

**DISCOVERY PROJECTS AUSTRALIAN POSTDOCTORAL FELLOWS FOR FUNDING
COMMENCING IN 2007**

Fellow Name	Administering Organisation	Project Id	Approved Project Title
Dr V Abramov	Monash University	DP0771338	Queueing systems and their application to telecommunication systems and dams
Dr F Alonso-Marroquin	The University of Queensland	DP0772409	Micromechanical modelling of fault gouge dynamics: towards an improved fault constitutive relation
Dr AA Ashrafi	The Australian National University	DP0773860	Pulsed Laser Deposition of Zinc Oxide-based Materials for Optoelectronic Device Applications
Dr K Bode	The University of Queensland	DP0770744	New Electronic Archives for Australian Literature
Dr SE Boyd	Monash University	DP0771183	Computational techniques for protease research
Dr T Britz	The University of New South Wales	DP0771300	Chromatic polynomials, random graphs, and error-correcting codes: a unified approach to graph colouring problems
Mr WA Burt	University of Wollongong	DP0773667	Investigating listening and performance strategies for microtonal composition
Dr ED Burton	Southern Cross University	DP0772050	Unraveling the oxidative geochemistry of nanoparticulate mackinawite in acid sulfate soil landscapes
Dr S Carotta	Walter and Eliza Hall Institute of Medical Research	DP0774639	Role of the PU.1 transcription factor in regulating lymphoid development
Dr JR Cass	The University of Sydney	DP0774697	Filters reveal what flicker conceals: temporal processing in the human visual system
Dr LA Cernusak	Charles Darwin University	DP0771427	Water-use efficiency of Australian tropical trees: mechanistic analysis at multiple scales
Dr EH Chan	The University of Sydney	DP0774431	Dynamically tunable, low-noise, discrete-time optical processing of high-speed signals
Dr DG Chapple	Museum Victoria	DP0771913	The success and rapid evolution of invasive species: resolving a genetic paradox
Dr CJ Clarkson	The University of Queensland	DP0770446	The African origins of Asian and Australian lithic technologies: Exploring modern human origins and dispersals using new techniques of core analysis
Mr I Collier	The University of Melbourne	DP0772440	Europe and Identity: A transcultural history of European communities in the Islamic world 1685-1800
Dr V Crinis	University of Wollongong	DP0771350	The Clothing Industry in the Asia Pacific: Managing Constant Change
Dr M de Rosnay	The University of Sydney	DP0774331	Acquiring Social Fears in Infancy: Underlying Mechanisms and Implications for Behavioural Intervention
Dr J Dickenson	The University of Melbourne	DP0771800	Managing trust: a comparative historical study of political accountability in Australia.
Dr TI Dreher	University of Technology, Sydney	DP0773579	News and Community Conflict: examining the role of journalism in local conflict and conflict resolution
Dr X Du	The University of Sydney	DP0772551	Novel nanostructured high energy cathode material
Dr SB Duffy	The University of Queensland	DP0771436	Spinoza, Kant and Deleuze on freedom and ethical difference: an immanent approach
Dr ME Eagle	The Australian National University	DP0772325	Augustus Earle (1793-1838) and the roles of humanism and science in interpreting the world and its peoples.
Dr H Eubel	The University of Western Australia	DP0773152	Protein Complexes and Supercomplexes of Plant Organelles

Dr H Feng	The University of Queensland	DP0774201	From Periphery to Central: the Politics of China's Central Banking Reform and the Building of a Financial Infrastructure in an Age of Transition
Dr KH Ferguson	James Cook University	DP0770428	A study of the public understanding of the Great Barrier Reef and its sustainable use
Dr JW Fernandez	The University of Melbourne	DP0772838	A Control Systems Approach for Understanding Human Locomotion
Ms F Fidler	La Trobe University	DP0770535	Evidence-based improvement of statistical inference practices in psychology and other disciplines
Dr BM Fischer	The University of Adelaide	DP0771243	Towards a miniaturised on-chip terahertz biosensing system
Dr J Fischer	The Australian National University	DP0771378	Sustainable Farms: Tree Regeneration and the Future of Farmland Biodiversity
Dr E Foo	University of Tasmania	DP0772348	The role of plant hormones in arbuscular mycorrhizal symbiosis
Mr T Gonzalez	La Trobe University	DP0770451	The origins of Asian domestic buffalo and its role in the development of agricultural technology
Dr MC Gregg	The University of Queensland	DP0770241	Working from home: New media technology, workplace culture and the changing nature of domesticity
Dr C Grillet	The University of Sydney	DP0774658	Highly nonlinear all-optical switches using chalcogenide photonic crystal
Dr AJ Hale	The University of Queensland	DP0771377	Computationally Modelling a Volcano: Flow and Stability.
Dr RQ Harrison	The Australian National University	DP0773697	The colonial souvenir market and Indigenous agency in Oceania
Ms BA Hewitt	The University of Queensland	DP0770586	Marital separation and divorce: social correlates, gender differences and initiation
Mr CJ Hoskin	The Australian National University	DP0773537	Understanding "reinforcement", an evolutionary process that can lead to the origin of new species and generate species diversity
Mr A Iqbal	The University of Adelaide	DP0771453	Study of mathematical models of evolution using the theory of quantum games - strengthening the theoretical foundation of quantum computation
Dr LR Jeffery	The University of Western Australia	DP0770923	The Role of Adaptive Coding Mechanisms in the Development of Face Perception.
Dr P Jia	The University of Sydney	DP0770997	East meets West: an archaeological study of early contact between China and Eurasia
Dr C Jiang	University of Wollongong	DP0770205	Current limiting mechanisms in magnesium diboride superconductors
Dr Q Kaas	The University of Queensland	DP0773830	Theoretical and computational approaches to accurately predict the structures of a unique family of circular and knotted proteins.
Dr B Kanra	The Australian National University	DP0773626	Communication Across Difference in a Democracy: Australian Muslims and the Mainstream
Dr MC Labat	Walter and Eliza Hall Institute of Medical Research	DP0774583	Elucidation of the hierarchy of stem, progenitor and mature cells in the mouse mammary gland
Dr SP Lailvaux	The University of New South Wales	DP0772577	Exposing genetic quality: whole-organism performance and life-history trade-offs under genetic and phenotypic stress in the field cricket <i>Teleogryllus commodus</i>
Dr C Lee	The Australian National University	DP0770023	Many-body quantum effects in the physics of ultracold atoms
Dr W Lei	The Australian National University	DP0774366	Indium arsenic antimony (InAsSb) Quantum Dots for Mid-Infrared Lasers

Dr DM Leslie	The University of Melbourne	DP0772827	Spiritual and cross-cultural elements in contemporary Australian art
Mr B Li	The University of Queensland	DP0772417	A mechanism to authenticate porcelain treasures from the Yuan-Ming dynasties (1260-1644 AD) in China
Dr JJ Longdell	The Australian National University	DP0773408	Quantum technologies based on crystalline rare-earth ion doped optical waveguides and resonators
Dr RJ Lowe	The University of Western Australia	DP0770094	Hydrodynamics of Fringing Reef Systems
Mr Bj MacQueen	Monash University	DP0770266	Democratizing the Middle East: implications of Washington's policies
Dr AA Maklakov	The University of New South Wales	DP0774587	The role of sexual conflict in the evolution of lifespan and ageing
Dr J Markley	Macquarie University	DP0772705	The impact of cultural contact between China and the Ancient Mediterranean World
Mr MD McDonnell	University of South Australia	DP0770747	A lossy compression paradigm for sensory neural coding
Dr JP Millie	Monash University	DP0773170	Preaching Islam: politics, performers and publics in Indonesia.
Dr AE Miroshnichenko	The Australian National University	DP0771218	Tunable nonlinear photonic devices with liquid crystals
Dr C Monat	The University of Sydney	DP0773984	Slow light in nonlinear photonic crystals: less haste, more speed
Dr NP Murphy	The University of Adelaide	DP0770979	Evolution of the unique fauna of the Great Artesian Basin mound springs: the impact of aridification and climate change.
Dr XJ Nelson	Macquarie University	DP0772517	Visual processing in a unique modular system - how can a simple cognitive architecture be used to solve complex visual tasks?
Mr PJ O'Sullivan	The University of Sydney	DP0774133	Categorical splitting theorems in algebraic geometry
Dr S Paolini	The University of Newcastle	DP0770704	The Disproportionate Impact of Negative Contact on Category Salience and Prejudice: Explaining Why Intergroup Interactions Can Be Harmful
Dr JF Parr	Southern Cross University	DP0773868	Enhancing long-term soil organic carbon sequestration
Mr CM Phan	The University of Newcastle	DP0772490	Influence of adsorbed surfactants on three phase contact line motion at high capillary number
Dr BL Phillips	The University of Sydney	DP0772418	Disperse or die: the evolution of dispersal ability in a changing climate.
Dr MJ Phillips	The Australian National University	DP0774015	Uncovering the evolutionary history of Australasian marsupials: combining molecular phylogenetics and ecological inference
Ms L Poland	University of Western Sydney	DP0773265	Australian literary publishing and its economies, 1965-1995
Dr M Poulos	The University of Sydney	DP0770437	A New History of 1968: Feminism and Student Revolt in the Colonels' Greece (1967-1974)
Dr SR Pryke	The University of New South Wales	DP0770889	Alternative life-history strategies in the evolution of colour polymorphism
Dr J Purdey	Monash University	DP0770854	A study of the scholarship on Indonesia in Australia and its implications for foreign policy
Dr JR Rabeau	The University of Melbourne	DP0774121	Diamond based single spin detector
Dr AA Robles Kelly	National ICT Australia	DP0774118	Spectral Mutli-camera Tracking
Dr M Ruitenber	The University of Western Australia	DP0774113	CX3C chemokine signalling in the olfactory epithelium and its role in the self regeneration of the olfactory system

Dr MA Schlosshauer	The University of Queensland	DP0773169	Decoherence in quantum computing and quantum electromechanical systems
Dr RH Sewell	The University of Western Australia	DP0769992	Growth dynamics and innovative spectroscopic techniques for real-time control of advanced electronics materials grown by molecular beam epitaxy
Dr JR Seymour	The Flinders University of South Australia	DP0772186	Microbial Oceanography: Community Heterogeneity Fuelled by Environmental Variability
Dr I Shadrivov	The Australian National University	DP0772300	Engineering and control of metamaterials with negative refraction
Mr MB Sheahan	The University of Newcastle	DP0770679	The Dynamics of Plant Cell Division-Discovering the Mechanisms of Organelle Inheritance
Dr CJ Shepherd	The Australian National University	DP0773307	Sustainable Development, Cultural Diversity, and Global Transformations: An Ethnography of Agricultural and Environmental Practices in East Timor
Dr WP Sijp	The University of New South Wales	DP0772938	What controls the shift from a hot house climate to a cold house climate: the Eocene/ Oligocene climate transition and greenhouse warming
Mr R Sinha	The University of Melbourne	DP0771504	Efficient Algorithms for In-memory Sorting, Searching and Indexing on Modern Multi-core Cache-based and Graphics Processor Architectures
Dr BJ Slagmolen	The Australian National University	DP0770426	Pushing the frontiers of gravitational wave science: from technology to astrophysics
Mr RJ Southgate	RMIT University	DP0770546	Autophagic vacuole formation in mammalian skeletal muscle; role of FOXO proteins.
Dr P Spedding	Monash University	DP0772763	The Dissemination and Control of Clandestine Writing in England 1695--1774
Mr D Stello	The University of Sydney	DP0771840	Habitable planets and stellar oscillations with the NASA Kepler mission
Dr PK Stephenson	The University of Queensland	DP0771959	A study of the rise of Islam and community survival in Indigenous Australia
Dr D Stuart-Fox	University of Wollongong	DP0772215	The evolution of female resistance to male reproductive traits in animals
Dr CJ Sumbly	The University of Sydney	DP0773011	Anion Binding and Sensing With Self-Assembled Metallo-Supramolecular Assemblies
Dr MW Taylor	The University of New South Wales	DP0773476	Bacterial disease and bleaching of chemically defended marine algae
Dr NL Taylor	The University of Western Australia	DP0772155	Adaptations of plant mitochondria during cold acclimation in Arabidopsis thaliana: towards an understanding of plant cold acclimation
Dr N Thamwattana	University of Wollongong	DP0770649	Modelling applications of nanomaterials in biology and medicine
Dr A Tiernan	Griffith University	DP0773267	Mapping the policy advisory capacity of the Australian federal government: assessing transformations in the policy advising role of the Australian Public Service
Dr GM Turchini	Deakin University	DP0772271	Omega-3 fatty acids, appetite and growth in farmed fish
Dr CT Tuttle	The University of Queensland	DP0770375	Dynamic modelling of biomolecular systems: Going beyond classical empirical force fields.
Ms L Vogl	The University of New South Wales	DP0772977	Fear, sadness and alcohol in adolescence: A test of innovative curriculum models to prevent adverse outcomes.
Dr L Wang	The Australian National University	DP0773761	Computer Vision Optimization Problems Using Machine Learning

Dr T Waters	The University of New South Wales	DP0772053	Reactivity and Spectroscopy of Gas Phase Metal Oxide Cluster Ions: Structure-Reactivity Correlations and Fundamental Insights into Heterogeneous Catalysis
Ms KE Westaway	University of Wollongong	DP0772571	Landscape evolution and palaeoclimates in Indonesia: environmental, faunal and archaeological implications.
Dr AG Wills	The University of Newcastle	DP0774086	Advancing System Identification using Modern Optimisation Methods
Dr E Wilson	The University of Western Australia	DP0772361	Selective information processing and anxiety problems
Dr B Winther-Jensen	Monash University	DP0770588	Switchable interfaces
Dr BA Wintle	The University of Melbourne	DP0774288	Optimal environmental monitoring under severe uncertainty.
Mr CT Wolfe	The University of Sydney	DP0772706	The origins of scientific experimental practices: from the anatomical theatre to the conversations of the Royal Society
Dr JC Wolfendale	The University of Melbourne	DP0770545	A study of Australia's ability to train soldiers to be effective and ethical
Dr Z Wu	University of Ballarat	DP0771709	Filled function methods for global optimization and their applications
Dr J Xie	The University of Melbourne	DP0770585	Novel Photo-Catalysts for Water Oxidation: Linking Nature to New Technologies
Dr AJ Zele	Queensland University of Technology	DP0773544	Psychophysical Assessment of Receptoral and Post-Receptoral Visual Function
Dr AN Zelikin	The University of Melbourne	DP0771430	Disulfide Cross-linked Hollow Polymer Capsules for Drug Delivery
Dr T Zhang	Curtin University of Technology	DP0770420	Wavelet approaches for solving nonlinear dynamic systems in process engineering
Dr Y Zhang	The University of New South Wales	DP0770424	Development of room temperature diluted magnetic semiconductors for spintronics devices application