Australian Government
Department of Education

National Industry PhD Program

National Industry PhD Program

Round 5 2025 – Recommended Successful Projects

Application No.	Stream	Project Title	Project Description	Field of Research	Participating University	Industry Partner/s	State
40416	Industry Linked	Development and Validation of a Standardised National Testing Program to Support Longitudinal Performance, Retention, and Wellbeing of Rugby Players	This project develops a national standardised testing and profiling battery for Australian rugby players. By providing a comprehensive overview of players' physical strengths and weaknesses, the research will enhance performance, health, and safety from grassroots to elite levels. The outcomes will improve player preparation, health, and rehabilitation, ensuring the future of rugby as a mass participation sport in Australia.	Human Movement	Australian Catholic University	Rugby Australia Ltd	ACT
40449	Industry Linked	Exploring and Optimising Locally Sourced Organic Geopolymers in Green Concrete for Strength and Durability in Darwin, Australia	This project develops eco-friendly concrete using local waste materials to reduce heat and cracking during curing in the Northern Territory's hot climate, aiming for strong, durable, and sustainable construction that meets Australian standards.	Construction Engineering	Charles Darwin University	H B Concrete PTY LTD	NT
40408	Industry Linked	Towards Right-way Fire Management	This research will help in understanding the interaction between people and rainfall on fire regimes, inform fire management targets and external reporting, and support the creation of nature economies for Indigenous rangers and their communities. Findings of this research will help mitigate devastating wildfires and protect endangered species.	Environmental Studies, n.e.c.	Charles Darwin University	Environs Kimberley Incorporated	NT
40528	Industry Linked	Development of an Artificial Intelligence-Driven Blueberry Yield Forecasting Model to Increase Production Efficiency	This project develops an artificial intelligence-driven yield forecasting model for blueberry crops to predict the volume of ripe fruit more accurately. By using weather and agronomy data, it aims to improve forecast accuracy, assisting growers in managing labour and market supply logistics, supporting the blueberry industry's growth.	Horticulture	CQUniversity	Perfection Fresh Australia	QLD
40454	Industry Linked	Chemical Speciation Analysis in Eco-Friendly Metal Leaching	The project aims to better understand the chemistry of new eco-friendly metal leaching processes using glycine (GlyCat™), an improvement on the traditional cyanidation methods. This will benefit process optimisation and control and ultimately provide cleaner and more efficient operations for gold extraction.	Chemical Sciences, n.e.c.	Curtin University	Draslovka Mining Innovation Centre (Trading as Mining and Process Solutions)	WA

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40538	Industry Linked	Advancing Biodiversity Metrics and Elucidating the Role of Ecosystem Engineers in Enhancing Carbon Sequestration to Inform the Nature Repair Market	This research investigates the role of vertebrates in ecosystem function and carbon cycling. By focusing on Australian species like digging marsupials, it aims to quantify their impact on soil health and carbon sequestration, supporting biodiversity conservation and climate change mitigation strategies.	Zoology	Deakin University	Odonata Foundation	VIC
40460	Industry Linked	A Novel Treatment for Gastroesophageal Cancer Using the Mushroom Extract HAS-B	This project assesses a novel anti-cancer compound derived from Shiitake mushrooms. It aims to evaluate its safety and effectiveness in treating gastrointestinal cancers, providing essential data for future clinical trials and exploring the compound's mode of action in cancer treatment.	Medical Science	Flinders University	Southern Oncology Clinical Research Unit	SA
40485	Industry Linked	Use of a Novel and Sustainably Sourced Antioxidant Treatment Aimed to Mitigate Environmental Stress Impacts on Grain Production	This project assesses the bioactivity of compounds derived from Australian hardwood species to explore their potential use in mitigating environmental stresses on crops. By determining optimal application rates and timing, the project aims to improve crop resilience to drought, heat, and frost, benefiting farmers in Southern Australia facing climate change-related challenges.	Agricultural Science	Flinders University	SylvaCo Pty Ltd	SA
40536	Industry Linked	Broadband Vector Magnetometers for Applied Sensing and Navigation	This project develops advanced vector magnetometers for detecting magnetic anomalies in navigation and other applied sensing applications. By using engineered diamonds with nitrogen-vacancy centres that will be tested on DefendTex's vehicle platforms, it aims to create sensitive, compact devices for real-time magnetic field measurement, supporting applications in industry, defence, and research.	Physics	Monash University	DefendTex Pty Ltd	VIC
40404	Industry Linked	Genetic Solution Toward Optimum Oat Grain Oil Content and Composition End Products (1)	The project aims to breed oat varieties with healthier oil content. By improving the nutritional value and sustainability of oat products, it makes them more suitable for diverse applications like oat milk formulations. The project will identify and manipulate genes responsible for oil synthesis, supporting the development of improved oat varieties.	Agricultural Science	Murdoch University	Meta Matters Pty Ltd	WA
40495	Industry Linked	Genetic Solution Toward Optimum Oat Grain Oil Content and Composition End Products (2)	The project aims to breed oat varieties with healthier oil content. By improving the nutritional value and sustainability of oat products, it makes them more suitable for diverse applications like oat milk formulations. The project will identify and manipulate genes responsible for oil synthesis, supporting the development of improved oat varieties.	Agricultural Science	Murdoch University	Meta Matters Pty Ltd	WA
40496	Industry Linked	Genetic Solution Toward Optimum Oat Grain Oil Content and Composition End Products (3)	The project aims to breed oat varieties with healthier oil content. By improving the nutritional value and sustainability of oat products, it makes them more suitable for diverse applications like oat milk formulations. The project will	Agricultural Science	Murdoch University	Meta Matters Pty Ltd	WA

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			identify and manipulate genes responsible for oil synthesis, supporting the development of improved oat varieties.				
40457	Industry Linked	Artificial Intelligence-Driven Extracellular Matrix Optimisation for Three-Dimensional Tissue Cultures in Preclinical Drug Development	This project aims to optimise the extracellular matrix in 3D tissue cultures for drug testing. By developing AI models to predict optimal conditions, it seeks to improve the efficiency and reproducibility of preclinical drug development, providing a more ethical and cost-effective alternative to traditional methods.	Engineering and Related Technologies, n.e.c.	Queensland University of Technology	Gelomics Ltd Pty	QLD
40526	Industry Linked	Metal Halide Perovskite Solar Cell Performance Based on Impurity Profiles from Australian Sourced Precursor Materials	This project evaluates the impact of elemental impurities found in locally sourced minerals on the performance of perovskite solar cells. This will facilitate the development and sale of perovskite precursors to both sovereign solar technology manufacturers and for export.	Engineering and Related Technologies, n.e.c.	Queensland University of Technology	Lava Blue Ltd	QLD
40472	Industry Linked	Industrial Catalyst Development for Sustainable Hydrogen Production via Ammonia Cracking	This research focuses on developing cost-effective non-noble metal catalysts for ammonia cracking. Ammonia is a promising hydrogen carrier and by enhancing the efficiency and stability of ammonia cracking and supporting its large-scale adoption, the project aims to reduce carbon emissions, and reinforce Australia's leadership in the global hydrogen economy.	Chemical Engineering	RMIT University	Cavendish Renewable Technology	VIC
40441	Industry Linked	Optimal Dynamic Load Distribution Algorithm for Mobile Hybrid Fuel Cell-Battery Systems to Maximise Durability and Efficiency	The project focuses on optimising load distribution between fuel cells and batteries in mobile applications to extend their lifetimes and improve energy efficiency. It will enhance the performance and reliability of these systems, fostering greater commercial interest in fuel cell-battery technologies.	Automotive Vehicle Operations	RMIT University	ASA Industry - Melbourne Pty Ltd	VIC
40510	Industry Linked	Next-Generation Ultraviolet-Resilient Aerospace Coatings for Enhanced Durability and Optimised Thermal Management	This project aims to develop advanced ultraviolet-resistant aerospace coatings using nanostructured spherical hollow particles. By improving ultraviolet reflection and reducing coating weight, it seeks to enhance durability and sustainability, supporting aerospace and industrial applications.	Chemical Sciences, n.e.c.	RMIT University	Defence Science & Technology Group DuluxGroup (Australia)	VIC
40507	Industry Linked	Quantum Tensor Gradiometry for Navigation and Anomaly Detection with Diamond	This project aims to create the world's first diamond-based quantum tensor gradiometer for advanced navigation. By using quantum diamond magnetometry, it seeks to reduce noise effects and enhance navigation accuracy, contributing to advancements in navigation technology.	Marine Craft Operation	RMIT University	Phasor Innovation Pty Ltd	VIC
40509	Industry Linked	Artificial Intelligence-Powered Phishing Countermeasures: Practical Vulnerability Assessment	This project develops an AI-powered phishing risk assessment and reduction system, creating a commercially viable product with the potential to equip businesses with affordable, scalable cybersecurity tools and strengthen national cyber resilience.	Artificial Intelligence	RMIT University	Scolyer-Gray Consulting Services	VIC

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		and Actionable Defence Tooling					
40465	Industry Linked	Run-Time Monitoring of Machine Learning for Robotic and Autonomous Perception	This project aims to make robotic perception systems more reliable by developing monitoring techniques for machine learning models. It seeks to detect performance issues early, improving system safety and reliability by continuously evaluating and predicting potential failures in robotic systems.	Artificial Intelligence	The University of Adelaide	Lockheed Martin Australia	SA
40421	Industry Linked	Developing Multi-Modal and Explainable Artificial Intelligence for Genetic Disease Risk Prediction	This project develops an AI-powered system for genetic disease risk prediction. By leveraging high-quality data from SA Pathology and genomic biobanks, the research will predict cancer phenotypes and support comprehensive multi-modal data analysis. The outcomes will enhance the interpretability and transparency of AI systems, improving clinical usability and trustability, and supporting operational feasibility in genetic disease prediction.	Artificial Intelligence	The University of Adelaide	Central Adelaide Local Health Network	SA
40388	Industry Linked	A Novel Non-Surgical Bracing Intervention to Facilitate Anterior Cruciate Ligament Healing After Rupture	The project examines a new treatment for ACL injuries that aims to promote healing without surgery. The project will provide evidence on the effectiveness of the Cross Bracing Protocol, offering a non-surgical option for ACL recovery. This research will inform treatment decisions for people with ACL injury and address important knowledge gaps.	Rehabilitation Therapies, n.e.c.	The University of Melbourne	Bauerfeind Australia	VIC
40390	Industry Linked	Optimising Nebulised Messenger RNA-Lipid Nanoparticle Delivery for Pulmonary Therapeutics and Clinical Translation	The project aims to enhance the stability and efficiency of a system for delivering mRNA-based therapies to the lungs, improving treatment for respiratory diseases like asthma and chronic obstructive pulmonary disease. By advancing non-invasive drug delivery methods, respiratory therapies will become more effective and accessible.	Pharmacy	The University of Melbourne	Misti Pty Ltd Inc Melbourne Centre for Nanofabrication (MCN)	VIC
40549	Industry Linked	Leveraging Human Genomics to Advance ASIC1a-Targeted Therapeutics for Ischaemic Diseases	This research uses human genomics to study acid-sensing ion channel 1a as a therapeutic target for ischemic injuries. By identifying genetic associations and therapeutic opportunities, it aims to develop treatments for conditions like heart attacks and strokes, improving patient outcomes.	Genetics	The University of Queensland	Infensa Bioscience Pty Ltd	QLD
40426	Industry Linked	Funding the Benefits of Virtual Care	Virtual health care leverages technology to connect patients and clinicians. Despite their promise, virtual care has not achieved widespread adoption in Australia. In part, this is due to complex funding arrangements in health. This project aims to build the economic evidence for virtual health care models. The outcomes will guide investment decisions to promote a more efficient, equitable, and sustainable health system.	Public Health, n.e.c.	The University of Sydney	Independent Health and Aged Care Pricing Authority (IHACPA)	NSW

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40505	Industry Linked	Evaluating Cumulative Environmental Impacts of Offshore Renewable Energy Infrastructure	This project explores the interactions between marine habitats, fish, fishers, and offshore wind farms to predict and potentially alter the impacts of offshore wind farms on marine biodiversity. By focusing on the offshore electricity infrastructure zone near Bunbury, it aims to inform policy and regulatory decisions, supporting sustainable development and environmental impact assessment for offshore renewable energy.	Oceanography	The University of Western Australia	Blue Economy Cooperative Research Centre BMT Commercial Australia Pty Ltd	WA
40399	Industry Linked	Adoption and Use of Technology to Protect Vulnerable People Against Technology-Facilitated Domestic Violence	Technology-facilitated abuse involves the use of digital technology to harm victims by sending abusive messages, using a tracking device, or sharing intimate photographs to harass. This study aims to develop technology to protect victims of domestic violence using blockchain for secure data storage. By enhancing safety and privacy, it provides reliable tools for evidence collection and personal protection. The project aims to design and implement a secure, decentralised system that safeguards sensitive information and supports victim-survivors.	Security Science	University of Canberra	Nansen Digital Forensic Services Pty Ltd	ACT
40444	Industry Linked	Innovating Sport Science Practices Through Technology to Support the Performance and Wellbeing of Male Professional Athletes	This project will create advanced sport science databases to support the health and performance of Australian Rules Football players. The project aims support the sport's growth and development, informing future protocols in the evolving sports environment to improve player performance and longevity. It will also develop a highly specialised and unique skillset, merging technological and data expertise with exercise and sport science expertise to support the growth of the Australian sporting industry.	Sport and Recreation, n.e.c.	University of New South Wales	Sydney Swans Limited	NSW
40445	Industry Linked	Innovating Sport Science Practices Through Technology to Support the Performance and Wellbeing of Female Professional Athletes	This project focuses on female Australian Rules Football players. It aims to develop sport science databases to enhance player health and performance, supporting the growth of the women's league and ensuring that innovations cater to the specific needs of female athletes. This project will also develop a highly specialised and unique skillset of merging technological and data expertise with exercise and sport science expertise to support the growth of the Australian sporting industry.	Sport and Recreation, n.e.c.	University of New South Wales	Sydney Swans Limited	NSW
40446	Industry Linked	Developing Artificial Intelligence-Driven Tools to Maintain Data Standards and Empirically Validate Investment Outcomes for the Managed Accounts Sector	This project addresses the shift in the funds management industry towards separately managed accounts (SMAs). It will develop AI tools to standardise SMA information, improving transparency and consistency for investors, and ensuring that financial advice and reporting are clear and reliable.	Banking and Finance	University of New South Wales	Adviser Ratings Pty Ltd	NSW
40453	Industry Linked	Breaking Ground: Gender Diversity, Safety, and Injuries in Australian Mining	With the growing participation of women in the mining workforce, this project addresses key knowledge gaps related to the impact of gender on injury risk in	Work Practices Programmes	University of South Australia	BYP Olympic Dam	SA

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			the mining industry. It aims to increase workforce diversity, relieve skilled worker shortages, and improve safety in one of Australia's largest industries.			Corporation Pty Ltd	
40497	Industry Linked	Satellite-Based Assessment of Softwood Plantation Productivity for Optimal Site-Specific Silviculture	This project aims to enhance Australian softwood plantation productivity using cloud-based satellite remote sensing. By developing models to estimate tree productivity and identify growth-limiting factors, this project will deliver cost-effective, scalable solutions for sustainable softwood plantation management in Australia.	Forestry Studies	University of South Australia	McGrath Forestry Services HQ Plantations Pty Ltd	SA
40471	Industry Linked	Genesis, Characterisation, and Geochronology of the Cargo Deposit, New South Wales, Australia	This PhD project investigates the genesis, characterisation, and geochronology of the Cargo deposit in NSW to better understand its mineralisation processes. Using field mapping, geochemical analysis, and geochronology, it aims to refine the understanding of the deposit's formation and economic significance, advancing exploration strategies for copper-gold systems in NSW.	Geology	University of Tasmania	Waratah Minerals Limited	TAS
40523	Industry Linked	Novel Bioactive Bone Putty for Treatment of Bone Defects	This project develops a new bone putty formulation for or treatment of bone defects, using bioactive bioceramics in a structural matrix material.. By enhancing mechanical performance and bioactivity, it aims to improve patient recovery and lower healthcare costs in orthopaedic and dental surgeries.	Biomedical Engineering	University of Technology Sydney	Allegra Innovations Pty Ltd	NSW
40524	Industry Linked	Surface Engineering of Soft Tissue Grafts to Enhance Bone-Tendon Integration for Tendon/Ligament Repair Applications	This project aims to improve bone-tendon integration in people who have undergone ligament and tendon repair procedures through the surface engineering of the bone-contacting ends of soft tissue grafts. By developing a bioactive ceramic coating to promote cellular adhesion, it aims to reduce failure rates, surgical revisions, and recovery periods in tendon graft procedures.	Biomedical Engineering	University of Technology Sydney	Allegra Innovations Pty Ltd	NSW
40519	Industry Linked	Interactive 3D Reconstruction in Virtual Reality for Training, Education, and Communication	This project designs an immersive virtual reality experience using three-dimensional scanned real environments and actors. By developing software for three-dimensional Gaussian Splatting radiance fields, it aims to create interactive virtual reality training products, enhancing training outcomes and leading global virtual reality development.	Computer Graphics	University of Technology Sydney	Vividhata Pty Ltd	NSW
40407	Industry Linked	Optimisation of an Alternative Binder Blend of Fibre Board Cement, Basic Oxygen Furnace Slag, and Coal Combustion Ash for Road Base	This study aims to develop a sustainable binder for road construction by combining Cement Fibreboard, Basic Oxygen Furnace Slag, and Coal Combustion Ash. The project will identify optimal particle sizes and blending ratios to enhance binder reactivity and improve road durability, reducing greenhouse gas emissions and promoting circular economy principles in the construction industry.	Geotechnical Engineering	University of Technology Sydney	SCE Recycling	NSW
40411	Industry Linked	Improving Reservoir Management to Overcome Climate Effects of Changing Water Levels	This project addresses the impact of water level fluctuations and flooding on reservoir water quality. By quantifying the ecological and water quality impacts of vegetation regrowth during droughts and subsequent inundation, the research will provide insights into managing reservoirs under climate	Earth Sciences, n.e.c.	University of Technology Sydney	WaterNSW	NSW

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			change conditions, ensuring reliable drinking water and supporting ecosystem processes.				
40545	Industry Linked	Towards Sustainable Inshore Fisheries: The Potential of Estuarine Electrofishing in Australia	This project explores electrofishing as an alternative method for both fisheries monitoring and harvest in the East Coast Inshore Fin Fish Fishery. By introducing innovative technology, it aims to enhance data collection, maximise productivity, and support sustainable fishing practices while creating new employment opportunities in Queensland's inshore waters.	Marine science	University of the Sunshine Coast	Department of Primary Industries (Queensland Government)	QLD
40398	Industry Linked	A Novel Cleaning Process for the Continuous Galvanisation of Aluminium-Zinc-Magnesium-Silicon Alloy Coatings to Reduce the Environmental Footprints	The project aims to reduce carbon emissions in steel manufacturing by improving cleaning processes. By supporting BlueScope's sustainability goals, it contributes to the reduction of industrial carbon footprints. The project will evaluate cold rolled steel coil cleaning processes to replace traditional methods, making steel production more energy-efficient and environmentally friendly.	Materials Engineering	University of Wollongong	BlueScope Steel	NSW
40391	Industry Linked	Quality Preschool Dance Education and Children's Development: A Multi-Study Examination of the 'Ready Set Dance' Program	This study evaluates the impact of preschool dance programs on children's development. By establishing best practices and demonstrating benefits beyond physical activity, these programs support self-regulation, executive functioning, and school readiness in young children, particularly post-pandemic. The project will provide evidence on the developmental value of structured, play-based dance programs, informing curriculum development and industry standards.	Education, n.e.c.	University of Wollongong	Ready Set Dance	NSW
40392	Industry Linked	Development and Evaluation of a Clinical and Quality Improvement Framework for Home-Based Palliative Aged Care: An Industry Co-Designed Model	The project aims to develop a Palliative Care framework for home-based aged care. Recognising and responding to individuals' symptoms, concerns and preferences will ensure better end-of-life care and reduced healthcare burden. The project will provide a model and improve access to high-quality palliative care in home settings for ageing Australians.	Aged Care Nursing	University of Wollongong	Silver Chain Group	NSW
40506	Industry Linked	Mitigation of Greenhouse Gas Emissions from Wastewater Transfer Systems	This project aims to develop a scalable methane reduction process for wastewater transfer systems. The project is highly significant as it supports Australia's decarbonisation goals, aligning with national climate commitments.	Water and Sanitary Engineering	University of Wollongong	Originwater International Pty Ltd	NSW
40435	Industry Researcher	Development of a Rapid Point-of-Care Molecular Diagnostic for Scabies and Co-Infections	This project aims to develop a rapid, high-sensitivity diagnostic test for scabies and associated bacterial co-infections. The collaboration between CDU/Menzies and ZiP Diagnostics will integrate this new test onto ZiP's TGA-approved portable point-of-care instrument, suitable for use in low-resource settings. The aim is to facilitate early diagnosis and treatment of scabies and	Medical Science	Charles Darwin University	ZiP Diagnostics Pty Ltd	NT

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			skin sores, thereby improving efforts to address a significant global health burden.				
40400	Industry Researcher	Manufacturing Innovation for Economic Return: Developing Optimal Machining Processes for Improving Metal Surface Integrity and the Product Life Cycle	The project aims to optimise machining processes for Stellite-6, a durable alloy. By improving surface quality and reducing production costs, it enhances the market value and durability of machined parts. The project will investigate optimal machining parameters and tool wear, supporting the production of high-quality components for various industries.	Manufacturing Engineering	CQUniversity	Berg Engineering	QLD
40403	Industry Researcher	Battery Energy Storage Systems Resilience and Reliability: Balancing Frequency Control Ancillary Services and Grid Stability	This study develops a control strategy for battery energy storage systems to improve grid stability. By extending battery life and enhancing economic returns, it supports the integration of renewable energy sources. The project aims to optimise battery energy storage performance in frequency control ancillary services, ensuring reliable and sustainable grid operations.	Electrical Engineering	CQUniversity	APA Group Limited	QLD
40530	Industry Researcher	Using Process Modelling and Artificial Intelligence to Understand the Defects Found in Cold Spray 3D Printing of Parts	This research will improve cold spray 3D printing manufacturing using a virtual model to find and fix defects and AI to optimize production parameters, enabling on-demand high-quality metal parts for aerospace, automotive, and defence.	Manufacturing Engineering	Deakin University	Auto Crash Pty Ltd	VIC
40501	Industry Researcher	Development of a Low Allergen Chicken Egg	This project aims to create a low-allergen egg product using genome engineering and advanced food processing techniques. By neutralising major egg allergens, it seeks to improve food safety for individuals with egg allergies, offering a safer alternative for consumers and positioning Australia as a leader in food innovation and allergen-free product development.	Food Science and Biotechnology	Deakin University	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	VIC
40489	Industry Researcher	Maximising Wind Energy Harvesting via Performance Optimisation of Large Scale Advanced Vertical Axis Wind Turbines	This project aims to enhance wind turbine efficiency and reliability using modern control algorithms and digital twins. By monitoring and adjusting control parameters, it seeks to optimise energy capture, grid stability, and fault tolerance, contributing to sustainable energy goals and advancing wind turbine technology.	Electronic Engineering	Flinders University	VAWT-X Energy Pty Ltd	SA
40487	Industry Researcher	Hybrid Coastal Protection: Integrating Nature-Based and Hard Engineered Structures for Climate-Resilient Shorelines	With climate change accelerating sea level rise and intensifying coastal storms, communities and infrastructure face increasing risk from erosion and flooding. This project investigates hybrid coastal protection strategies that integrate nature-based solutions with engineered structures. By offering scalable, practical alternatives to traditional seawalls, it aims to increase community resilience to climate change and sea level rise	Natural and Physical Sciences, n.e.c.	Flinders University	Magryn & Associates Pty Ltd	SA
40458	Industry Researcher	Embedding Relational Resilience: A Culturally	The research aims to improve mental health support for emergency services personnel in South Australia. It will evaluate a culturally and trauma-informed	Psychology	Flinders University	Military and Emergency	SA

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		Informed Model for Reducing Psychological Harm Among South Australian First Responders	prevention programme for first responder agencies, aiming to understand and to de-stigmatise help-seeking and improve individual wellbeing, ultimately strengthening workforce resilience and improving services for local communities.			Services Health Australia	
40462	Industry Researcher	Addressing Inequity in Access to Clinical Pharmacy Care for Regional South Australians: An Evaluation and Feasibility Study of Telepharmacy Services	In South Australia, there is historically an inequity in access to clinical pharmaceutical care between patients admitted to metropolitan versus regional hospitals. The research evaluates the implementation of telepharmacy services in regional South Australia. It aims to improve access to pharmaceutical care, enhancing health outcomes in underserved areas by addressing the challenges and barriers to effective telepharmacy implementation.	Pharmacy	Flinders University	Central Adelaide Local Health Network	SA
40494	Industry Researcher	Developing and Evaluating Nursing Pathways: An Evidence-Based Career Progression Framework for Australian Nursing Workforce	Nurses and midwives are the largest segment of Australia's healthcare workforce. However, like many countries globally, Australia is facing an unpredicted nursing workforce crisis. This research evaluates the impact of the Nursing Pathways framework on addressing workforce shortages and retention challenges in Australia. By identifying resources for career advancement, it aims to ensure the profession's growth and sustainability.	Nursing, n.e.c.	Flinders University	Australian College of Nursing	SA
40553	Industry Researcher	Decision Support for Space Mission Planning Using Knowledge (Hyper-)Graphs	This project develops an artificial intelligence-driven framework for decision support in space mission planning. By integrating diverse data sources and using reasoning algorithms, it aims to improve mission coordination, risk detection, and strategic decision-making in space technologies.	Artificial Intelligence	Griffith University	Starbound Space Solutions Pty Ltd	QLD
40551	Industry Researcher	Experimental and Numerical Investigation of Shear Capacity and Flexural Strength of Super-Span Floor Systems	This research examines the strength, serviceability, and sustainability of modular construction systems. By conducting experimental testing and analysis of the super-span modular decking system, it aims to improve structural performance and support the adoption of modular construction for affordable housing and sustainable building practices in Australia.	Civil Engineering, n.e.c.	Griffith University	Edge Consulting Engineers	QLD
40548	Industry Researcher	Synergistic Mechanisms of Neodymium:Yttrium Aluminium Garnet and Erbium:Yttrium Aluminium Garnet Lasers in Non-Ablative Skin Treatments: Integration of Experimental and Computational Approaches	This project investigates the combined use of two types of lasers in non-ablative skin therapies, thereby addressing the high industry demand for safer, high-precision minimally invasive therapies. By understanding laser-tissue interactions and optimising treatment protocols, it aims to improve the safety and effectiveness of minimally invasive skin treatments, advancing medical and aesthetic applications.	Biochemistry and Cell Biology	Queensland University of Technology	The Skin Institute & Academy	QLD
40369	Industry Researcher	Laser additive manufacturing of novel nickel-copper alloy heat	This research focuses on the additive manufacture of novel heat exchanger components from a high-strength, corrosion-resistant nickel-copper alloy. By refining the laser-based manufacturing process and enhancing material	Manufacturing Engineering	RMIT University	Conflux Technology Pty Ltd	VIC

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		exchanger components for extreme environments	properties, the project aims to produce highly efficient components for demanding environments in marine, chemical processing, and aerospace industries. The outcomes will enable the creation of advanced heat exchangers for use in areas not serviceable with existing devices.				
40397	Industry Researcher	Enabling Informal Science Learning Through Inclusive Science Communication	This research explores how informal science learning institutions can use inclusive science communication approaches to enhance science engagement among marginalised communities. The project aims to develop inclusive science communication strategies and recommendations for institutions, enhancing the impact of informal science learning.	Sociology	The Australian National University	Scitech Discovery Centre	ACT
40432	Industry Researcher	Developing Data-Driven Precision Breeding Analytics for Crops to Improve Australian Agriculture	This project aims to develop precision breeding analytics for Australian agriculture. By using machine learning and algorithmic approaches, the research will unlock the potential of large-scale genomics datasets. The outcomes will enable prediction of suitable crop genotypes, supporting the agricultural industry in adapting to climate change, increasing revenue, and ensuring food security.	Genetics	The Australian National University	Diversity Arrays Technology Pty Ltd	ACT
40412	Industry Researcher	Advanced Navigation Strategies for Unmanned Underwater Vehicles: Integrating Perception with Sensor Fusion and Reinforcement Learning	This project enhances navigation accuracy for unmanned underwater vehicles (UUVs) in dynamic and GPS-denied environments. By integrating model-based and learning-based control methods, the research will develop a hybrid control framework that adapts to changing conditions, improving UUV performance and advancing exploration, surveillance, and environmental monitoring.	Maritime Engineering and Technology, n.e.c.	The University of Adelaide	Bastion Defence Consulting	SA
40389	Industry Researcher	Impacts and Requirements of Physically Effective Fibre in Commercial Dairy Goats	This research aims to optimise the diet of dairy goats by understanding their fibre requirements. By improving animal health, production efficiency, and sustainability, it benefits the dairy industry and reduces feed waste. The project will provide valuable data on the relationship between fibre intake and health outcomes, supporting more accurate diet formulation for dairy goats.	Animal Husbandry	The University of Melbourne	Harwood Grains Meredith Dairy	VIC
40380	Industry Researcher	Exploring the Core Issue of Mobility: The Impact of Postural Alignment on Mobility Outcomes Following Acquired Brain Injury	Recovery of walking ability is the number one priority of people with acquired brain injury in rehabilitation situations and influences the quality of life for individuals with such injuries. This research aims to develop a method to measure postural alignment in people with acquired brain injury. The project will provide valuable insights into the relationship between postural alignment and mobility, informing targeted treatment approaches for better recovery.	Rehabilitation Therapies, n.e.c.	The University of Melbourne	Epworth HealthCare	VIC
40384	Industry Researcher	Precision Quantum Sensing of Magnetic Fields Using Nitrogen Vacancy Defects in Engineered Diamond	The project aims to advance diamond-based magnetometer technology for precise magnetic field measurements. Applications include navigation, mineral mapping, and medical imaging. By overcoming current limitations of technology transfer from laboratories to the real world, the project seeks to provide new capabilities for accurate and stable magnetic field measurements, offering revolutionary advancements in various fields.	Physics	The University of Melbourne	Phasor Innovation Pty Ltd	VIC

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40385	Industry Researcher	Co-Developing New Services and Programs in Agricultural Land Management for Biodiversity Outcomes and Environmental Market Access in Remote Australia	This research explores the risks and opportunities of environmental markets for Indigenous land managers and non-Indigenous pastoralists. By developing tailored services and programs, it aims to help both groups engage effectively with these markets. The project seeks to ensure sustainable practices and economic benefits, supporting the livelihoods of those working with the land, and contributing to environmental conservation.	Sociology	The University of Melbourne	Landcare Australia	VIC
40552	Industry Researcher	Novel Mechanisms for Improved Efficiency of Primordial Germ Cells Modifications in Quail Model	This project aims to optimise a virus-free technique for modifying primordial germ cells in poultry. By refining the technique of Direct Injection developed by CSIRO to harness precision genome engineering tools, it aims to enable precision genome engineering to support the poultry industry by enhancing disease resilience and trait improvement in chickens and quail..	Agriculture, n.e.c.	The University of Queensland	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	QLD
40425	Industry Researcher	Towards Greater Public Hospital Efficiency	The 2011 National Health Reform Agreement seeks to deliver greater access to high quality and efficient public hospital care for all Australians. This project aims to evaluate the benefits and limitations of the national activity-based funding (ABF) system on public hospital care in Australia. The outcomes will support decision-making in the interests of Australians needing hospital care, ensuring greater access to high-quality and efficient public hospital services.	Public Health, n.e.c.	The University of Sydney	The Independent Health and Aged Care Pricing Authority	NSW
40387	Industry Researcher	Falls Risk Reduction with Enhanced Sensorimotor Ability Assessment	This study investigates how age-related sensorimotor decline affects balance in the elderly. By reducing falls through targeted assessments and exercise interventions, it aims to improve the quality of life for this vulnerable population. The project will provide insights into the mechanisms of balance deterioration and inform the development of effective fall prevention strategies.	Physiotherapy	University of Canberra	Prism Neuro Pty Ltd	ACT
40393	Industry Researcher	Enhanced Prediction Methods for Acid Rock Drainage in Critical Metal Mining	This research aims to improve methods for predicting acid rock drainage in mining. By enhancing environmental management and reducing mining impacts, it ensures sustainable practices in the extraction of critical metals. The project will develop faster and more accurate prediction methods, supporting the mining industry's efforts to gain social licence and plan for closure.	Environmental Engineering	University of New South Wales	Environmental Geochemistry International	NSW
40382	Industry Researcher	Health and Nutrition Needs of Mid-Life and Older Australians: Guiding Food Innovation for Healthy Ageing	Mid-life remains an understudied yet critical period for preventative nutrition and lifestyle intervention. By examining the intersection of nutrition, physical activity, and ageing, this study aims to support health promotion and the development of innovative food products. The findings will address age-related declines in body composition and muscle health, improving the quality of life for Australia's ageing population.	Nutrition and Dietetics	University of New South Wales	Australian Health & Nutrition Association Limited	NSW

Application No.	Stream	Project Title	Project Description	Field of Research	Participating University	Industry Partner/s	State
40511	Industry Researcher	Breaking the Bottleneck: Evaluating Advice & Guidance Models of Care to Improve Specialist Access, Reduce Wait Times, and Improve Referral Pathways	This project evaluates the implementation and impact of a Clinical Advice and Guidance model of care that uses AI-enhanced triage to manage outpatient referrals and waitlists. It aims to streamline referral pathways, reduce avoidable outpatient visits, and improve our understanding of how AI is used and trusted in healthcare.	Decision Support Systems	University of Newcastle	Consultmed Pty Ltd	NSW
40515	Industry Researcher	Food Safety and Nutritional Analysis of Black Soldier Fly Larvae: An Alternative Protein Source for Human Consumption	This project investigates the food safety of black soldier fly larvae as a sustainable protein source. By assessing trace elements, heavy metals, and nutritional composition, it aims to ensure the safety and quality of larvae, supporting the commercialisation of alternative protein sources.	Animal Husbandry	University of South Australia	Australian Superintendence Company Pty Ltd FlyFarm Queensland Pty Ltd	SA
40463	Industry Researcher	Dynamic Safety and Quality Control in Hospitals Using Machine Learning: A Learning Health System Approach	This project aims to enhance hospital safety and quality control using machine learning. It will develop a benchmarking framework to identify performance issues and guide improvements, benefiting healthcare systems by providing actionable insights and supporting continuous, data-driven decision-making.	Artificial intelligence	University of South Australia	Beamtree Pty Ltd	SA
40540	Industry Researcher	Optimisation of Particle Entrainment in Supersonic Jets and Surface Preparation Applications	This project investigates how abrasive media blasting surface preparation systems and componentry can be tuned or re-designed to increase performance, efficiency, and safety in the maintenance of steel structures like bridges and ships. The new component designs and process innovations resulting from the study will be evaluated and commercialised by the industry partner, leading to wide economic benefits across multiple industries.	Mechanical and Industrial Engineering and Technology, n.e.c.	University of Southern Queensland	BlastOne International	QLD
40482	Industry Researcher	Designing Parametric Insurance Models for Oyster Farms: Mitigating Risks from King Tides and Extreme Heat Events	This project develops a parametric insurance model to protect oyster farms from financial losses due to king tides and extreme heat events. By providing pre-agreed and automated payouts based on environmental and biological conditions, it aims to offer faster, transparent financial relief for affected farmers, with the potential to benefit aquaculture and marine-based industries more broadly by providing a framework for financial protection against climate-related risks.	Aquaculture	University of Southern Queensland	CelsiusPro Australia Pty Ltd	QLD
40520	Industry Researcher	Improving High Tibial Osteotomy Planning: A 3D Mathematical Model for Assessing Posterior Tibial Slope and Tibial Torsion Effects	This project develops a three-dimensional mathematical model for simulating lower limb realignment surgery. By integrating patient-specific imaging data, it aims to improve surgical precision and patient outcomes, providing a clinical decision-support tool for High Tibial Osteotomy procedures.	Biomedical Engineering	University of Technology Sydney	Personalised Surgery PTY LTD	NSW

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40437	Industry Researcher	Health Misinformation in Australia: Exploring Educational Interventions to Address Susceptibility	Health misinformation refers to false, misleading or inaccurate information about health, and its negative impacts on individuals and societies are well established. This PhD study investigates factors increasing susceptibility to online health misinformation. The goal is to develop effective strategies to combat misinformation, contributing to public health policy and practice.	Health Promotion	Western Sydney University	Conceptavision Pty Ltd	NSW
40452	Industry Researcher	Acupuncture for Pain-Fatigue-Sleep Cluster in Breast Cancer Survivors: A Randomised Trial on Mechanisms and Efficacy	This research tests whether acupuncture can relieve a symptom cluster of pain, fatigue, and sleep problems in breast cancer survivors. It also explores how the nervous system, gut health, and inflammation affect this symptom cluster—offering a low-cost, drug-free option to improve recovery and quality of life	Acupuncture	Western Sydney University	Chris O'Brien Lifehouse	NSW