Foreword

Application of New Genetic Technologies to Livestock Breeding

The Association for the Advancement of Animal Breeding and Genetics (AAABG) is a professional organization based in Australia and New Zealand for livestock scientists, breeders, educators and industry service providers. It promotes research and development in the broader area of Animal Genetics and Breeding and has the following objectives: (i) to promote scientific research on the genetics of animals; (ii) to foster the application of genetics in animal production; and (iii) to promote communication among all those interested in the application of genetics to animal production, particularly breeders and their organisations, consultants, extension workers, educators and geneticists.

To meet these objectives, the Association: (i) holds regular conferences and forums for the presentation of papers and in-depth discussions of general and industry-specific topics concerning the application of genetics in commercial animal production; (ii) encourages scientific discussions and presentation of papers on completed research work and on proposed research projects; and (iii) publishes the proceedings of each regular conference and circulates them to all financial members.

The 16th AAABG Committee is holding its conference from 25–28 September 2005 at Noosa, Queensland under the theme: 'Application of New Genetic Technologies to Livestock Breeding'.

In the past, AAABG published its conference Proceedings to a standard length of four pages. The deficiency of such Proceedings is that the international citation indexing services do not capture such publications. To ensure keynote AAABG conference papers are captured by the international indexing services, the 16th AAABG Organising Committee was keen to publish a Special Edition of the *Australian Journal of Experimental Agriculture* (AJEA) to highlight, to international researchers, new areas

of animal breeding and genetics research within Australia and New Zealand.

Invited speakers were therefore requested to submit a full-length scientific publication for publication in the AJEA special issue to AJEA's publication standard and following the regular peer review process of the journal. These papers summarise current state of research and present new experimental results in a range of fields including:

- Bioinformatics
- DNA markers
- Gene expression
- · Statistical methods
- RNAi
- Cell biology
- Genetic evaluation
- Mating systems
- Feed efficiency
- Reproductive efficiency
- Disease resistance
- Productivity
- Product quality

We would like to most sincerely thank our major sponsors, Meat and Livestock Australia and Australian Wool Innovation and also acknowledge the support of our other sponsors. Their strong support is very much appreciated.

The 16th AAABG Committee commends this Special Issue to you and wishes all conference delegates a most enjoyable and stimulating conference.

Heather Burrow President, 16th AAABG Committee

