# SFI Research Centre for Digitalising Dairy Production and Processing

VistaMilk, the SFI Research Centre for precision-based dairy production and processing, will lead the Agri-Food technology sector through innovation and enhanced sustainability across the entire dairy supply chain.

While focused on pasture-based dairy production, the advances developed in the centre will be equally applicable to confinement dairy production and processing systems as well as acting as a catalyst for global growth in the Agri-Tech sector. This will be achieved by greatly improving the soil to gut supply chain connectivity, thereby improving resource efficiency, better meeting consumers' expectations and improving profitability and resilience.



### **Research Programmes**

VistaMilk will develop novel, and advance existing, electronic monitoring and actuation technologies to transform the Irish dairy and Agri-Tech sectors into global leaders. It will specifically address pasture-based dairy production, improved processability and the generation of novel, higher value-added products.

In addition to the creation of new sensing and actuation paradigms, particular focus will be given to developing state-of-the-art analytical techniques applied to large scale, sensor data-sets delivered by advanced network and communication technologies.





### **Facilities**

- > Teagasc state-of-the-art research laboratories, including the largest DNA sequencing facility in Ireland and >1500 experimental dairy cows
- > **Tyndall** fully serviced wet chemistry laboratory featuring highly sophisticated nanofabrication technology
- Insight specialised software for data analytics and for processing streamed data
- > TSSG infrastructure for testing and measuring networking protocols

### Industry and Commercialisation

Through a strategy of highly-interconnected, innovative and ambitious scientific ventures and disciplines, VistaMilk will develop and deploy the scientific solutions and valuecreating decision support tools, informed by sophisticated data analytical approaches, to empower the dairy industry in advancing efficiencies across all components of the food chain, and, in doing so, develop a vibrant and dynamic Agri-Tech indigenous industry.

A World Leading SFI Research Centre



## Industry Partners Include:

- > ALT
- > Alltech Ireland
- > Analog Devices
- > Anuland
- > Carbery Food Ingredients
- > Cork County Council
- > CropX Technologies Ltd.
- > Dairygold
- > Devenish Nutrition
- > Dovea Genetics

- > Germinal
- > Goldcrop
- > Irish Holstein Friesian Association
- > Kerry Group
- > Lakeland Dairies
- > Munster Cattle Breeding Group
- Nestlé
- > Nutribio Ltd.
- > Ornua
- > Progressive Genetics

- > ReproDOC
- > Terra NutriTECH
- > United Technologies Research Centre
- > Volac Feeds
- > Weatherbys Scientific.
- > Yara GmbH & Co. KG
- YL-Verkot OY
- > Zoetis

### **Education and Public Engagement:**

The mission statement of the VistaMilk outreach program will be to "promote an understanding and appreciation of the role of information and communication technology and other sciences in the sustainable delivery of consistently high quality, safe dairy products through engagement with stakeholders and the general public". The strategy of engagement will help the general public to judge the importance and relevance of science in achieving the goal of more sustainable and safe food production systems. Awareness will also be raised around the importance of dairy food in the diet.

# **Key Contacts**

### **Prof Donagh Berry**

Director donagh.berry@teagasc.ie

Professor Donagh Berry works as a senior principal investigator in statistical genetics at Teagasc, Moorepark, Ireland since completing his PhD in animal genetics in 2003. He is responsible for the development of the national dairy cow breeding objectives which includes the prioritisation of the relative importance of different animal characteristics in the national breeding goals, generation of statistical and genomic models to generate accurate individual animal estimates of genetic merit for all traits, and the development of optimal breeding schemes to ensure long-term genetic gain. **Prof Mark Keane** Deputy Director mark.keane@ucd.ie

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#### VistaMilk

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