

## Primary Growth Partnership: Dairy Post - Farm Gate Programme Executive Summary (October – December 2012)

Across the programme the major focus on capability development continues with the creation of a NZ Inc approach and critical mass via the Riddet Institute and its partners (Massey, Auckland and Otago Universities, Plant and Food and AgResearch). To date success has been considerable and there are now over 50 staff with a significant involvement in the programme from across these organisations, Fonterra, and other NZ and overseas research providers.

A combination of new processes, new analytical systems and statistical process control to create real time quality and food assurance will create options for global best-practice processing and supply chain systems that can be used to optimise dairy manufacture in New Zealand, and other selected geographies.

To complement the two existing professorships established through the PGP programme, Roger Kissling has been seconded to Massey University as an Adjunct Professor. This will provide continuity whilst the search for a permanent appointment continues. Professor Kissling will ensure that the publications on statistical process control needed to help influence global compliance standards are produced. The first papers have been submitted for publication.

An initiative new to this programme is the development of milk fingerprinting analytical system to detect the adulteration of milk – essentially a speed camera for the milk supply chain. Once developed and deployed this technology will be used to ensure the safety of milk supply chains.

In the area of protein nutrition and quality, the programme will contribute to future work to support the new digestible indispensable amino acid score (DIAAS) methodology, and will also leverage other funds as outcomes will benefit all dairy protein providers.

This quarter the following have been prepared

- Ma, X. (2012) *Evaluation of Functional Properties and Microstructure of Mozzarella Cheese, and their correlation*. PhD thesis, University of Auckland 2012.