Date: Wednesday, August 9, 2006.
Time: 12 noon to 3pm
Where: Meeting Room No. 1.
Royal National Association.

A key objective of ARCBA is to convey the latest genetic technology for cattle breeding to industry in an easy-to-understand form.

Program

12 noon Official Opening.
Hon. Anna Bligh MP. (has been invited)
Deputy Premier, Treasurer and Minister for State Development,
Trade and Innovation.

12.10pm Road Map for the Project.
Dr Rickards, Executive Director, ARCBA.

12.25pm Characteristics of the DNA bank that is being analysed for the project.
Wayne Upton, Animal Genetics and Breeding Unit.

12.55pm Questions

1.10pm Lunch
Catering by Super Santa Stone Grill Restaurant

2pm How do we find more gene markers and which traits are being targeted.
Dr Jay Hetzel, Genetic Solutions.

2.20pm How do markers become recorded onto breed society databases.
Christian Duff, Tropical Beef Technology Services.

2.25pm How marker information is used in marker-assisted calculation of Estimated Breeding Values.
Wayne Upton, Animal Genetics and Breeding Unit.

2.40pm Panel Discussion

3pm Target Closing Time.

The Australian Registered Cattle Breeders Association and Queensland Country Life will be co-sponsoring the first public discussion of the exciting SmartGene for Beef project. Boosted by over $1M of funding, this project aims to fast track the use of at least 12 gene markers into the calculation of breeding values for beef cattle.

RSVP: There is no charge but as seating is limited please register by email to office@abri.une.edu.au or faxing ARCBA at 02 67 725 376.

Names of Attendees:

Get tomorrow’s message Today.
The SmartGene for Beef project represents a huge step forward for the cattle industry.

Estimated Breeding Values (EBVs) based on records of weight, scans and fertility measures have been used widely for 20 years.

A small number of gene marker tests in cattle have become available over the last 6 years.

SmartGene will accelerate the discovery of gene markers in beef cattle and use novel techniques to combine these tests with phenotypic measurements to produce the first Marker Assisted EBVs within a 2-year time frame.

No single organisation in Australia has the appropriate skills and infrastructure to undertake this task alone. Using underwriting from the Queensland Government’s Innovation Projects Fund, a high-level team has been put together including Genetic Solutions, Beef CRC III, Animal Genetics and Breeding Unit (AGBU), Agricultural Business Research Institute (ABRI), BreedLink Consultants, Meat & Livestock Australia and Cornell University (USA) to undertake the SmartGene project.

Genetic Solutions will scan the DNA for 14,100 cattle that have been part of the Beef CRC’s research to identify markers for hard-to-measure traits such as net feed intake and tenderness. Importantly the stored DNA is for cattle from:

7 breeds x 3 market end points x 2 production systems (grain x grass)

and for which extensive recording has been done. Gene marker information will be sent electronically from Genetic Solutions to ABRI where it will be stored in the appropriate breed society database.

AGBU has been commissioned to write software which will combine gene markers with phenotypic records to produce MA EBVs. Using AGBU’s new software, ABRI will provide MA EBVs to breeds that are able to collect the appropriate gene marker information.

A panel of experienced speakers will walk the audience through this intriguing process that represents a huge advance in objective selection. Speakers include:

**Dr Bernie Bindon**
Previous CEO of the Beef CRC and President of ARCBA. Bernie will chair the Seminar.

**Dr Jay Hetzel**
World renowned molecular geneticist and co-founder of Genetic Solutions.

**Dr Arthur Rickards OAM**
Managing Director of ABRI and Executive Director of ARCBA.

**Mr Wayne Upton**
Extension specialist with AGBU.

**Mr Christian Duff**
Technical Officer, Tropical Beef Technology Services.