

# FELLOWSHIP OPPORTUNITIES WITH A WORLD LEADING SCIENCE FOUNDATION IRELAND AGRI-TECH RESEARCH CENTRE



VistaMilk is actively seeking applications from excellent candidates for the 2021 Marie Skłodowska Curie Fellowship call



VistaMilk welcomes applications from experienced researchers across all strands of the Marie Skłodowska-Curie Individual Fellowships scheme. To secure funding, the candidate must develop a proposal with a supervisor from the host Institute of their choice before the 2021 call deadline.

The objective of the VistaMilk SFI Research Centre is to generate and deploy innovative basic and applied science and technologies to better understand and monitor the complex interactions across a highly inter-dependent food-production chain. The objective is achieved by exploring 3 inter-dependent thematic areas (Pasture, Cow and Food) bringing together expertise in biological sciences, sensor-systems, communications and networking, data analytics and food processing.

**VistaMilk research programme encompasses (*further detail overleaf*):**

**PASTURE:** Soil nutrient dynamics, Sustainable pasture management and production, Pasture breeding programmes

**COW:** Animal nutrition and fertility, Animal Health and Diseases Diagnostic, Sustainable and accurate animal breeding programmes

**FOOD:** Next generation dairy processes and products, Digestive characteristics of dairy products and ingredients, Nutrifunctional Milk and health benefits for humans.

**AGTECH:** Advanced Sensors & Systems Integration, Communications and Networks, Data, Privacy & Warehousing, Data Analytics, -omics, Test-Beds, Integration and deployment

### Researcher eligibility:

We are seeking excellent postdoctoral candidates in all VistaMilk-related disciplines. The researcher must fulfil the Marie Curie – Individual Fellowship mobility and experienced researcher requirements as detailed in the [Guide for Applicants](#).

If you are interested, please contact [guillaume.lepalud@teagasc.ie](mailto:guillaume.lepalud@teagasc.ie) or any one of our researchers listed overleaf

## VistaMilk topic: Pasture

## Host institution and supervisors

- Microbial Ecology
- Ecosystems Biology
- Application of Machine Learning to Microbiology
- Proteomics and Metaproteomics

### **Dr Florence Abram - National University of Ireland, Galway.**

Dr Abram has supervised/co-supervised 1 MSc and 11 PhD students to completion and currently supervises 4 PhD students. She has also mentored 3 postdoctoral researchers.

[Google Scholar](#)

- Forages
- Plant reproductivity traits
- Cytoplasmic male sterility
- Abiotic stress
- Herbicide resistance

### **Dr Susanne Barth - Teagasc, Crops Research Centre, Oak Park, Carlow.**

Dr. Barth has previously supervised 3 contract researchers, 2 technicians and 14 PhD students.

[ORCID](#)

- Soil microbiome
- Plant-soil-microbial interactions
- Greenhouse gases
- Nutrient cycling
- Enteric pathogens

### **Dr Fiona Brennan- Teagasc Crops, Environment and Land Use Programme, Johnstown.**

Dr Brennan's team currently consists of a technologist, 4 postdoc researchers, and 8 PhD students. She has previously supervised 5 PhDs and 1MSc student to completion.

[Google Scholar](#)

- Earth system science
- Environmental chemistry
- Spectroscopy and chemometrics for analysis of agricultural soils, crops and sediments.

### **Dr Karen Daly - Teagasc Crops, Environment and Land Use Programme, Johnstown.**

Dr Daly currently has 6 post-grad students and co-supervises 2 post-doc researchers. She previously supervised 3 PhD and 1 MSc student to completion and supervised 5 contract researchers/post-doc scientists.

[Research Gate](#)

- Multi-species mixtures and grassland diversity
- Biodiversity
- Sustainability accreditation
- High nature value farmland
- Ecosystem services

### **Dr John Finn - Teagasc Crops, Environment and Land Use Programme, Johnstown.**

Dr. Finn has previously supervised 2 Marie Curie fellows, several postdoctoral fellows, and multiple PhD fellowships.

[Google Scholar](#)

- Grass growth and sward structure
- N fertiliser
- Agronomy
- Grassland decision support tools
- Temperature effects on grass & clover growth

### **Dr Deirdre Hennessy – Teagasc Animal & Grassland Research and Innovation Centre, Moorepark.**

To date, Dr Hennessy has supervised 1 Postdoc, 6 PhDs and 1 Masters students to completion. She currently supervises 3 PhD students.

[Research Gate](#)

- Agronomy
- Water quality
- Grassland
- Agricultural catchments

### **Dr Bridget Lynch - Teagasc Crops, Environment and Land Use Programme, Johnstown.**

Dr. Lynch has supervised 18 postgraduate students to thesis completion. She currently manages three research officers, a technologist, technician and two data recorders in the agricultural catchments programme.

[Scopus](#)

- Molecular genetics
- Genome-wide association studies
- Plant breeding
- Genotyping, and phenotyping
- Bioinformatics

### **Dr Dan Milbourne - Teagasc, Crops Research Centre, Oak Park, Carlow.**

Dr. Milbourne has supervised/co-supervised 14 PhD students, and several postdoctoral scientists – including 1 current Marie Curie Fellow.

[Research Gate](#)

- Soil nitrogen
- Nitrous oxide
- Precision fertiliser
- Nitrate leaching

### **Dr Karl Richards - Teagasc Crops, Environment and Land Use Programme, Johnstown.**

Dr Richards has supervised 7 postdocs, 15 PhD and 3 MSc students to completion. Currently his team consists of 2 postdocs and 8 PhDs.

[Google Scholar](#)

## VistaMilk topic: Cow

## Host institution and supervisors

- Animal genetics and genomics
- Decision support
- Phenotypes
- Genetic evaluations
- Genomic predictions

### **Prof Donagh Berry - Teagasc Animal & Grassland Research and Innovation Centre, Moorepark.**

Donagh Berry currently mentors 5 post-doc and 7 PhD students as primary supervisor. He successfully supervised 28 students and 6 post-docs to completion.

[Google Scholar](#)

- Reproduction
- Nutrition
- Physiology
- Genetics and Sexed semen
- Fertility Management

### **Dr Stephen Butler – Teagasc Animal & Grassland Research and Innovation Centre, Moorepark.**

Dr Butler has supervised 3 post-doc researchers, 8 PhD students and 2 Msc students to completion. Currently, he supervises 2 post-doc researchers and 4 PhD students

[Research Gate](#)

- Calf health
- Calf rearing systems
- Replacement Heifer Rearing

### **Dr Emer Kennedy – Teagasc Animal & Grassland Research and Innovation Centre, Moorepark.**

Dr. Kennedy has supervised 12 PhD students and 2 Masters Students. Annually, she mentors 5 international undergraduate degree students.

[Research Gate](#)

- Statistical methodology
- High-dimensional data
- Spectral data
- Genomic predictions

### **Prof. Claire Gormley, School of Mathematics and Statistics, University College Dublin**

Prof. Gromley has supervised 5+ PhD students to completion (some interdisciplinary) and 3 postdoctoral research fellows.

[Google Scholar](#)

- Dairy farms energy & water efficiency
- Milking process and Labour productivity
- Milking parlour efficiency

### **Dr John Upton – Teagasc Animal & Grassland Research and Innovation Centre, Moorepark.**

Dr. Upton is currently supervising 4 PhD students.

[Research Gate](#)

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Department of Agriculture,  
Food and the Marine

## VistaMilk topic: Food

## Host institution and supervisors

- Nutrigenomics
- Metabolomics
- Personalised Nutrition

### **Prof. Lorraine Brennan - Institute of Food and Health, University College Dublin.**

Professor Brennan has supervised 14 PhDs to completion. Her current team consists of 5 PostDocs, 3 Research Assistants, 1 PhD student and 1 Research Manager.

[Google Scholar](#)

- Food digestion
- In vitro/in vivo digestion
- protein chemistry
- food colloids
- Microencapsulation

### **Dr André Brodkorb - Teagasc Food Research Centre, Moorepark.**

Dr Brodkorb currently supervises 5 post-doctorates and 4 PhD students with 8 previous post-docs and 11 PhD students; 1 successful MSCA Fellowship in 2019.

[Google Scholar](#)

- Fermented food microbiology
- Food chain microbiome
- Modulating gut microbiome for health improvements
- Next generation DNA sequencing

### **Prof. Paul Cotter - Teagasc Food Research Centre, Moorepark.**

Dr Cotter has supervised 24 PhDs and 10 MScs to completion and currently supervises 9 Post-docs/research fellows, 11 PhD students and 2 technicians.

[Google Scholar](#)

- Food Bioactives
- Food Digestion and Bioavailability
- Intestinal Barrier Function

### **Dr Linda Giblin - Teagasc Food Research Centre, Moorepark.**

Dr. Giblin has supervised 8 PhD, 10 MSc and 6 Post-doctoral scientists to completion and currently supervises 4 PhD students and 2 post-docs.

[Research Gate](#)

- Dairy
- Quality
- Raman
- Microscopy
- Microstructure

### **Dr Laura Gómez-Mascaraque - Teagasc Food Research Centre, Moorepark.**

Currently supervises 1 post-doc, 1 research officer and 3 PhD students, and co-supervises another post-doc and 1 MSc student.

[Google Scholar](#)

- Flavour chemistry
- Fermentation derived flavours
- Cheese biochemistry
- Fatty acid analysis and lipid oxidation

### **Prof Kieran Kilcawley - Teagasc Food Research Centre, Moorepark.**

Prof Kilcawley has supervised 6 PhD and 4 MSc students and 2 post-doctoral scientists and is currently supervising 5 PhD students.

[Research Gate](#)

- Food,
- Microbiology
- Biotransformation
- Fermentation
- Waste Valorisation

### **Dr Olivia McAuliffe - Teagasc Food Research Centre, Moorepark.**

Dr. McAuliffe has supervised to completion 12 PhD and 8 MSc students, She currently supervises 4 PhD students and 2 postdoc researchers.

[Linkedin](#)

- Mechanisms regulating body weight and tissue growth from early life to adulthood.
- Dietary approaches for weight management and improved body composition.

### **Dr Kanishka Nilaweera - Teagasc Food Research Centre, Moorepark.**

Dr. Nilaweera is currently supervising 1 PhD student and 2 Postdocs. He previously supervised/co-supervised 2 PhD students and a Postdoc researcher.

[Research Gate](#)

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Department of Agriculture,  
Food and the Marine

## VistaMilk topic: Food

## Host institution and supervisors

- Dairy Science and chemistry
- Food processing
- Impact of animals primary production systems on product characteristics and functionality
- Nutritional formulations
- Food metabolomics

### **Dr Tom O'Callaghan, University College Cork.**

Dr O'Callaghan supervises 2 PhD and 1 MSc students. He previously supervised 3 PhD students, 1 Research Officer and 1 Postdoc.

[Google Scholar](#)

- Process analytical technologies in dairy
- Heat induced protein structural changes
- Low cost sensors
- 3D dairy printing
- Robotics in food applications
- Protein/starch relationships in dairy & cereal structures

### **Dr Norah O'Shea- Teagasc Food Research Centre, Moorepark**

Currently, Dr Norah O'Shea is the supervisor of 1 Post-doctoral researcher, primary supervisor of 2 PhD students and a MSc student and the co-supervisor of a PhD student.

[Research Gate](#)

- Bioinformatics
- Metagenomics
- Microbiome
- Statistics
- Nutrition

### **Dr Orla O'Sullivan - Teagasc Food Research Centre, Moorepark**

Dr O'Sullivan currently has 3 PhD students and 2 Postdocs under her direct supervision as well as MSc placement students.

[Google Scholar](#)

- Dairy Food Structure-function
- Food structuring and Casein-polymer interactions
- Physicochemical influence on bacterial metabolic activity in food matrices
- Small solute entrapment and diffusivity within cheese matrices

### **Dr Diarmuid Sheehan - Teagasc Food Research Centre, Moorepark.**

Dr. Sheehan currently supervises/co-supervises 4 Postdocs, 4 PhDs and 1 MSc students. He has previously supervised/co-supervised 9 Postdocs, 6 PhDs and 1 MSc to completion.

[Google Scholar](#)

- Early life nutrition
- Probiotic cultures
- Gut microbiota
- Bioactive lipids

### **Prof Catherine Stanton - Teagasc Food Research Centre, Moorepark.**

Catherine Stanton currently supervises 8 Postdocs and 10 PhD students with 11 previous Post-docs and 22 PhD students.

[ORCID](#)

- Novel food processing & preservation technology
- Clean and green extraction technologies
- Sustainable food processing technologies
- Food processing by-products

### **Dr Brijesh Tiwari- Teagasc Food Research Centre, Moorepark**

To date, Dr. Tiwari has supervised 12 Postdocs, 5 Research Officers, 15 PhDs.

[Google Scholar](#)

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Department of Agriculture,  
Food and the Marine

- Nano and Molecular Communications
- Internet of (Nano) Things
- Bio-inspired Communication systems
- 5G Terahertz communications

## **Dr Sasitharan Balasubramaniam - Telecommunication Software and Systems Group, Waterford Institute of Technology.**

Sasitharan has graduated 7 PhD students, and is currently supervising 5. He is also supervising 3 postdoctoral research fellows, including one Marie-Curie EDGE fellow.

[Google Scholar](#)

- Use of Copernicus in systems in agriculture
- Remote sensing
- Earth observation
- Machine learning
- Drone

## **Dr Stuart Green – Teagasc, Rural Economy & Development Programme, Ashtown, Dublin.**

To date, Dr Stuart Green has supervised 7 PhDs and 4 post-doctoral scientists to completion.

[Research Gate](#)

- Electrochemistry
- Sensing
- Direct laser fabrication
- Biosensors
- Nanomaterials

## **Dr Daniela Iacopino - Tyndall National Institute, Cork.**

Dr Iacopino has previously graduated 4 PhDs and supervised 2 postdoc fellows. She recently received funding from MSCA IF 2020 and currently supervises a team of 6 people.

[Google Scholar](#)

- Explainable AI (XAI)
- Smart Ag Decision Support Systems
- Psychology of Explanation & Surprise
- Text Analytics

## **Prof Mark Keane – Insight Centre for Data Analytics, University College Dublin.**

Over his 30 years research experience, Mark Keane has supervised more than 25 PhDs and MScs.

[Google Scholar](#)

- Nanomaterials & nanofabrication
- Smart nanoelectrochemical sensor systems for soil, plant and animal health applications
- Surface enhanced Raman spectroscopy
- Chemical and biochemical sensors
- Molecular diffusion simulations

## **Dr. Alan O’Riordan - Tyndall National Institute, Cork.**

Alan O’Riordan currently leads a group of 18 researchers . He has previously graduated 9 PhDs and 5 MSc students.

[Google Scholar](#)

- Electrochemical Sensors
- Electrochemical simulation
- Electrode design
- Microfabrication

## **Dr James Rohan - Tyndall National Institute, Cork.**

James Rohan has previously supervised 6 PhD and 7 MSc students to completion as well as 13 post-doctoral researchers.

[ORCID](#)