

Overseas Travel – October to December 2022

Public sector employees – Department of Primary Industries and Regions

No of travellers	Destination	Reasons for Travel	Total Cost of Travel ¹
1**	Spain	<p>This project had three objectives. First, scientific and technological insights on relations between plants, insects and viruses to inform clean-and-green biosecurity approaches in SA aligned with Strategic Priority 3. Second, training with state-of-the art entomological technologies to measure insect physiological and behavioural traits. Third, enter PIRSA-SARDI into a global scientific network of multidisciplinary research to improve SARDI's agility and access to knowledge. The objectives of this project, outlined above, were achieved in full. They align closely with the goals and activities of the PIRSA Strategic Plan 2021-2025.</p>	6149
1	Portugal	<p>Presented recent research which stands to measurably improve on existing methods, specifically to enhance the precision and accuracy of the egg survey estimates of the daily egg production method (DEPM) biomass in South Australian fish stocks of Snapper and Sardine.</p> <p>The trip achieved its two main objectives.</p> <ul style="list-style-type: none"> - The new SARDI geostatistical method to estimate Snapper biomass was well received by participants. Feedback was positive confirming that our perceived advantages of this approach are well founded. - Particularly good feedback and interaction was received from Andrés Uriarte, co-chair of the DEPM workshop, who expressed interest in the SARDI work of Dr McGarvey going back to the early 2000's. 	5859
1	Portugal	<p>Presented recent research which investigated assumptions about the distribution of pelagic fish eggs used in Biomass Estimation methods, specifically to simulate patchy egg distribution and compare alternate analysis. Results of field surveys were also presented.</p> <p>Results of simulation modelling of egg distributions and DEPM sampling were presented to the international DEPM community.</p> <p>Results of the continuous vertical and oblique sampling trial were presented to the International DEPM community. Feedback was positive confirming that our findings were of interest and useful to others.</p>	5328

1	New Zealand	<p>Attended symposia and workshops, at the Society for Reproductive Biology Annual Scientific Meeting, on fundamental and applied reproductive engineering and clinical research gaining knowledge and understanding which relates to three facilities within livestock sciences at SARDI; the embryology laboratory, the endocrine laboratory as well as assisted reproductive technologies.</p> <p>This travel supported PIRSA's Stimulate Value Growth Priority as follows:</p> <ul style="list-style-type: none"> o Nano technology would provide us with RD&E necessary to drive advances in assisted reproduction, which in turn could lead to increased productivity growth and the adoption of new practices and systems through improved artificial insemination, ICSI, microinjection techniques. o Attending this conference enabled SARDI to communicate new industry and product opportunities – ie the use of melatonin implants as a neuroprotectant for twin lamb survival; the analysis of pre-partum progesterone levels a potential marker to identify ewes with good maternal traits for improved lamb survival. 	3504
1	New Zealand	<p>Travelled to New Zealand to undertake assessments of vineyard trials in Hawke's Bay and Marlborough as part of the Bragato Research Institute / NZ Winegrowers project NZW 19-101 "Improving remedial surgery practices for control of grapevine trunk disease to increase vineyard longevity". Involvement in this research provides the SA wine industry with access to the RD&E necessary to drive productivity growth and adopt new practices and systems such as remedial surgery to control grapevine trunk disease.</p>	7142
1	USA	<p>Was invited as a speaker at the 2022 World Alfalfa Congress. The congress is the key world forum for alfalfa (lucerne) scientists to exchange ideas about production, economics, genetics, and environmental interactions, and is held every four years. The benefits to SARDI, PIRSA and SA from this travel include the identification of new opportunities for lucerne breeding, and further work that can be done in SA to identify ecosystems benefits of lucerne. Future work to identify the capacity of lucerne to sequester soil carbon was discussed at the congress, together with holistic approaches of comparing species diversity (microbial, mega and microfauna) in lucerne pastures versus annual crops and pasture. The promotion of lucerne as a 'green' crop is the greatest scientific and extension opportunity derived from attending this congress and may be suitable for a Drought Hub project.</p>	7687

1	USA	Attended the World Alfalfa Congress in San Diego, CA. Travel objectives were to i) further breeding knowledge through exposure and dialogue with international plant breeders and research scientists. ii) To co-host the inaugural Crop Trust BOLD working group meeting with research partners from Kazakhstan and Kyrgyzstan. The Crop Trust BOLD program is a three year \$950,000USD investment aimed at delivering new commercially viable lucerne varieties to developing countries. SARDI's role is facilitation and distribution of the lucerne core climate collection to project partners. The Crop Trust BOLD program will fund 100% of the travel and conference registration fees.	7305
1	USA	Provided technical expertise to support the Australian delegation at the 53rd Session of the Codex Committee on Food Hygiene (CCFH). The following documents were being developed or revised that are of importance to the South Australian (and the wider Australian) seafood industry. Specifically, these are the: <ul style="list-style-type: none"> o Revision of Guidelines on the Application of General Principles of Food Hygiene to the Control of Pathogenic Vibrio Species in Seafood o Revision of the Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food o Development of Guidelines for the Safe Use and Re-use of Water in Food Production. This contributed to PIRSA's strategic priorities of 'Manage Risk and Recovery' & 'Reset the Operating Environment'. This travel benefited SARDI, PIRSA and South Australia: Codex Standards, Guidelines and Codes of Practice drive food safety legislation domestically, as well as internationally, and form the basis of market access requirements.	6934

Approved for publication – 23/03/2023

**Travel was conducted in Quarter 1, but employee was on Annual Leave until November 2022 and was unable to provide the details of travel at the time of preparation of the Quarter 1 report.

Example disclaimer - Note: These details are correct as at the date approved for publication. Figures may be rounded and have not been audited.

Please contact PIRSA via email: PIRSA.FOI@sa.gov.au or telephone: (08) 8429 0422 if you would like to see copies of receipts, travel outcome documentation and itineraries for this travel.



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¹ Excludes salary costs.