

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



**VistaMilk is actively seeking applications from excellent candidates for call 2 of TEAGASC's Research Leader 2025**



VistaMilk welcomes applications from experienced researchers for 2019 Research Leader call. The candidate must develop an Expression of Interest with a supervisor from Teagasc and a host Institute of their choice by November 13<sup>th</sup> 2019.

Full application to be submitted by 10<sup>th</sup> January 2020.

Fellowships have a duration of 36 months, including 18 months outside of Ireland, followed by a "return phase" to Teagasc in Ireland for a further 18 months and can include a period of industry placement. Research expenses are also available.

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 (i.e., Pasture, Cow and Food) bringing together expertise in the biological sciences, sensor-systems, communications and networking, data analytics, and food processing.

**VistaMilk research programme encompasses:**

|   |   |
|---|---|
| <p><b>PASTURE:</b> Soil nutrient dynamics, Sustainable pasture management and production, Pasture breeding programmes</p>   | <p><b>COW:</b> Animal nutrition and fertility, Animal Health and Diseases Diagnostic, Sustainable and accurate animal breeding programmes</p>   |
| <p><b>FOOD:</b> Next generation dairy processes and products, Digestive characteristics of dairy products and ingredients, Nutrifunctional Milk and health benefits for humans.</p> | <p><b>AGTECH:</b> Advanced Sensors &amp; Systems Integration, Communications and Networks, Data, Privacy &amp; Warehousing, Data Analytics, -omics, Test-Beds, Integration and deployment</p> |

**Researcher eligibility:**

We are seeking excellent postdoctoral candidates in all VistaMilk-related disciplines. The applicant must fulfil the Fellowship mobility and experience requirements as detailed in the [Call document](#).

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



Visit VistaMilk website at [www.vistamilk.ie](http://www.vistamilk.ie)

## VistaMilk research topics

## Host institution and supervisors

- 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](#)

- 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](#)

- 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 has supervised 3 PhD and 1 MSc students to completion. Currently her team consists of a technologist, a technician, 2 postdoc researchers, 1 Msc and 7 PhD students.

[Google Scholar](#)

- Food and Protein colloids during in vitro digestion of food
- Protein Chemistry
- Food Colloids
- Food Structure
- Microencapsulation

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

Dr Brodkorb has supervised 10 completed and 4 on-going PhDs as well as 11 completed and on-going post-doctorates and visiting scientists.

[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](#)

- Computational biology
- Comparative genomics
- Pan-genome,
- Genome assembly

### **Dr Stephen Byrne- Teagasc, Crops Research Centre, Oak Park, Carlow.**

Dr. Byrne has supervised/co-supervised 4 PhD Students and several technicians and research assistants.

[ORCID](#)

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

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

Paul 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](#)

- 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](#)

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Flavour chemistry</li> <li>• Fermentation derived flavours</li> <li>• Cheese biochemistry</li> <li>• Fatty acid analysis and lipid oxidation</li> </ul>  | <p><b>Dr Kieran Gilcawley - Teagasc Food Research Centre, Moorepark.</b><br/>Dr Kilcawley has supervised 3 PhD students, 4 MSc students and co-supervised 3 PhD students. He is currently supervising 4 PhD and 2 MSc students.<br/><a href="#">Research Gate</a></p>                                    |
| <ul style="list-style-type: none"> <li>• Food Bioactives</li> <li>• Food Digestion and Bioavailability</li> <li>• Intestinal Barrier Function</li> </ul>  | <p><b>Dr Linda Giblin - Teagasc Food Research Centre, Moorepark.</b><br/>Dr. Giblin has supervised 8 PhD, 10 MSc and 6 Post-doctoral scientists to completion and currently supervises 4 PhD students and 2 post-doctoral scientists.<br/><a href="#">Research Gate</a></p>                              |
| <ul style="list-style-type: none"> <li>• Use of Copernicus in systems in agriculture</li> <li>• Remote sensing</li> <li>• Earth observation</li> <li>• Machine learning</li> <li>• Drone</li> </ul>   | <p><b>Dr Stuart Green – Teagasc, Rural Economy &amp; Development Programme, Ashtown, Dublin.</b><br/>To date, Dr. Stuart Green has supervised 7 PhDs and 4 post-doctoral scientists to completion.<br/><a href="#">Research Gate</a></p>   |
| <ul style="list-style-type: none"> <li>• Grass growth and sward structure</li> <li>• N fertiliser</li> <li>• Agronomy</li> <li>• Grassland decision support tools</li> <li>• Temperature effects on grass and clover growth</li> </ul>        | <p><b>Dr Deirdre Hennessy – Teagasc Animal &amp; Grassland Research and Innovation Centre, Moorepark.</b><br/>To date, Deirdre Hennessy has supervised 1 Postdoc Researcher; 6 PhDs and 1 Masters students to completion; She currently supervises 3 PhD students.<br/><a href="#">Research Gate</a></p> |
| <ul style="list-style-type: none"> <li>• Multi-species mixtures</li> <li>• Grassland diversity</li> <li>• Biodiversity</li> <li>• Sustainability accreditation</li> <li>• High nature value farmland</li> <li>• Ecosystem services</li> </ul> | <p><b>Dr John Finn - Teagasc Crops, Environment and Land Use Programme, Johnstown.</b><br/>Dr. Finn has previously supervised 2 Marie Curie fellows, several postdoctoral fellows, and multiple PhD fellowships.<br/><a href="#">Google Scholar</a></p>  |
| <ul style="list-style-type: none"> <li>• Calf health</li> <li>• Calf rearing systems</li> <li>• Replacement Heifer Rearing</li> </ul>   | <p><b>Dr Emer Kennedy – Teagasc Animal &amp; Grassland Research and Innovation Centre, Moorepark.</b><br/>Dr. Kennedy has supervised 12 PhD students and 2 Masters Students. Annually , she also mentors about 5 international undergraduate degree students.<br/><a href="#">Research Gate</a></p>      |
| <ul style="list-style-type: none"> <li>• Food cultures as a reservoir of antimicrobial resistance determinants</li> </ul>   | <p><b>Dr Olivia McAuliffe- Teagasc Food Research Centre, Moorepark.</b><br/>Dr. Olivia has currently group of 9 staff and students, has supervised 12 PhD and 6 MSc students to completion, along with many research and technical staff.<br/><a href="#">Google Scholar</a></p>                         |
| <ul style="list-style-type: none"> <li>• Molecular genetics</li> <li>• Genome-wide association studies</li> <li>• Plant breeding</li> <li>• Genotyping, and phenotyping</li> <li>• Bioinformatics</li> </ul>                                  | <p><b>Dr Dan Milbourne - Teagasc, Crops Research Centre, Oak Park, Carlow.</b><br/>Dr. Milbourne has supervised/co-supervised 14 PhD students, and several technicians and postdoctoral scientists – including one current Marie Curie Fellow.<br/><a href="#">Research Gate</a></p>                     |
| <ul style="list-style-type: none"> <li>• Mechanisms regulating body weight and tissue growth from early life to adulthood.</li> <li>• Dietary approaches for weight management and improved body composition.</li> </ul>                      | <p><b>Dr Kanishka Nilaweera - Teagasc Food Research Centre, Moorepark.</b><br/>Dr. Nilaweera is currently supervising 1 PhD student and 2 Post-doctoral. He previously supervised/co-supervised 2 PhD students and a post-doctoral researcher.<br/><a href="#">Research Gate</a></p>                     |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Dairy Science and chemistry</li> <li>• Food processing</li> <li>• Impact of primary production systems of animals on product characteristic's and functionality</li> <li>• Nutritional formulations</li> </ul>  | <p><b>Dr Tom O'Callaghan - Teagasc Food Research Centre, Moorepark</b><br/> Dr. Tom Callaghan's team currently consists of 3 PhD students, 1 Research Officer and 1 Post-doctoral Researcher.<br/> <a href="#">Research Gate</a></p>   |
| <ul style="list-style-type: none"> <li>• Process analytical technologies in dairy</li> <li>• Heat induced protein structural changes</li> <li>• Low cost sensors</li> <li>• 3D dairy printing</li> <li>• Robotics in food applications</li> <li>• Protein / starch relationships in dairy and cereal structures</li> </ul> | <p><b>Dr Norah O'Shea- Teagasc Food Research Centre, Moorepark</b><br/> 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.<br/> <a href="#">Research Gate</a></p>            |
| <ul style="list-style-type: none"> <li>• Bioinformatics</li> <li>• Metagenomics</li> <li>• Microbiome</li> <li>• Statistics</li> <li>• Nutrition</li> </ul>  | <p><b>Dr Orla O'Sullivan - Teagasc Food Research Centre, Moorepark</b><br/> Dr O'Sullivan currently has 3 PhD students and 2 post-doc under her direct supervisions as well as MSc placement students.<br/> <a href="#">Google Scholar</a></p>   |
| <ul style="list-style-type: none"> <li>• Environmental, soil and water contaminants</li> <li>• Nitrogen cycling</li> <li>• Greenhouse gas emissions</li> <li>• Leaching</li> <li>• Pathogens</li> </ul>  | <p><b>Dr Karl Richards - Teagasc Crops, Environment and Land Use Programme, Johnstown.</b><br/> Dr Richards has supervised 15 PhD and 3 MSc students to completion and 7 postdocs. Currently, his research team consists of 2 postdocs and 8 PhD students.<br/> <a href="#">ORCID</a></p>            |
| <ul style="list-style-type: none"> <li>• Dairy Food Structure-function</li> <li>• Food structuring through Casein- polymer interactions</li> <li>• Physicochemical influence on bacterial metabolic activity in food matrices</li> <li>• Small solute entrapment and diffusivity within cheese matrices</li> </ul>         | <p><b>Dr Diarmuid Sheehan - Teagasc Food Research Centre, Moorepark.</b><br/> Dr. Sheehan currently supervises/co-supervises 4 post-docs, 4 PhDs and 1 MSc students. He has previously supervised/co-supervised 9 post-docs, 6 PhDs and 1 MSc to completion.<br/> <a href="#">Google Scholar</a></p> |
| <ul style="list-style-type: none"> <li>• Early life nutrition</li> <li>• Probiotic cultures</li> <li>• Gut microbiota</li> <li>• Bioactive lipids</li> </ul>   | <p><b>Prof Catherine Stanton - Teagasc Food Research Centre, Moorepark.</b><br/> Catherine Stanton currently supervises 8 Post-docs and 10 PhD students with 11 previous Post-docs and 22 PhD students.<br/> <a href="#">ORCID</a></p>   |
| <ul style="list-style-type: none"> <li>• Dairy farms energy &amp; water efficiency</li> <li>• Milking process and Labour productivity</li> <li>• Milking parlour efficiency</li> </ul>   | <p><b>Dr John Upton – Teagasc Animal &amp; Grassland Research and Innovation Centre, Moorepark.</b><br/> Dr. Upton is currently supervising 4 PhD students.<br/> <a href="#">Research Gate</a></p>   |
| <ul style="list-style-type: none"> <li>• Novel food processing and preservation technologies</li> <li>• Clean and green extraction technologies</li> <li>• Sustainable food processing technologies</li> <li>• Food processing by-products</li> </ul>  | <p><b>Dr Brijesh Tiwari- Teagasc Food Research Centre, Moorepark</b><br/> To date, Dr. Tiwari has supervised 12 PostDocs, 5 Research Officers, 15 PhDs.<br/> <a href="#">Google Scholar</a></p>  |

@VistaMilk , #VistaMilk



Funded by



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine