

VistaMilk

MAKING AN IMPACT

AgTech- It's in our DNA By Colin Curran, Technologist, ICBF

The Irish Cattle Breeding Federation (ICBF) was formally set up in 1998, and is a non-profit organisation charged with providing cattle breeding information services to the Irish dairy and beef industries. ICBF exists to benefit farmers, the agri-food industry and the wider community through genetic gain. We do this through the application of science and technology to ensure that farmers and the industry make the most profitable and sustainable decisions, through the use of the services provided by ICBF.

Ultimately, all the activity outlined above revolves around the maintenance and growth of the national cattle breeding database, which holds information on all animals registered nationally, and any available performance data relating to those animals and the herds in which they reside. As the gate keepers of such a vast database, ICBF's primary role within VistaMilk focuses on data integration. By harnessing the value of said data, new technologies such as Machine Learning may be applied to key VistaMilk initiatives & research projects as.

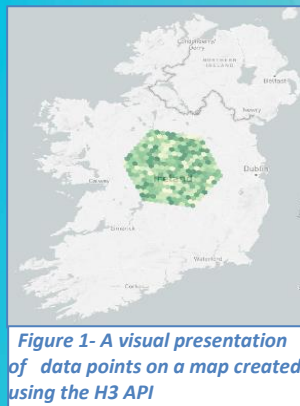


Figure 1- A visual presentation of data points on a map created using the H3 API

Currently, work is underway to build the infrastructure required for VistaMilk's Digital MilkMap. Uber's H3 Application Programming Interface (API) will be used to build the map. An API is a software intermediary that allows two applications to talk to each other. The Digital MilkMap will display historical milk collection data from the previous 5 years in a meaningful and visually appealing format. Various data points about the milk will be displayed such as quantity, protein content, fat content, lactose content, casein content, somatic cell count and an approximate location of the farm from which the milk was produced. Each hexagon tile seen below represents approximately 36 km². This ensures individual farms cannot be uniquely identified. *Contact: Colin Curran*

NEW STAFF



- [Aoife O'Donovan](#), Postdoctoral Researcher, TP 9 Nutrifunctional Milk
- [Conor Fitzpatrick](#), PhD Student, TP 8 Digestive Characteristics
- [Gerardina Celentano](#), PhD Student, TP 8 Digestive Characteristics

UPCOMING EVENTS

24th March

Sensors Masterclass hosted by Vistamilk @Tyndall.
 Contact Site Manager [Gerry Mouzakis](#) for more information

28th and 29th April

International Workshop on Spectroscopy & Chemometrics
 Applications in Food and Agriculture
 Zoom webinar: 28th and 29th April

Featuring:

- Professor Tom Fearn, University College London, UK
- Dr. Scott Denholm, Scotland's Rural College, UK
- Professor Claire Gormley, University College Dublin, Ireland
- Professor Valentina Bonfatti, University of Padova, Italy
- Dr. Ron Wehrns, Wageningen University, Netherlands

#SpecAgriFood

International Workshop on Spectroscopy and Chemometrics.
 Contact [Alessandro Casa](#) for more information



FUNDING OPPORTUNITIES

[NGI TRUBLO](#) for short sprint projects on “Trust and reputation models on blockchains” and “Proof-of-validity and proof-of-location”. Deadline March 19th 2021. Call details [here](#).

[CELTIC-NEXT](#) for industry and RPO transnational R&D projects on next generation communications for digital society, inc. smart agriculture. Deadline April 12th 2021. Call details [here](#).

ERA-NETs SusAn, FACCE ERA-GAS, ICT-AGRI-FOOD and SusCrop [joint call](#) on “Circularity in mixed crop and livestock farming systems (inc. grassland), with emphasis on greenhouse gas mitigation”. Full application May 2021. Pre-announcement available [here](#).

[EIT Food Innovator Fellowship](#) programme for talents with creative and innovative potential to expand their skills through advanced training to develop an entrepreneurial idea with impact on food systems. Deadline May 14th. Call details [here](#).

[AGROBOFOOD](#)'s Innovation Experiments Open Call for SMEs to develop innovative solutions for the application of robotic technologies in agri-food industry. Deadline May 31st. Call details [here](#).

Events: All-island Innovation Programme’s “Innovation Challenges and Industry 4.0 Solutions: Spotlight on Food System”. March 10th 2021. Register [here](#).

Horizon Europe - Launch Event for Ireland. 25th March 2021. Register [here](#). The event will provide an overview of Horizon Europe and offer practical advice for future applicants.

OTHER NEWS



Congratulations to Academic Collaborator Dr Ultan McCarthy (WIT) who will lead the "[Eye-Q](#)" team in the Food Challenge Future Innovator Prize of €2million. The aim of the award is to develop innovative solutions to reduce food waste and plastics. Read more [here](#).

PUBLICATIONS

A review of precision technologies in pasture-based dairying systems

L. Shalloo, T. Byrne, L. Leso, E. Ruelle, K. Starsmore, A. Geoghegan, J. Werner, N. O’Leary
[10.15212/ijafr-2020-0119](https://doi.org/10.15212/ijafr-2020-0119)

A Theoretical and Experimental Study of Electrochemical pH Control at Gold Interdigitated Microband Arrays

Bernardo Patella, Robert Daly, Ian Seymour, Pierre Lovera, James Rohan, Rosslinda Inguanta, Alan O’Riordan, Benjamin O’Sullivan
<http://doi.org/10.26434/chemrxiv.13796252.v1>

Short communication: Differences in genetic merit for visually assessed body condition score materialises as phenotypic differences in tactile-based body condition score in commercial dairy cows

D.P.Berry&M.M.Kelleher
<https://doi.org/10.1016/j.animal.2021.100181>

EDUCATION AND PUBLIC ENGAGEMENT

Be sure to check out our International Women’s Day interview series on March 8th which will be highlighting some of the amazing women across the VistaMilk community. Join the conversation online by using the hashtag **#ChooseToChallenge**

