

# Adam Lock

College of Agriculture and Natural Resources  
Department of Animal Sciences

Dr. Adam Lock is an Associate Professor in the Department of Animal Science. Research in his lab focuses on the regulation and manipulation of ruminant lipid metabolism, allowing improvements in the efficiency of animal production and providing opportunities to design foods that are consistent with consumer perceptions and dietary recommendations. Of particular interest to Dr. Lock is the effect of diet on the production of bioactive fatty acids in the rumen, their subsequent impact on metabolism and milk fat synthesis in the mammary gland and applying this knowledge to improve our ability to troubleshoot on farm issues related to milk fat depression.

## **Global Research Interests**

Adam's global research interests include; the role of milk fat-derived bio-active fatty acids on human health; impact of palm-derived fatty acids on milk production and dairy cow efficiency; impact of bio-active fatty acids in milk fat on atherosclerosis; and lipid metabolism to address new challenges and deliver solutions with changing industry and scientific needs.

## **Description of Research Proposal:**

Adam Lock currently does not have a defined research proposal at present. However, efforts would be related to improving dairy cow productivity and efficiency in larger scale dairy operations. Research would be related to lipid digestion and metabolism in dairy cattle.

Previously, Adam has been asked about putting forward a Science without Borders proposal with a University in Brazil for long-standing research collaboration.

Adam would like to enhance relationship and funding with Malaysian Palm Oil Board and allied industries to further research efforts related to palm-product use in the global dairy industry.

## **Region/Country of research:**

Asia and Australasia or Brazil

Possible collaborative opportunities with faculty in New Zealand and Australia