

**2017-18 Investment Call**  
**12 Proposals**

| Project code                                   | Proposal Title   | Lead Investigator  | Research Organisation  | Project Summary  |
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| L.LSM.0015                                     | New approaches to increase the weaning rate of the national sheep-flock  | Dr David OKleemann and Dr William vanWettere                   | South Australian Research and Development Institute  | This proposal aims to test the efficacy of a range of dietary additives fed to ewes during late pregnancy to enhance perinatal brain oxygenation and thence improve lamb survival.   |
| B.GBP.0023                                     | Improving beef production through management of plant toxins             | Mary Fletcher  | University of Queensland (QAAFI)   | This project proposes to produce a rumen inoculum with microbes able to detoxify the Pimelea toxin, simplexin, and investigate absorbent/slow-release systems for the rumen that would have broad utility across a range of plant toxins   |
| B.GBP.0026                                     | Feeding Leucaena to manage the rumen for maximum beef profit             | Ed Charmley/Chris McSweeney<br>Athol Klieve<br>Diane Ouwerkerk | CSIRO Agriculture and Food University of Queensland The State of Queensland acting through the Department of Agriculture and Fisheries | This proposal seeks to evaluate the psyllid-resistant Leucaena cultivar, Redlands, in terms of the efficacy of the current <i>S. jonesii</i> inoculum for denaturing Leucaena toxin, as well as cattle growth performance and methane emissions. Establishment of the range and extent of land suitable for growing Leucaena cultivars also is proposed. |
| B.ERM.0108                                     | Grazing strategies and tools to improve profitability and land condition | Peter O'Reagain  | The State of Queensland acting through the Department of Agriculture and Fisheries   | This proposal seeks to extend outcomes of the long-term Wambiana Grazing Trial by evaluating adaptive, flexible stocking rates and wet season spelling at Wambiana and four additional commercial property demonstration sites.  |
| B.AWW.0260                                     | Development of a single shot immunocontraceptive vaccine for cattle      | Michael Holland<br>Michael McGowan                             | University of Queensland   | This proposal aims to develop a single shot vaccine based on immunisation against proteins or peptides in the zona pellucida of the ovary that will cause infertility in heifers and cows for at least 12 months. If successful, this could be a welfare-friendly alternative to surgical ovariectomy (spaying).   |
| L.LSM.0011<br><a href="#">Project complete</a> | Maximising the value of eID technology for sheep producers               | Hamish Dickson   | AgriPartner Consulting   | This proposal aims to model various management systems available to sheepmeat producers and conduct cost benefit analyses of the implementation of eID technology to inform management decisions under these different scenarios.  |

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| B.AHE.0318<br><a href="#">More information here</a> | Reducing foetal and lamb losses in young ewes  | Caroline Jacobson               | Murdoch University   | This proposal aims to use participatory research on multiple sites across southern Australia to determine the extent and timing of reproductive wastage between pregnancy diagnosis and marking in young ewes, and the contribution of maternal infections during late pregnancy to these losses.   |
| L.LSM.0013  | Managing fecund flocks to improve survival of triplet dams and their lambs               | Andrew Thompson                 | Murdoch University   | This proposal aims to define the scale of triplet-bearing ewe and lamb mortalities in Australia and conduct participatory research to develop and demonstrate best management practices on commercial farms to reduce these mortalities, including evaluation of the potential benefits of scanning for triplets.   |
| L.LSM.0014  | Boosting lamb survival by supplementing ewes with vitamins and minerals                  | Andrew Thompson                 | Murdoch University   | This project proposes to evaluate the effects of supplementation of latepregnant ewes with vitamin E plus selenium and vitamin D on lamb survival to marking on a range of commercial properties across southern Australia.<br><br><i>For further information on this project, please contact Joe Gebbels, Sheep and Goat Productivity Program Manager <a href="mailto:jgebbels@mfa.com.au">jgebbels@mfa.com.au</a></i> |
| B.GBP.0024<br><a href="#">Project complete</a>      | The gateway to selecting for nutrient efficient livestock – “Better Doers”               | Jude Bond                       | NSW Department of Primary Industries   | This proposal represents an amalgamation of two independent preproposals focussing on (a) identification of rumen epithelial genes and their products and (b) muscle mitochondrial density as possible tissue markers for efficiency of nutrient utilisation in sheep and cattle.   |
| B.GBP.0029<br><a href="#">More information here</a> | “The Sweet Spot”: Improving breeder herd performance through optimal pasture utilisation | Robyn Cowley<br>Kieren McCosker | The Northern Territory of Australia, represented by the Department of Primary Industry and Resources | This proposal seeks to use existing datasets on pasture utilisation by breeding herds in northern Australia to develop modelling tools to predict the effect of stocking rate on reproductive efficiency and optimise pasture use to increase weaning rates and reduce breeder mortality, while maintaining the feedbase.   |
| B.GBP.0025<br><a href="#">Project complete</a>      | Grazing with Self Herding  | Dean Revell                     | Rangelands NRM   | This proposal seeks to evaluate the implementation of Rangeland Self Herding (RSH) methods (e.g. rangelot flushing, managed movements) to improve grazing management and thus, nutrition and productivity of extensively managed breeder herds. Benefits to environmental management and land condition are associated objectives.  |