

**DISCOVERY PROJECTS AUSTRALIAN POSTDOCTORAL FELLOWS FOR  
FUNDING COMMENCING IN 2010**

<b>Fellow Name</b>	<b>Administering Organisation</b>	<b>Project ID</b>	<b>Approved Project Title</b>
Dr LG Barrett	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	DP1097256	The evolution and maintenance of specificity, mutualism and diversity in plant-soil microbe interactions
Mr H Chen	Deakin University	DP1095998	Functionalisation of boron nitride nanotubes: preparation, underlying mechanism and potential sensor applications
Dr PM Guillon	Griffith University	DP1094549	Structure-based discovery of anti-parainfluenza viral agents
Dr NC Ban	James Cook University	DP1096453	Conservation planning: incorporating patch dynamics and climate change to achieve better outcomes
Mr R Puschendorf	James Cook University	DP1094540	Environmental determinants of mass extinctions by emerging disease: why does chytridiomycosis exterminate frogs in rainforest but not in open forest?
Dr NA Graham	James Cook University	DP1094932	A mechanistic understanding of coral reef recovery
Dr KE Fitzsimmons	La Trobe University	DP1092966	Human responses to long term landscape and climate change in the Willandra Lakes World Heritage Area
Dr SC Hayes	La Trobe University	DP1093001	Suburban archaeology: approaching an archaeology of the middle class in 19th century Melbourne
Dr TM Niven	La Trobe University	DP1094578	Complexity in Algebra and Algebra in Complexity: the role of finite semigroups and general algebra
Dr D Stojanovski	La Trobe University	DP1094973	Transporting proteins to and within mitochondria
Dr MJ Oaten	Macquarie University	DP1092551	Disgust as a psychosocial defence against infectious disease
Dr LJ Graham	Macquarie University	DP1093020	A critical analysis of the increase in diagnosis of special educational needs in New South Wales government schools
Dr D Jin	Macquarie University	DP1095465	Novel coding and decoding in suspension arrays for accelerated biomolecular discovery and personalised medicine
Dr D Dzino	Macquarie University	DP1095356	Ancient and Medieval Identity-shifts and the Construction of Identities in Post-Yugoslav Space
Dr O Winther-Jensen	Monash University	DP1092610	Photo-enhanced water oxidation using novel structures and conjugated polymers
Dr TE McEwan	Monash University	DP1092840	Recognising, assessing, and managing high risk stalking behaviour: An evidence-based approach

Dr GA Narsilio	Monash University	DP1096456	Development of Leakage Resistant Well-Cements for Geo-Sequestration of Carbon Dioxide Application using Alkali Activated Slag and Geopolymer Cements
Dr J Ang	Monash University	DP1093134	Financial development, liberalisation and productivity growth
Dr JA Windle	Monash University	DP1093739	A social geography of school choice: Educational decision-making and markets in the new age of accountability
Dr X Gou	Monash University	DP1095833	Hierarchically Structured Graphene-Based Nanoassemblies
Ms H Forbes-Mewett	Monash University	DP1095202	International student safety from crime
Dr P Biegler	Monash University	DP1094577	Implicit persuasion in pharmaceutical marketing: ethical implications for regulators and consumers
Dr S Zlotnik	Monash University	DP1095166	The Initiation and 3D Evolution of Instabilities in the Deep Continental Lithosphere
Dr HD Coleman	Queensland University of Technology	DP1093236	Modification of lignin biosynthesis in sugarcane for the improved efficiency of pre-treatment in ethanol production
Dr JE Burgess	Queensland University of Technology	DP1094281	New Media and Public Communication: Mapping Australian User-Created Content in Online Social Networks.
Dr KJ Kitto	Queensland University of Technology	DP1094974	Generalised quantum models of complexity with application to cognitive systems
Ms M Bhaskaran	RMIT University	DP1092717	Complementary metal–oxide–semiconductor (CMOS) -compatible ultra-high response piezoelectric thin films for efficient energy harvesting
Dr TG Nguyen	RMIT University	DP1096153	Novel silicon photonic devices harnessing new leakage behaviour
Ms HM Breen	Southern Cross University	DP1096595	Gambling problems, risks and consequences in Indigenous Australian communities: An innovative public health analysis
Mr AC Mackay	The Australian National University	DP1092445	Technology and behavioural evolution in late Pleistocene Africa, Europe and Australia
Dr ND Ramsey	The Australian National University	DP1097164	War, Literary Culture and Masculinity in Romantic Period Britain, 1750-1850
Dr M van de Pol	The Australian National University	DP1092565	Fitness in free-living populations in a changing world
Dr B Calcott	The Australian National University	DP1097048	Evolvability and the Evolution of Complexity
Ms DD Argue	The Australian National University	DP1096870	Who were the ancestors of Homo floresiensis?
Dr S Okada	The Australian National University	DP1096487	Stability conditions on triangulated categories and related aspects of homological mirror symmetry

Mr R Shams	The Australian National University	DP1093149	Enhanced ultrasound-based imaging using image-based registration and acoustic impedance reconstruction
Dr SS Mokkapati	The Australian National University	DP1096361	High efficiency III-V solar cells based on low-dimensional quantum confined heterostructures
Dr K Bowan	The Australian National University	DP1096147	Sounds of Empire: Popular Politics and Music in the Nineteenth Century
Dr GA Van Riessen	The Australian National University	DP1093331	High-energy electron scattering of surfaces: new spectroscopies and new physics
Dr MM Antoinette	The Australian National University	DP1096041	The rise of new cultural networks in Asia in the twenty-first century
Dr Y Sheng	The Australian National University	DP1095981	Optical parametric processes in randomized nonlinear photonic structures
Dr J Bernu	The Australian National University	DP1093569	Non-Gaussian states and entanglement distillation for Continuous Variable quantum information protocols
Dr E Subasic	The Australian National University	DP1095319	Leadership, social identity and the dynamics of influence in intergroup relations: A new understanding of social continuity and social change
Dr A Dehghani	The Australian National University	DP1095290	Development of Control Methodologies for Drug Dosing in Biomedical Engineering
Dr A Catanzariti	The Australian National University	DP1095157	Pathogen recognition and plant-defence activation by a novel Fusarium wilt-resistance protein from tomato
Dr T Iizuka	The Australian National University	DP1095142	Deciphering the early Solar System chronology and planetary chemistry using isotope systematics of meteoritic zircon
Dr N Iannella	The University of Adelaide	DP1096083	A modelling challenge: bridging the gap between molecular and neuronal networks
Dr B Llamas	The University of Adelaide	DP1095782	A shipload of consequences: studying the impact of Old World diseases on native South American populations via ancient DNA
Mr W Withayachumnankul	The University of Adelaide	DP1095151	Terahertz Metamaterials for Molecular Sensing
Dr MB Yap	The University of Melbourne	DP1092637	Genes, neuroanatomy and family process: Predicting adolescent anxiety and depression
Dr L Feketeova	The University of Melbourne	DP1096391	Formation, structure and chemistry of non-covalent complexes of biomolecules via mass spectrometry
Ms A Reupold	The University of Melbourne	DP1095928	A Tale of six cities: Explaining social inequality in secondary school systems: an international comparative study
Dr K Sutton	The University of Melbourne	DP1093819	Making the case: the case study genre in sexology, psychoanalysis and literature
Dr M Bode	The University of Melbourne	DP1095388	General theory for eradicating multiple invasive species from threatened island ecosystems
Dr SM Laham	The University of Melbourne	DP1095323	Implicit transmission of embodied culture

Mr NN Do	The University of Melbourne	DP1094328	Moduli spaces
Dr A Limosani	The University of Melbourne	DP1094843	Searching for Supersymmetry in the Universe with the A Toroidal Lagre Hadron Collider ApparatuS (ATLAS) experiment at the Large Hadron Collider
Dr WR Clarke	The University of New South Wales	DP1097185	Redesigning the transistor at the atomic-scale
Dr G Li	The University of New South Wales	DP1092508	A new improved solution to global optimization over multivariate polynomials: Mathematical principles, numerical methods and selected applications
Dr CA Boyer	The University of New South Wales	DP1092640	Polymer Stabilized and Bio-functionalised Metal Nanoparticles As Potential Vectors For Drug Therapies
Dr G Chen	The University of New South Wales	DP1092661	Core-shell nanoparticle from polymers with pendant cyclodextrins
Dr K Lee	The University of New South Wales	DP1092878	Internet History in Australia and the Asia-Pacific
Dr KR Murphy	The University of New South Wales	DP1096691	Olfactory Characterisation of Odours for Optimising Impact Assessment
Dr Y Otsuka	The University of New South Wales	DP1096099	Missing the big picture: Global form perception from infancy to adolescence
Dr SS Gray	The University of New South Wales	DP1093380	Fashion, Identity and the City: Making an 'Australian Style' in fashion, Sydney in the 1970s-80s
Dr D Dong	The University of New South Wales	DP1095540	Enhancing Performance in Controlling Finite Level Quantum Systems with Uncertainties
Dr DM Owen	The University of New South Wales	DP1095468	Molecular microscopy: protein and membrane dynamics in resting and activated T cells
Dr KH Black	The University of New South Wales	DP1094569	Drying and dying in Australia: extraordinary creatures and climate change 15 million years ago
Dr AS Taschetto	The University of New South Wales	DP1094784	Modes of Pacific Ocean variability and their relationship to regional Southern Hemisphere climate
Dr N Byrne	The University of Newcastle	DP1094583	Polymerization of amyloid fibrils and electroactive hybrid nanowires using ionic liquids
Dr T Fiedler	The University of Newcastle	DP1094696	Design of high performance heat sink composites
Dr AC Paulk	The University of Queensland	DP1092442	Neural mechanisms of attention in the honeybee and <i>Drosophila melanogaster</i>
Dr E McDonald-Madden	The University of Queensland	DP1092732	The role of learning in conservation management: developing adaptive approaches for the conservation of biodiversity in a changing climate.
Dr P Simerska	The University of Queensland	DP1092829	Lipid and Carbohydrate Based Systems to Target and Deliver Peptide Drug Candidates to Specific Cells

Dr K Deng	The University of Queensland	DP1096826	Context Exploration: An Effective Way to Enhance Duplication Detection
Dr MM Turpin	The University of Queensland	DP1092887	Singing the Dreaming: exploring the relationship between language and music in Arandic song-poetry.
Dr S Takayama	The University of Queensland	DP1093105	Information and market price manipulation in trade
Dr N Cloonan	The University of Queensland	DP1093164	Functionally characterizing mammalian microRNAs and mRNA interactions controlling cell division.
Dr S Singh	The University of Queensland	DP1096157	Swidden Cultivation and the Agrarian Transition on the Forest Frontiers of Southeast Asia
Dr MT Hsu	The University of Queensland	DP1093421	Intravital super-resolution imaging via Stimulated Emission Depletion microscopy (STED)-microendoscopy
Miss EJ Hine	The University of Queensland	DP1093474	The Geometry of Genetic Limits to Evolutionary Change
Dr A Trakic	The University of Queensland	DP1095902	Solutions for reducing magnetic resonance image degradations and tissue heating at high frequencies
Dr SR Shouldice	The University of Queensland	DP1093592	The MIA mitochondrial import pathway: structure and function
Dr K Monro	The University of Queensland	DP1093784	How does allocation to each sex evolve in hermaphrodites? New insight from the sea
Dr MJ Bellanta	The University of Queensland	DP1095631	Sentimental blokes: a cultural history of working-class masculinities in Australia, 1850-1929
Dr M McGilvray	The University of Queensland	DP1094560	Hypervelocity re-entry
Dr RP McCrea	The University of Queensland	DP1094589	Examining the impact of employment on social relationships in urban communities
Mr W Zhou	The University of Queensland	DP1095089	Novel cathode materials for low-temperature solid-oxide fuel cells
Mr RS Allen	The University of Sydney	DP1097150	Discovery of novel microRNA biogenesis and functional components
Mr R Pant	The University of Sydney	DP1096838	Stimulating light scattering in periodic structures: How slow can it go?
Dr P Domachuk	The University of Sydney	DP1096831	Silk Fibroin Optofluidic Chips
Dr SG Leon-Saval	The University of Sydney	DP1096567	Light-Matter Interactions In Nanoparticle-doped Microstructured Polymer Fibres
Mr KS Munasinghe	The University of Sydney	DP1096276	Eco-NextNet: An Ecologically-Inspired Adaptive Network Resource Management Framework for a Sustainable Next Generation Mobile Network for Ubiquitous Services
Dr VM Vergoz	The University of Sydney	DP1093491	The role of dopamine in the regulation of worker sterility in the honey bee
Dr DR McCamey	The University of Sydney	DP1093526	Spins in Organic Semiconductors
Dr SG Nervegna	The University of Sydney	DP1093572	The Theatrical Revolution: The Expansion of Theatre Outside Athens

Dr Z Zhou	The University of Sydney	DP1095650	Network code division multiplexing in multi-system wireless networks
Dr AS Hartwig	The University of Sydney	DP1093816	Plato Comicus and Greek comedy: a study of his dramatic career
Dr AN Widmer-Cooper	The University of Sydney	DP1095638	Soft modes in glasses: chemical control of relaxation and mechanical response
Dr V Jayaswal	The University of Sydney	DP1095320	Statistical methods for analysing multi-source microarray data and building gene regulatory networks
Dr N Denson	The University of Sydney	DP1094417	Maximising the benefits of diversity in university through cross-cultural interaction
Dr S Protschky	The University of Western Australia	DP1092615	Gender, power and identity in the early modern Nassau family
Dr K Benmessai	The University of Western Australia	DP1092690	Precision time and frequency in the lab and in space to test fundamental physics
Dr JL Fitzpatrick	The University of Western Australia	DP1096253	Inbreeding: what are the reproductive costs and how are they avoided?
Dr JA Trotter	The University of Western Australia	DP1096252	Global Climate Change, Carbon Dioxide (CO <sub>2</sub> ), and the Evolution of Life in the Palaeozoic and Early Mesozoic
Dr R Firman	The University of Western Australia	DP1094845	Sperm competition, sexual conflict, and gamete evolution in mice
Mr MT Inouye	The Walter and Eliza Hall Institute of Medical Research	DP1097112	Comprehensive transcriptional mapping of emergent division-linked cell fate decisions
Dr S Ho	University of South Australia	DP1094571	Robust transmission, identification and key agreement in communications networks
Mr H Fujiyama	University of Tasmania	DP1094440	Age-related changes in brain activation: Indicators of deficiency, maturity, or compensation?
Mr Z Sun	University of Wollongong	DP1096546	Directed assembly and photoelectric properties of core-shell nanowire networks of PbSe-TiO <sub>2</sub> heterostructures for high efficiency low-cost solar cells
Dr RM Warner	University of Wollongong	DP1093934	Harnessing the oceans to combat climate change: Developing law and policy frameworks for ocean energy and climate change mitigation
Dr G Peleckis	University of Wollongong	DP1094073	Materials science and superconductivity in the new Fe-based high temperature superconductors