

2010-2011 (Round 2)

Researcher	Title of research project	Host researcher
Dr Line Bay James Cook University	Can corals acclimatise and adapt to climate change?	Assistant Professor Mikhail Matz University of Texas USA
Dr Michael Brown Monash University	The growth of galaxies.	Professor Martin White University of California USA Dr Buell Jannuzi National Optical Astronomy Observatory USA
Dr Martina Doblin University of Technology Sydney	Assessing phytoplankton connectivity along Australia's east coast to investigate the outcome of a strengthening East Australia Current under climate change.	Dr Tatiana Rynearson University of Rhode Island USA
Dr Catia Domingues CSIRO Marine and Atmospheric Research	Increasing confidence in regional projections of future ocean warming and sea-level rise.	Dr Peter Glecker Lawrence Livermore National Laboratory USA
Dr Anthony Dosseto University of Wollongong	Quantifying past changes in sediment transport to study the response of our environment to climate change.	Dr Kate Maher Stanford University USA
Dr Tim Doyle Royal Melbourne Institute of Technology	Development of a musculoskeletal model to determine the affect of fatigue on injury risk.	Dr Eric Dugan Boise State University USA Dr Jeff Reinbolt University of Tennessee USA Dr Ajay Seth Stanford University USA
Dr Theodore Evans Deakin University	Invasive termites alter forests and increase greenhouse emissions in the USA.	Professor Brian Forschler University of Georgia USA Dr Alan Lax ARS Southern Regional Research Centre USA Dr Carl Trettin United States Department of Agriculture USA

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Dr Stephanie Feih Royal Melbourne Institute of Technology	Sustainable recycling of glass and carbon fibre composites.	Professor Scott Case Virginia Polytechnic Institute and State University USA
Dr Mark Gibson CSIRO	Determination of the metallic glass forming region via LENS derived composition gradients.	Professor Hamish Fraser Ohio State University USA
Dr Daniel Gomez CSIRO	Surface plasmons and quantum dots: Amplified stimulated emission of light.	Professor Gregory Hartland University of Notre Dame USA
Dr Jenny Ho Monash University	Interfacing surface acoustic wave microfluidics atomisation platform with mass spectrometry for molecular biosensing.	Professor Hsueh-Chia Chang University of Notre Dame USA
Dr Bevan Huang CSIRO	Modernising genetic analysis in crops by harnessing the power of graphic processing units.	Dr Vijay Pande Stanford University USA
Dr Andrew Merchant University of Sydney	Developing novel, phloem based diagnostic tests of plant health and nutrition.	Professor Elizabeth Ainsworth University of Illinois USA Professor Elizabeth Van Volkenburgh University of Washington USA
Professor Barbara Nowak University of Tasmania	Use of genomics to study parasitic diseases of fish farmed in Australia.	Dr Simon Jones Fisheries and Oceans Canada Canada Professor Ben Koop University of Victoria Canada
Associate Professor Sebely Pal Curtin University of Technology	The Prospective Australian Health Weight Registry (PAWCR).	Professor James Hill University of Colorado USA
Dr Alistair Poore University of New South Wales	Chemical warfare: Using pharmacology to understand herbivore tolerance to plant chemical defences.	Assistant Professor Jennifer Forbey Boise State University USA
Dr Martina Sanderson-Smith University of Wollongong	Elucidation of the role of host-plasminogen activators in invasive group A streptococcal disease.	Professor Francis Castellino University of Notre Dame USA

Researcher	Title of research project	Host researcher
Dr Dawei Wang University of Technology	Electrochemical reactivity and recognition of oxygen functionalities on thin grapheme oxide nanosheets.	Professor Allen Bard University of Texas USA
Professor Michael Ward University of Sydney	Applications of BioPortal system for infectious disease spread analysis.	Dr Andres Perez University of California USA
Dr Wei Zhang University of New South Wales	Coding for wireless systems with low-complexity receiver.	Professor Xiang-Gen Xia University of Delaware USA

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Dr Tracey Ainsworth James Cook University	Host-microbe interactions and the impacts of pollution to inshore coral reefs.	Professor Ruth Gates University of Hawaii USA
Associate Professor Jason Antenucci University of Western Australia	Internal wave controls on plankton patchiness in lakes due to shear and pseudo-chaotic advection.	Professor Roman Stocker Massachusetts Institute of Technology USA
Associate Professor Stefan Arndt University of Melbourne	Methane uptake of soils in Australia.	Associate Professor Joseph von Fischer Colorado State University USA Associate Professor Noah Fierer University of Colorado USA
Dr Julie Brown University of New South Wales	Investigation of the effect of modified spinal properties on rear-seat dummy response in adult seat belts.	Mr Richard Morgan George Washington University USA
Dr Tasman Daish University of Adelaide	Identification of miRNA candidates involved in sex chromosome silencing in monotremes.	Professor Gregory Hannon Howard Hughes Medical Institute USA
Associate Professor Scott Donne University of Newcastle	Adsorption phenomena during electrocatalytic oxygen reduction.	Professor Yang Shao Horn Massachusetts Institute of Technology USA
Dr Justine Ellis Murdoch Childrens Research Institute	International collaboration for genome wide association studies in juvenile idiopathic arthritis.	Dr Hakon Hakonarson Childrens Hospital of Philadelphia USA
Dr Yuanqun Gu Queensland University of Technology	Advanced multiscale modelling techniques for exploring the deformation mechanism of materials.	Associate Professor Shaofun Li University of California at Berkeley USA
Dr Adam Koberoff University of New England	The role of experience in a natural behavioural system.	Professor Donald Owings University of California, Davis USA
Dr Jasmina Lazendic-Galloway Monash University	A search for the origin of galactic cosmic rays: Catching up with the fastest particles known.	Dr Patrick Slane Smithsonian Astrophysical Observatory USA
Dr Roman Makarevich La Trobe University	Ionospheric plasma dynamics during geomagnetically disturbed conditions.	Professor Alexandre Koustov University of Saskatchewan Canada

Dr Joshua Mylne University of Queensland	Evolutionary development of cyclic peptides in the sunflower family.	Associate Professor Jose Panero University of Texas USA Professor Edward Schilling University of Tennessee USA
Professor John Pandolfi University of Queensland	Incorporating appropriate ecological baselines into management of natural resources.	Professor Jeremy Jackson University of California, San Diego USA Ms Kathryn Mengerink University of California, San Diego USA Mr Steve Roady Duke University USA
Dr Amy Richards Food Science Australia	Exploring the potential of natural antioxidants for healthier food products: To enhance the viability of the Australian food industry into the future.	Dr Jill Winkler-Moser United States Department of Agriculture USA
Dr Linda Stalker CSIRO Petroleum Resources	Accelerating deployment of carbon storage and monitoring and verification strategies.	Dr Barry Freifeld Lawrence Berkeley National Laboratory USA
Dr Tianhai Tian Monash University	Spatio-temporal modelling of the mitogen-activated protein (MAP) kinase pathway.	Professor John Hancock University of Texas Health Science Centre at Houston USA Professor Zhixiang Chen University of Texas at Pan American USA
Dr Caroline Ummenhofer University of New South Wales	Indian Ocean variability and long-term change linked to regional rainfall and drought.	Professor Mark Cane Columbia University USA Dr Rosanne d'Arrigo Columbia University USA
Associate Professor Jeffery Walker University of Melbourne	Development of global soil moisture retrieval algorithms for the Soil Moisture Active Passive (SMAP) mission.	Dr Thomas Jackson United States Department of Agriculture USA Dr Eni Njoku NASA Jet Propulsion Laboratory USA Dr Peggy O'Neill NASA Goddard Space Flight Centre USA
Dr Changbin Yu Australian National University	Building the Australian capability for Micro Autonomous Systems and Technology.	Professor Shankar Sastry University of California at Berkeley USA

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Dr Stewart Allen Bureau of Meteorology	Using observations from deep ocean buoys to improve tsunami forecasts and warnings.	Dr Vasily Titov National Centre for Tsunami Research USA
Dr Peter Anderson Flinders University	Activation of plant disease resistance proteins.	Professor Brian Staskawic University of California Berkeley USA
A/Professor Muthupandian Ashokkumar University of Melbourne	Sonochemically synthesised composite nanomaterials as catalysts in fuel cells.	Professor Prashant Kamat University of Notre Dame USA
Dr Mark Bayley Australian Wetlands Pty Ltd	Bayou Bienvenue Wetland Restoration Project: Strategies for coastal wetland rehabilitation for multiple use and benefit.	Professor Douglas Meffert Tulane University USA Dr Elizabeth Mossop Louisiana State University USA
Dr Michael Beard University of Adelaide	Identification and characterisation of host genes that control replication of hepatitis C virus using novel cell culture models.	Professor Robert Lanford Southwest Foundation for Biomedical Research USA Professor Dr Stanley Lemon University of Texas Medical Branch USA
Dr Lee Bowling NSW Department of Water and Energy	Cyanobacterial research in Quebec.	Ms Sylvie Blais Ministere du Developpement durable, de l'Environnement et des Parcs Canada
Dr Jaclyn Brown CSIRO Marine Research	Understanding El Nino and drought in a warmer climate.	Dr Anand Gnanadesikan Princeton University USA
Dr Sheree Cairney Charles Darwin University	Accessing sophisticated neuroscientific techniques for the assessment, treatment and education of Indigenous substance abusers.	Professor Richard Goldberg Rhode Island University USA Professor Peter Snyder Brown University USA
Professor Alan Carey Mathematical Sciences Institute Australian National University	Operator algebras and non-commutative geometry.	Professor Ian Putnam University of Victoria Canada
Dr Shaokoon Cheng University of New South Wales	Computational model of the upper airway to understand the pathophysiology of obstructive sleep apnoea.	Associate Professor Atul Malhotra Harvard Medical School USA

Dr Nicolas Cherbuin Australian National University	A study of corpus callosum shape variability in the context of handedness, cognition and healthy ageing.	Professor Arthur Toga University of California Los Angeles USA
Professor Geoffrey Clarke University of Sydney	The tectonic significance of regional flat-lying rock fabrics in orogenic belts.	Professor Keith Klepeis University of Vermont USA Dr Stuart Thompson University of Arizona USA
Dr Belinda Ferrari University of New South Wales	Development of pathogen detection and isolation strategies through analysis at the single-cell level: A bimolecular approach.	Professor Howard Shapiro The Centre for Cytometry USA
Dr Paul Gribben University of Technology Sydney	Global responses of invasive and native species to climate change.	Dr James Byres University of Georgia USA
Professor Brendan Griffin University of Western Australia	Characterisation of the information content of Rutherford Backscattered Ions and Ion-induced Secondary Electron imaging using the new He ion Scanning Microscope.	Professor David Joy Oak Ridge National Laboratory USA
Dr Vanessa Hayes University of New South Wales	Genome sequencing for preservation of the Tasmanian Devil.	Professor Stephan Schuster Penn State University USA
Professor Yinghe He James Cook University	Production of designer particles from liquid and solid starting materials.	Professor Osman Basaran Purdue University USA Professor James Litster Purdue University USA
Dr Anita Hill CSIRO Materials Science and Engineering	Membranes as sensors.	Professor Benny Freeman University of Texas at Austin USA Professor Allan Hoffman University of Washington USA
Dr Helen Irving-Rodgers University of Adelaide	Preserving the fertility of women with cancer.	Professor Teresa Woodruff Northwestern University USA
Dr Denisa Jurcakova University of Queensland	Carbon electrode materials for high-performance super-capacitors.	Professor Teresa Bandosz The City University of New York USA Professor Yury Gogotsi Drexel University USA
Dr Kourosh Kalantar-Zadeh RMIT University	Hybrid polymeric and metal oxide nanostructured fuel cells.	Professor Sossina Hailes California Institute of Technology USA Professor Richard Kaner University of California Los Angeles USA

Professor Anatoli Kheifets Australian National University	Multiple atomic ionisation in strong electromagnetic field.	Professor David Tannor University of California Santa Barbara USA Professor C William McCurdy Lawrence Berkeley National Laboratory USA Dr Thorsten Weber Lawrence Berkeley National Laboratory USA
Dr Scott Kim University of New South Wales	Acquiring the knowledge and technical expertise in generating knockout mouse using bacterial artificial chromosomes.	Professor Mason Freeman Harvard Medical School USA
Dr Laszlo Kiss University of Sydney	Stellar oscillations as a tool to identify planet hosting stars.	Dr Gaspar Bakos Harvard Smithsonian Centre for Astrophysics USA
Dr Darby Kozak University of Queensland	Optically encoded particles as a platform for the validation of proteomic biomarkers in the early detection of ovarian cancer.	Professor Nicole Urban Fred Hutchinson Cancer Research Centre, USA
A/Professor Sunil Kumar University of South Australia	Mechanical properties of coated bioceramics.	Dr Eduardo Saiz Lawrence Berkeley National Laboratory USA
Dr Todd Lane University of Melbourne	Improved analysis and forecasting of precipitation through assimilation of Doppler radar observations with an ensemble Kalman filter.	Professor Fuqing Zhang Pennsylvania State University USA
Dr Ricky Lareu University of Western Australia	Combinatorial regulation of fibrosis by small non-coding RNA molecules.	Dr Isidore Rigoutsos Deep Computing Institute USA
A/Professor Simon Lewis Curtin University of Technology	Chemical characterisation and classification of automotive paint clear coats.	Associate Professor Tim Menzies West Virginia University USA Professor Jay Siegel Indiana University USA
Dr Chaohong Li Australian National University	Many-body quantum dynamics of strongly correlated atomic systems	Professor Eugene Demler Harvard University USA
Dr Tong Lin Deakin University	Improvement of fuel cell performance via super-hydrophobic treatment of cell electrodes.	Professor Liming Dai University of Dayton USA
Dr Chunsheng Lu Curtin University of Technology	Fractals in bio-inspired nanomechanics of hierarchical materials.	Professor Huajian Gao Brown University USA

Dr Ian Macreadie CSIRO Molecular and Health Technologies	Investigations of the roles of allyl hydroperoxidase, cloquinol and farnesol in yeast models for neurodegenerative diseases.	Dr Jaekwon Lee University of Nebraska USA Dr Robert Spreitzer University of Nebraska USA
Dr Karen Murphy University of South Australia	Cardiometabolic health effects associated with dairy consumption.	Professor Gary Fulcher University of Manitoba Canada Dr Curtis Rempel University of Manitoba Canada
Dr Michelle Power Macquarie University	Host parasite co-evolution: a tool for managing emerging diseases in Australia.	Professor John Barta University of Guelph Canada
Dr Morgan Pratchett James Cook University	Predicting future effects of climate change on coral reefs.	Dr Bernhard Riegl Nova Southeastern University USA
Dr Thomas Rayner University of New South Wales	Climate change and freshwater fishes of the Tropical Pacific.	Professor Robert Kinzie University of Hawaii USA Dr David Foote USGS Pacific Island Ecosystems Research Centre USA
Dr Yinlan Ruan University of Adelaide	Fabrication of chalcogenide glasses and antibody labelling using quantum dots for infrared applications.	Dr Jennifer Hollingsworth Los Alamos National Laboratory USA Professor Kathleen Richardson Clemson University USA
Dr Kallista Sears CSIRO Textile and Fibre Technology	Carbon nanotubes for flexible, high performance, organic solar cells.	Professor Ray Baughman University of Texas at Dallas USA
Dr Melony Sellars CSIRO Marine and Atmospheric Research	All-female sterile prawn culture: Determining how to improve the viability of prawns with an extra set of chromosomes.	Mr Steve Arce The Oceanic Institute USA Dr Shaun Moss The Oceanic Institute USA
Dr Marcus Sheaves James Cook University	Developing a global view of wetland-estuary linkages.	Dr Thomas Minello National Oceanic and Atmospheric Administration USA
Dr Petra Souter Australian Institute of Marine Science	Use of next generation gene analysis to predict corals' capacity to cope with climate change.	Dr Iliana Baums Pennsylvania State University USA Professor Jim Marden Pennsylvania State University USA

Dr Jeremy Sumner University of Tasmania	Markov and phylogenetic invariants: resolving the mathematical connections between related phylogenetic methods.	Professor Elizabeth Allamn University of Alaska at Fairbanks USA Professor John Rhodes University of Alaska at Fairbanks USA
Dr Anita van den Biggelaar University of Western Australia	Innate immune pathways to microbial pathogens in newborns in settings with high versus low/moderate exposure.	Assistant Professor Ofer Levy Harvard Medical School USA A/Professor Richard Malley Harvard Medical School USA
Dr David Williams Curtin University of Technology	Testing new technologies for the detection and discovery of emerging microbial pathogens relevant to the Australasian region.	Professor Ian Lipkin Columbia University USA
A/Professor David Young Griffith University	Developing new chemotherapies for Leishmaniasis and Trypanosomiasis.	Professor Margaret Phillips University of Texas Southwestern Medical Centre USA