

## HELEN NEWTON TURNER MEDAL TRUST

The Helen Newton Turner Medal Trust was established in 1993 following an anonymous donation to the Animal Genetics and Breeding Unit. The Helen Newton Turner Medal is awarded to provide encouragement and inspiration to those engaged in animal genetics. The Medal is named after Dr Helen Newton Turner whose career with CSIRO was dedicated to research into the genetic improvement of sheep for wool production. The Medallist is chosen by Trustees from the ranks of those persons who have made an outstanding contribution to genetic improvement of Australian livestock.

The Helen Newton Turner Medal was first awarded in 1994 to Associate Professor John James and a list of all recipients to date is given below. The recipient of the Medal is invited to deliver an Oration on a topical subject of their choice. The Oration of the 2015 Medal recipient, Dr. Arthur Gilmour, is reproduced in these proceedings.

### Trustees of the Helen Newton Turner Trust are:

- Dr Richard Sheldrake AM (Chairman), representing NSW Department of Primary Industries
- Professor Brian Kinghorn, representing the University of New England
- Mr Scott Dolling, representing the Association for the Advancement of Animal Breeding and Genetics
- Dr Roly Nieper, Representative of the National Farmers Federation
- Dr Robert Banks, Director, Animal Genetics and Breeding Unit

### MEDALLISTS

<i>1994</i>	J.W. James	<i>2001</i>	G.A. Carnaby	<i>2011</i>	R. Banks
<i>1995</i>	L.R. Piper	<i>2003</i>	F.W. Nicholas	<i>2013</i>	M. Goddard
<i>1997</i>	J. Litchfield	<i>2005</i>	K. Hammond	<i>2015</i>	A. Gilmour
<i>1998</i>	J.S.F. Barker	<i>2007</i>	L. Corrigan	<i>2017</i>	A. Collins
<i>1999</i>	C.W. Sandilands	<i>2009</i>	R. Hawker	<i>2019</i>	K. Atkins

## HELEN NEWTON TURNER AO



## HELEN NEWTON TURNER MEDALIST ORATION 2017

### **Alf Collins**

Alf Collins snr is one of the most innovative beef cattle breeders in the world. Building on the foundations established by his father, he has applied enormous dedication, careful recording and rigorous focus on breeding for profitability, to the continuous improvement of Brahman cattle.

Brahman cattle have to perform in very challenging environments, and breeding programs to deliver genetic improvement in those environments are challenging too – reflecting large scale of operations and variable climatic conditions.

Alf has met these challenges head on and collected performance records underpinning reliable EBVs, and used the information backed by hard-nosed practical understanding of functionality and survival ability, to generate very impressive genetic progress over several decades. Perhaps the most outstanding aspect of that genetic progress is that it includes very substantial progress in female fertility – something that has almost been treated as “too hard” by most breeders of tropically adapted cattle. CBV has actively participated in industry R&D, including significant contributions to Beef CRC I, II and III. The breeding program includes several fertility traits within overall selection for profit: recording includes speed of re-breed, puberty threshold, calving interval, age at first calving, number of calves, speed of growth, dry season gain, wet season acceleration, as well as good temperament, and fleshiness. Alf Collins is a deep thinker about what cattle need to do in the tropical environment, and has never been afraid to try novel approaches or include new traits if they will help breeding cattle better and better suited to the environment and to improving profit:

*“At CBV, from 1981 to the present day, our management has been relentless in the development and multiplication of the traits that have greatest commercial significance. In total, this represents over 50 years of development, using steadily improving tools of analysis and selection.*

*We have absolutely no tolerance of cattle that do not earn every single year. We get our share of non-performing stock and have management strategies to convert them to beef carcasses immediately when they fail.*

*The genetic trends reflect this strategy at CBV.*

*Reproduction and survival are paramount, coupled with gentle temperament, fleshy bodies and thrift at grazing. CBV cattle are true examples of a highly adapted breed. This equates to a high speed beef machine at minimal cost.*

*We have received very high levels of support from researchers, scientists, clients, family and friends. Intellectual inputs have been considerable, along with personal effort. CBV has an ongoing involvement in research and analysis every year.*

*Our matings commence in the dry season on October 1, to identify the most efficient adapted females, by their ability to conceive whilst lactating in very dry grazing and to hold that pregnancy, calve un-assisted, raise a sound calf and to rebreed within our low cost management. Our stocking rate of kilograms per hectare per 100mm of rainfall is high but ecologically responsible.*

*Consequently earnings per hectare per financial year are optimised.”*

Alf Collins continues to be an outstanding pioneer and innovator in real-world application of genetics technology, and the demonstration that it is possible to breed genetically fertile, productive and profitable tropically adapted cattle is an inspiration.