmental selection on physiological phenotypes help explain the success of invasive species in Australian rainbowfishes?	Peter Unmack, UC; Chris Fulton, ANU	10000
52 Mar 2019	Barcode and capture-based approaches for eggshell genomics to improve biodiversity assessment in Australian birds	Alicia Grealy, Naomi Langmore, ANU; Clare Holley, CSIRO	10000
51 Mar 2019	Building a reference genome for a non-model species: <i>Wahlenbergia ceracea</i>	Loeske Kruuk, Benjamin Schwessinger, Diep Ganguly, ANU, Rocco Notarnicola; Alexander Schmidt-Lebuhn, CSIRO	10000
50 Mar 2019	The role of honey bee microbiome evolution in adaptation to environmental stress	Sasha Mikheyev, ANU, Kiera O'Halloran, Amy Paten, CSIRO; Vienna Kowallik, OIST	10000
49 Mar 2019	What do humans and insects have in common? Using advances in human genetics to understand insecticide resistance in the cotton bollworm, <i>Helicoverpa armigera</i>	Amanda Padovan, Tom Walsh, CSIRO; Dan Andrews, Angela McGaughan, Andy Bachler, ANU	9918
48 Sept 2018	Genetic rescue of the Southern Brush-tailed Rock Wallaby: Is there genomic evidence it is reducing inbreeding?	Jennifer Pierson, ACT Gov, Janine Deakin, UC; Richard Hill, VIC Dept Land, Water & Parks	10000
47 Sept 2018	New approaches to understanding trophic ecology in marine ecosystems for industry application	Allen Rodrigo, Louis Ranjard, ANU; Dianne Gleeson, Elise Furlan, UC; Simon Nicol, Dept Agriculture & Water Resources	8220
46 Sept 2018	Developing hyRAD-X capabilities in the CBA for population genomics and identification of cryptic species: a high-throughput tissue to SNP pipeline, tested in <i>Monotoca</i> (Ericaceae)	Todd McLay, Sarah Mathews, Dave Albrecht, Luisa Teasdale, CSIRO; Kevin Murray, Niccy Aitken, Ashley Jones, ANU	10000
45 Sept 2018	Laser scanning ecosystem structure to map habitat quality and measure landscape change	Kara Youngentob, Adrian Manning, ANU; Tommaso Jucker, CSIRO	9850
44 Sept 2018	Evolution of Müllerian mimicry in Australian velvet ants (Hymenoptera: Mutillidae)	Juanita Rodriguez, Thekla Pleines, CSIRO; Renee Catullo, ANU; Claudia Schipp, UQLD; Kevin Williams, CDFA, USA; Joseph Wilson, USU-Tooele	15000
43 Sept 2018	Evo-devo in non-model beetles by studying herbivorous ladybirds (Coccinellidae)	Hermes Escalona, Adam Slipinski, CSIRO; Maja Adamska, ANU; Yoshinori Tomoyasu, Miami	9500
42 Sept 2018	eDNA: The next frontier of pest and biological control detection in agriculture	Valerie Caron CSIRO; Dianne Gleeson, Cat Campbell, UC	10000

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41 Mar 2018	<b>Evolution of chemical defences in Tasmanian dalodesmid millipedes (Diplopoda: Dalodesmidae) (Honours project)</b>	Juanita Rodriguez, CSIRO; David Rowell, Hannah Zurcher, ANU	5000
40 Mar 2018	<b>Elucidating the diversity and population structure of the invasive coastal weed <i>Euphorbia paralias</i> (Sea spurge) in Australia</b>	Gavin Hunter, Ben Gooden, CSIRO; Celeste Linde, ANU	10000
39 Mar 2018	<b>Wealth from weeds: Isolation of fungal disease resistance genes from invasive weeds for integration into crop plants</b>	Gavin Hunter, CSIRO; Sambasivam Periyannan, ANU	10000
38 Mar 2018	<b>Beating the heat? Population genomics of climate change in Australian birds (Honours project)</b>	Sasha Mikheyev, Janet Gardener, ANU, Elroy Au; Leo Joseph, CSIRO	10000
37 Mar 2018	<b>Telomere length as a biomarker for stress in an Australian pest moth (Honours project)</b>	Kerensa McElroy CSIRO; Angela McGaughran, Nonthakorn (Bea) Apirajkamol ANU	10000
36 July 2017	<b>Landscape genomics of a dryland river keystone species</b>	Jake Gillen, Niccy Aitkin, ANU; David Bush, CSIRO	10000
35 July 2017	<b>Understanding biological invasions: assessing the biosecurity threat of the pink bollworm to Northern Australia</b>	Angela McGaughran, Rob Lanfear, ANU; Tom Walsh, CSIRO	10000
34 July 2017	<b>Uncovering the Hare Microbiome</b>	Robyn Hall, CSIRO; Benjamin Schwessinger, Somasundhari Shanmuganandam, ANU	10000
33 July 2017	<b>Phylogeny of the longhorn beetle genus <i>Rhytiphora</i> (Coleoptera: Cerambycidae)</b>	Lauren Ashmam, David Rowell, ANU; Adam Slipinski, Andreas Zwick, CSIRO	10000
32 July 2017	<b>Biodiversity change: A risk factor for human health?</b>	Aparna Lal, ANU; Karel Mokany, CSIRO	6500
31 July 2017	<b>The Untold Story of Underground Communities: Fungi and Soil Seed-banks in Mountain Ash forests</b>	Elle Bowd, David Lindenmayer, Sam Banks, Fenner, ANU; Andrew Bissett, CSIRO; Tom May, The Royal Botanical Gardens, Victoria	10000
30 July 2016	<b>Characterizing the evolutionary and ecological diversity of invertebrates in the Monsoonal vine thickets of the Kimberley</b>	Russell Dinnage, Marcel Cardillo, ANU; Gavin Huttley, ANU; Owain Edwards, CSIRO	10000
29 July 2016	<b>Biogeography of sex reversal and the effects of climate change on reptile sex determination</b>	Clare Holleley, Kerensa McElroy, CSIRO; Dan Rosauer, Craig Moritz, ANU; Arthur Georges, UC	9998
28 July 2016	<b>Genomic diversity in Australian palms</b>	Sarah Mathews, CSIRO; Bee Gunn, ANU	10000
27 July 2016	<b>Tackling the unknown – a next-generation phylogenetics approach to explore the immense diversity of Australian thynnine wasps (Tiphiidae: Thynninae)</b>	Rod Peakall, Thomas Semple, ANU; Andreas Zwick; CSIRO	10000
26 Sept 2015	<b>A winning combination? Could seed dormancy and polyploidy be beneficial in a warmer, drier climate?</b>	Lydia Guja, Robert Godfree, CSIRO; Adrienne Nicotra, Amelia Stevens, ANU	10000
25 Sept 2015	<b>Linking genomic data to spatial biodiversity data in the Atlas of Living Australia</b>	Caroline Chong, Justin Borevitz, Lindell Bromham,	9300

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		ANU; Rebecca Pirzl, John La Salle, ALA	
24 Sept 2015	<b>Environmental Drivers of Acacia-Associated Symbiotic Microbe Diversity</b>	Russell Dinnage, Marcel Cardillo, ANU; Anna Simonsen, Suzanne Prober, Luke Barrett, Pete Thrall, CSIRO	9750
23 Sept 2015	<b>Curating spatial data to understand patterns and processes shaping biodiversity in New Guinea</b>	Paul Oliver, Dan Rosauer, Eric Rittmeyer ANU; Kristin Williams, Leo Joseph, CSIRO	10000
22 Sept 2015	<b>Can adaptation in 'ecosystem engineers' drive fire regime feedbacks?</b>	Annabel Smith, Justin Borevitz, ANU; Shannon Dillon, CSIRO	9821
21 Sept 2015	<b>Bill adaptation in parrots: finding loci involved in surface area increases by integrating morphometrics with NGS (Hons Project)</b>	Kerensa McElroy, CSIRO; Loeske Kruuk, Janet Gardner, Keira Beattie, ANU	9308
20 Sept 2015	<b>Investigating the effects of diversity, distribution and chytrid load on <i>Upoleia</i> frog skin microbial communities</b>	Matt Morgan, CSIRO; Renee Catullo, Maxine Piggott, ANU	9987
19 Sept 2015	<b>An exome capture system for phylogenetic and evolutionary studies in the hyperdiverse orchid tribe Diurideae (Orchidoideae)</b>	Katharina Schulte; Mark Clements, Lars Nauheimer, CSIRO; Rod Peakall, Celeste Linde, Ryan Phillips, ANU	10000
18 Mar 2015	<b>Genetic and demographic impacts of contemporary disturbance regimes in Mountain Ash forests</b>	Brenton von Takach Dukai, Sam Banks, ANU; Shannon Dillon CSIRO	10000
17 Mar 2015	<b>Effects of climate change on avian morphology</b>	Janet Gardner, Loeske Kruuk, ANU; Leo Joseph, CSIRO	9923
16 Mar 2015	<b>Developing new methods for using distribution data to identify taxa that can tolerate extreme conditions</b>	Xia Hua; Lindell Bromham, Marcel Cardillo, ANU; ALA	9593
15 Mar 2015	<b>Genetic characterisation of formalin preserved fish tissue</b>	Sharon Appleyard, CSIRO; Maxine Piggott, ANU	10000
14 June 2014	<b>Eucalyptus genomics project/s</b>	Linda Broadhurst, David Bush, Brendan Lepschi, CSIRO; Justin Borevitz, Norman Warthmann, Megan Supple, Jason Bragg, ANU	10000
13 June 2014	<b>Bringing next generation approaches to conservation genomics using museum collections – Rock wallaby museum skinomics</b>	Sally Potter, Maxine Piggott, Jason Bragg, ANU; Matthew Morgan, Leo Joseph, CSIRO	10000
12 June 2014	<b>Collections-based landscape genomics: Red-browed finches as a test case</b>	Kerensa McElroy, CSIRO; Norman Warthmann; ANU	9683
11 June 2014	<b>Penguin ectoparasites of the Southern Hemisphere</b>	Katherine Moon, Ceridwen Fraser, ANU; Bruce Halliday, CSIRO	8100
10 June 2014	<b>Genome skimming with degraded DNA from herbarium specimens</b>	Alexander Schmidt-Lebuhn CSIRO; Adrienne Nicotra, ANU	9180
9 June 2014	<b>Molecular phylogeny of <i>Helicoverpa</i> from museum specimens</b>	Andreas Zwick, David Yeates, Tom Walsh, Karl Gordon, CSIRO; Craig Moritz, Dave Rowell, ANU	10000

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8 Aug 2013	Palaeoecological indicators of biodiversity change through time	Simon Harberle, Dan Rosauer, Marcel Cardillo, ANU; Kristen Williams, CSIRO (and others)	5000
7 June 2013	Future ecosystem states: linking ecophysiological cues and thresholds to climatic regimes, variability and weather extremes	Simon Ferrier, Kristen Williams, CSIRO; Craig Moritz, ANU	5000
6 June 2013	A curation community for coral environmental genomics	Alexie Papanicolaou, Owain Edwards, CSIRO; Sylvain Forêt, ANU	5085
5 June 2013	Species boundaries in Australian orchids	Rod Peakall, Celeste Linde, ANU; Mark Clements, CSIRO	5000
4 June 2013	Evolutionary processes in Billy Buttons	Alexander Schmidt-Lebuhn, CSIRO; Justin Borevitz, ANU	5000
3 Oct 2012	Species discovery and refugia in the monsoonal tropics	Craig Moritz, Scott Keogh ANU; Justin Perry, Eric Vanderduys, Simon Ferrier, CSIRO	2000
2 Oct 2012	Hybrid history: deep sequencing of the Tasmanian blue gum	Carsten Kulheim, ANU; Joe Miller, CSIRO	5000
1 Oct 2012	How local is local? Landscape genomics in Yellow box	Justin Borevitz, ANU; Linda Broadhurst, CSIRO	5000



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