

# Potential PhD titles:

- Reproductive physiology in dairy cows
- Youngstock rearing practices including dairy calves and heifers, dairy-bred beef calves
- Fish pathology/immunology/nutrition
- Sperm-cervix interactions in sheep
- Effect of cryopreservation on sperm transit in the ewe reproductive tract
- Assisted reproductive technologies in camelids
- Mineral nutrition and the immune system
- The use of prebiotics in the management of pig gut health as an alternative to metaphylactic pharmaceutical zinc oxide
- Dietary means to reduce heat stress in poultry
- Dietary means to alleviate the negative impact of cocci vaccines on poultry growth performance
- The effect of feed additives on physiological and production traits and its interaction in broiler chickens with thermal tolerance
- Creating value and co-producing healthcare in livestock veterinary services: application of human health care modelling to the animal health sector
- Precision grazing management
- Using precision livestock technologies to monitor farm animal welfare
- The use of unmanned aerial vehicles to monitor and manage free-ranging livestock
- Dietary influences on the rumen microbiome and its impact on the performance of dairy cows
- Reducing the environmental impact of dairy cows (N/P/methane) and improving the fatty acid composition of milk
- Improving the trace mineral nutrition of dairy cows
- Using preventative/pro-active approaches to reduce health problems in livestock and horses
- Enhancing biofumigation of potato cyst nematodes through optimal nutrient inputs
- Use of solanaceous trap crops for the management of potato cyst nematodes
- Factors affecting partial biofumigation of potato cyst nematodes
- Farmer attitudes to the uptake of sustainable technology/renewable energy
- Rural electrification in the Global South
- Urban agriculture: environmental, social and economic aspects
- Other titles involving qualitative research methods: questionnaires, interviews, focus groups etc
- Understanding reproductive and hormonal physiology during drought damage in crop plants
- Physics and physiology of water loss in film antitranspirant-treated crop plants
- Temperature-drought interactions in mitigation of crop drought stress by film antitranspirants
- Identifying wild crops with traits of interest for breeding climate resilient vegetable crops
- Managing the postharvest quality of fresh produce crops
- Agronomic practices for urban production of fruit and vegetable crops
- Influence of constant and fluctuating temperatures of aphid parasitoids
- The biology, ecology and control of *Otiorynchus* spp. affecting horticultural crops
- Investigating the chemical ecology of aphid hyperparasitoids
- Transforming the Urban Landscape through horticulture and technology
- Plant-herbivory interactions: Understanding the mechanisms of defence of *Lactuca sativa* against *Myzus persicae*
- Understanding the agronomic and biological attributes for postharvest disorder
- Using plant extracts as a possible control strategy against the large pine weevil, *Hylobius abietis*
- The influence of the aphids, *Elatobium abietinum*, *Cinara pilicornis* and *Eulachnus agilis* on the growth and form of Christmas trees
- The role of earwigs as aphid predators in arable and vegetable crops
- Evolutionary ecology and population genetics of fig wasp communities
- Predicting herbivore host use from phylogenetic and plant chemistry data
- Epidemiology and control of *Fusarium* head blight in wheat

- Epidemiology and control of Fusarium panicle blight in oats
- Biological control of Fusarium head blight
- Multifunctional vegetative strips to deliver ecosystem services on farmland
- The use of research and informative synthesis to improve agricultural decision-making
- Evidence syntheses to support decision making for food security resilience
- Development of agricultural robots
- Laser weeding
- Novel uses of drones in farming
- Veterinary (small and large animal) orthopaedics
- Gait analysis and recovery monitoring
- Exploring the factors which influence the compensatory behaviours adopted by individuals with drunkorexia
- Cold chain management in meat storage, distribution and retail
- Development and validation of an electronic nose-based zoonotic disease detection monitor for on-farm applications
- Developing a biosensor-based method for rapid detection of *Listeria monocytogenes* in food processing environments
- Developing an Electronic nose system to simultaneously detect on-farm food safety and animal disease problems
- The applications of bacteriophages in food manufacture to improve food quality and safety outcomes
- The potential of Mass Spectrometry to assess specific food spoilage and safety issues
- Demanding food supply chains: a catalyst for modern slavery
- Voluntary Private Social Standards and its impact on post-BREXIT UK
- Blockchain Resilience: Food fraud risks of a decentralised ledger system
- Valorisation of fibres and vitamins derived from grains that are produced entirely by autonomous machines
- Healthy and Active Ageing in old people: the role of nutrition
- Do pets make you happy? An investigation into pet ownership and the *creation* and *co-creation* of happiness
- Industrial luxury: The nature and role of *luxury* in the industrial context
- Consumer happiness and purchase types: the nature, characteristics and impact of *material* and *experiential* purchases on *happiness*
- Valorisation of food waste with an emphasis on brewery and/or distillery waste streams (spent grain, spent yeast, etc). However, other food industry wastes will be considered as well
- The Social Science of New Product Development with an emphasis on alternative dietary protein sources
- Developing entrepreneurship within young farmers
- Use of agriculture as a tool of political, economic and social stabilisation in post conflict environments
- Tackling modern slavery and human trafficking in agricultural systems and supply chains
- Risk Management with focus on Agricultural Insurance and Marine Insurance
- Cost-Benefit analysis of new technology in farming sector
- Pedagogic research: adoption of technology to enhance teaching and learning
- Macroeconomic Policies and Economic Growth
- International Economics, FDI and International Trade
- Agricultural Economics and Price Transmission of Agricultural Products
- Re-designing production systems and transforming value chains with agri-tech and machine learning
- Assessing the economic impact of precision livestock technologies and management
- Developing predictive and prescriptive decision support systems for farm business management
- Economics of robotics for organic field crop and vegetable production
- Impact of field size and shape on profitability with conventional and robotic machines