

Foreword

At the Poultry CRC, we are extremely grateful for the opportunity to showcase the research relating to our program areas of health and welfare, nutrition and environment, and food safety and quality in this special edition of *Animal Production Science*. It is, indeed, a rare chance to demonstrate the breadth and depth of our research work in a single unified publication.

By way of background, the current Poultry CRC results from a successful bid for extension funding for the Australian Poultry Cooperative Research Centre (CRC), which operated from 1 July 2003 to 31 December 2009. The Australian Poultry CRC's key outputs include:

- seven patents lodged;
- seven vaccines at various stages of development;
- 28 rapid diagnostic tests transferred to industry;
- 177 scientific papers, including 40 journal articles, published;
- a comprehensive Vocational Education and Training (VET) program for the poultry industry implemented;
- 36 students supported for their Honours, Masters and PhD degrees in poultry science;
- three undergraduate courses dedicated to poultry science deployed; and
- an award-winning, comprehensive online poultry information centre established.

Poultry CRC, commencing operations from 1 January 2010, was established to meet the challenge of helping Australia achieve sustainable, ethical poultry production as our population grows. While gaining further funding from the Commonwealth is a measure of confidence in the future promise of the CRC, it is the poultry industry's commitment to, and involvement in, the Poultry CRC that ensures deployment of outcomes to industry end-users. This is reflected in the significant shift, from the first to the second CRC, in the expansion to almost 95% involvement of the meat chicken and egg layer industry sectors, and the welcome addition of turkey, duck, geese and game bird industry sectors.

The Poultry CRC's Education program has delivered seven interns directly into industry jobs. Four of these interns, who are veterinarians, not only provide timely flock health management they also help up-skill the industry workforce via accredited VET programs. In addition the CRC has developed 14 textbooks

and six unit guides for the VET sector. VET training in feed and nutrition has been completed by 25 industry personnel, while 24 organisations have received training materials on Health and Welfare. The ongoing success of our 'Teachers' Resource Kit' in Australian schools has seen it now sent to over 600 schools. The kit aids the teaching of agriculture in schools, promotes poultry in a factual manner and delivers the food security message through an appreciation of where food comes from. In addition to the kit, Poultry Hub (poultryhub.org), our award-winning website, currently attracts 85 000 unique hits per month and around 3000 page views per day from over 100 countries.

As end-users are embedded under the CRC model, the Poultry CRC has successfully commercialised a live fowl cholera vaccine (Vaxsafe[®] PM) and executed three options for the commercialisation of Poultry CRC technologies. The Poultry CRC has also conceived and built the world's first egg grading game app, which is now available freely in Australia and for a small fee internationally under a licence with the game-developer. And these achievements are also recognised by others: in July 2008 the Australian Poultry CRC won the World's Poultry Science Association (WPSA) Industry/Organisation Award, while the Poultry CRC won the WPSA's Education Award in August 2012 and received an Australian Collaborative Innovation Award in May 2012.

In this special edition of *Animal Production Science*, we will examine a diverse range of Poultry CRC research, from the impact close human interaction has on reducing avoidance behaviour in caged laying hens, to how quantitative molecular assays may evaluate changes in broiler gut microbiota linked with diet and performance. The papers in this edition showcase our program areas of health and welfare, nutrition and environment, and food safety and quality, which are the touchstones of our focus on production from inception to farm gate.

We hope that these papers will add to your knowledge base and that you will keep in touch with us in the future.

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