

**2019-20 Investment Call
14 Proposals**

Project code	Proposal Title	Lead Investigator	Research Organisation	Project Summary
L.LSM.0020	Refining body condition score for region, season, breed and responsiveness	Dr Gordon Refshauge	NSW Department of Primary Industries	This project will investigate the reliability of advice around body condition score targets for sheep reproduction, by examining data from different regions, breeds and mating seasons and to demonstrate the importance of understanding flock responsiveness to condition score.
L.LSM.0026 More information here	A novel amino acid approach to lamb survival	Dr Mariana Caetano	The University of Adelaide	This project examines the impact of supplementation of pregnant ewes with specific amino acids on the survival and in utero growth/vigour of twin foetuses.
L.LSM.0021	Increasing lambing percentages through better use of pregnancy scanning technology	Associate Professor Forbes Brien	The University of Adelaide	This project aims to increase the adoption of scanning and develop more customised management of twin- and multiple-bearing ewes to increase twin-lamb survival. The potential for identifying scanned indicators of foetal health, using remote diagnosis of scanned images, and better linking of scan data with EID tags, will also be examined.
B.GBP.0052	Calf 48 hour – better detection of calving events for improved productivity	Mark Trotter	Central Queensland University Australia	This project seeks to develop and evaluate on animal and farm sensor systems to provide highly accurate animal location and behaviour data for identify calving events.
B.GBP.0051	Objective real-time assessment of Bos Taurus cattle to improve profitability and productivity	Dr Malcolm McPhee	NSW Department of Primary Industries and University of Technology, Sydney	This project will expand the use of 3-D camera technology across British breeds to develop a commercial-ready product to predict carcass traits (fat, muscle score, frame score and body condition score) at different stages of growth in real-time. The project will also validate and update predictions of lean meat yield, MSA marbling and MSA index on live cattle and will develop the existing Beefspects calculator for smart phones.
B.PAS.0502 More information here	Boosting natural regeneration of the nitrogen capital in grazing lands	Professor Susanne Schmidt	School of Agriculture and Food Science, The University of Queensland	This project will evaluate the potential of 'Biocrusts' of soil microbes to fix nitrogen in grazing lands, and will determine the impact of grazing management practices on nitrogen capture by biocrusts.
B.TGP.2001	Quantifying spatial and temporal changes in feed supply and demand	Dr Sarah McDonald	NSW Department of Primary	This project will determine the feasibility of using remotely-sensed and on-ground monitoring data to develop a decision

			Industries (Climate Research)	support tool (early warning signal) for graziers to manage total grazing pressure by managed and unmanaged herbivores.
B.WEE.0148	Integrated management and development of additional agents for Parkinsonia	Michelle Rafter	CSIRO	This project will investigate potential biocontrol agents for the woody weed Parkinsonia. The project will investigate the release of additional leaf defoliating agents, develop new tools to monitor their establishment and determine the impact of a stem-galling fly on Parkinsonia.
B.WEE.0149	A new hope for the biological control of blackberry	Dr Raelene Kwong	AgVic	This project will investigate a new potential biocontrol agent (the blackberry cane-boring sawfly) for control of blackberries and specifically the specificity of the sawfly to blackberries alone.
B.PAS.0360	Not enough nodules - impacts of herbicides, pesticides and other farm management tactics	Dr Belinda Hackney	NSW Department of Primary Industries	This project will determine the impact of management practices (herbicides, pesticides and soil inputs) on rhizobia/legume interactions and options for optimising N-fixation and legume biomass production.
B.GBP.0048 Project complete	Quantifying neonatal mortality and reproductive performance in southern beef herds	Dr Kelly Stanger	The University of Melbourne	This project will quantify (by survey) the extent of neonatal calf losses in southern Australia and the relative importance of the dam, genetics, nutrition, maternal condition score, metabolic disturbances and infectious diseases, on the risk of calf death. Relationships between management practices and calf mortality will also be identified to provide benchmarks for industry.
L.NAB.1903 (NB2 Strategic Partnership)	Calf Loss Consortium	> 35 interested researchers involved	> 6 organisations involved	Calf loss is a major cause of lost productivity in Northern Australia. The causes are multifactorial and the solutions not well researched. Furthermore, the geographic spread and potential causes and solutions are likely to be varied. Expressions of interest were called from parties to form a partnership to perform RD&A to reduce the incidence and impact of calf loss.
L.LSM.0024 Project complete	A review of the impact of heat stress on reproductive performance in sheep	This project will see a closed competitive tender (2) put out for the conducting of a review of literature on heat stress (in sheep), identification of key knowledge gaps and a where appropriate development of a program strategy to investigate short, medium and long term methods of mitigating and managing the		

		effects of heat stress on reproductive performance
L.LSM.0028 Project complete	Confinement feeding for sheep	The aim of this project is to prepare a literature review that identifies feeding and other practices that could be managed to optimise reproductive performance whilst ensuring ewe welfare. This review will include evaluation of feeding strategies during joining and of the pregnant ewe, with consideration of the optimal ewe body condition score.