



the **ARCHIBULL** PRIZE

# CAREER SNAPSHOT

It's lunchtime on a Tuesday and Jo's just finished up a phone interview with one of her focus farms. Over the course of a year she's been conducting interviews with dairy farmers across Australia following their experience of introducing herd testing on farm, which is the monthly recording of many much milk, fat and protein every cow produces. After lunch Jo jumps on the computer and checks on an analysis, looking at how things like herd reproduction rate and how many heifers farmers rear affects the cost-benefit for dairy farmers to adopt new genetic and genomic tools. Her analysis is too big to run on a normal laptop; instead she's linked into the "cluster". The "cluster" is an enormous computer that more than 100 scientists all use for complex analysis of very large data sets. The cluster has 2000 terabytes of storage. That's enough space to store 2 million episodes of a TV series.

Jo then spends the afternoon preparing some figures and tables to summarise the results on another analysis she did that looks at the relationship between an animal's genetic merit and its lifetime profit. The figures will be used in a scientific paper that she is collaborating on with other scientists and economists. Before heading home Jo prints her airplane tickets and saves a back-up of a powerpoint presentation onto a USB. Tomorrow morning she's flying up to NSW to talk to a group of farmers about how genomic-testing (DNA testing) of heifer calves could be used on commercial dairy farms.

This is Jo's career in agriculture. What will yours be?



## JO NEWTON

LOCATED IN MELBOURNE, DR JO NEWTON WORKS AS A RESEARCH SCIENTIST WITH ANIMAL GENETICS, AFTER A SUCCESSFUL ACADEMIC CAREER STUDYING SHEEP REPRODUCTION.

