

Name: Dr Kim A. Millar

Title of Research Project: Characterisation of pulse flours for application in developing nutritionally enhanced baked foods.



Name(s) of Supervisory team:

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Brief overview of the Research Project: Motivated by the increasing demand for healthier processed foods, the aim of this project was to develop and characterise food products which incorporate **plant-based** ingredients. Pulse grains were identified as a key resource for food innovation during the International Year of the Pulse, 2016. Pulse flours offer a **sustainable** source of **plant protein** for innovation in **protein-enriched** foods. Specifically, this research focuses on the processability, nutritive and sensory properties of pulse flours produced from dry peas (*Pisum sativum*) and fava beans (*Vicia fava*) and their potential application in baked goods. This research demonstrates successful application of pea flour in developing baked crackers and breads with enriched protein, while also identifying the key techno-functional and organoleptic properties which are affected and can be manipulated to improve the acceptability of such products.