INTERBULL EXECUTIVE SUMMARY

No. 2023-1 JANUARY-MARCH 2023

This executive summary reports the latest information about the Interbull Centre, conclusions from the Interbull Technical Workshop (14-15 February 2023) and important decisions taken by the Interbull Steering and Technical Committees in their meetings of 13 and 15 February 2023 respectively.

Publications and communication

The following documents have been completed, and subsequently published during the first three months of 2023. They are available on the Reports page of the Interbull website: (https://interbull.org/ib/itbcreports).

- Interbull Centre Activity Report 2022
- Interbull Centre Financial Report 2022
- Interbull Centre Annual Operational Plan 2023.

Interbull Governance

Gerrit Kistemaker (Senior Geneticist at Lactanet, Canada) stepped down as member of the Interbull Technical Committee. Gerrit was one of the original members of the ITC when it was established in 1999. **Esa Mäntysaari** (LUKE, Finland) will soon retire, and will, after having been an ITC member for 20 years, also leave the ITC. We thank both Gerrit and Esa for their valuable contributions to Interbull matters during all these years.

As a follow-up to the 2021 Governance Review:

The processes for appointing ITC members are under review. Additions to the ITC may be expected once the review has been completed.

An updated **Interbull Terms of Reference** for the Interbull Steering Committee has been approved by the ICAR Board in its meeting of 28 March 2023.

Interbull Centre

Anahit Nazari Ghadikolaei will join the Interbull Centre on 1 April 2023 as a Genetic Data Analyst. Anahit has a PhD in Animal Breeding and Genetics from the University of Tehran. During her PhD studies, she was a visiting scholar at Cornell university. For the past two years, Anahit was a post doc in the Department of Animal Breeding and Genetics (HGEN, SLU, Uppsala), working on genomic selection and the introduction of single-step GBLUP in Swedish Charolais and Hereford beef breeds.

Simone Hazas will also join the Interbull Centre in April 2023, as the Centre's Administrator. Simone has a PhD in Cultural Research, and she worked for the last 10 years in administration and project management positions at large projects at Lancaster University (UK). Simone adds a wealth of organisational, communication and planning skills to the team.

Obituary - Fabiola (Bia) Canavesi

After a long health battle, our friend and colleague Fabiola (Bia) Canavesi passed away on 13 February 2023. Fabiola completed her Animal Science Laurea at the University of Milan in 1988 and then a Master at the University of Guelph with Dr Larry Schaeffer in 1993. She then returned to Italy as Geneticist at the Italian Holstein Association (ANAFI) in Cremona, Italy, in charge of genetic evaluation systems. From 2000 until 2011, Bia managed the ANAFI R&D office, after which she was a consultant for the University of Milan, the Chamber of Commerce, and AI organisations.

Always fully dedicated and passionate about her job, she worked relentlessly in developing new genetic evaluation systems, breeding and herd management tools for the Italian dairy producers. She was a frequent contributor and attendee of Interbull conferences. Her passion for her work has affected all those who worked with her over the years. We always had high esteem of Fabiola as a friend and colleague, and she will be missed very much.

Interbull Services

As of January 2023, the **Genotype Data Exchange** database of the International Genotype Exchange Platform (GenoEx) is in use for all **InterGenomics** services; Holstein genotypes from participating and contribution countries will be pooled in GenoEx-GDE, while participating Brown Swiss organisations will continue to share genotypes through GenoEx-GDE.

The next Truncated MACE (**TMACE**) evaluation is scheduled for October 2023. USA has already confirmed their participation to the service. Interested NGECs are invited to inform the Interbull Centre at their earliest opportunity of participation.

Interbeef

Due to change of employment, **Andrew Cromie** has announced that he will step down as chair of the Interbeef WG. Andrew is prepared to act as chair until a new chair has been appointed. Following a successful pilot run, the **first official test evaluation for Carcass traits** (including carcass weight, carcass conformation and carcass fat) will take place in April 2023. Planning on the introduction of an **international single-step genomic evaluation of beef cattle** -on the basis of Renzo Bonifazi's PhD at Wageningen University (WUR)- is ongoing in collaboration with the Interbeef WG, Interbeef Genomic Task Force and WUR.

Benefits and Value of Interbull Centre Services

We thank all participants in the Interbull survey that sought the views of Service Users on the **benefits and value of existing services** offered by the Interbull Centre, including International Evaluations (incl. MACE, GMACE, InterGenomics and Interbeef), Validation services, and Data Exchange (e.g. Parentage SNP data, Genomic data, Genetic Recessive Traits). The information gathered through the survey will be used for:

- Communication and marketing
- Setting service fees
- Evaluating delivery of future services, and

 Offering current and new services to organisations that may not be involved with Interbull yet.

As part of the **2023 ICAR meeting in Toledo**, an open session has been organised on Tuesday 23 May (16:00-17:00) to present the service provided by the Interbull Centre. The focus will be on the **value and benefits** of international evaluations and Data Exchange **for users**, both current and potentially new ones.

2023 Interbull Technical Workshop, Maccarese Castle (Rome), Italy

Fifty-eight participants from 20 countries attended the 2023 Interbull Technical Workshop near Rome on 14 and 15 February 2023. Three technical sessions were organised to inform the community and collect their feedback, on key current research topics: "New Traits" (Expansion of Interbull Services portfolio), "Future MACE" and "Validation" (New validation in the genomic era.

Take home messages from the 2023 Interbull Technical Workshop:

New traits: Three traits had been initially identified based on the information reported in PREP: Gestation length, Retained Placenta and Hypercalcaemia/milk fever. Although the two health traits were met with some interest, they were based on the information collected only from a few countries. More informative decisions could be taken if information on new traits from all participating countries would be shared in the PREP. While it is important to have information on individual traits, the meeting would recommend the introduction of full trait groups.

Future MACE: The enhanced version of the GPS-MACE presented in Montreal found the approval of the audience. The Future Mace Working Group and Interbull Centre will continue working towards a delivery of a pilot run in the autumn of 2023.

Validation: A new version of the GEBVtest software, enhanced with additional regression tests, was tested by some countries and their feedback collected during the meeting. The Validation Working Group will continue adjusting the software according to the feedback collected. The new GEBVtest software will be released as soon as feasible.

A big thank you to all participants, local organisers and presenters, presentations are available on the Interbull website: https://interbull.org/ib/2023 ws programme. The Interbull Bulletin with proceedings of this workshop is scheduled to be published in May 2023. Pictures of the event are available on the Interbull Hall of Fame:

http://interbull30years.blogspot.com/2023/03/interbull-meeting-technical-workshop-in.html.

PREP Database / GE Forms

The new database platform, PREP, will in due course completely replace the way the information regarding national performance recording procedures and genetic/genomic evaluations, for both beef and dairy organisations, is shared. PREP was launched in March 2022 through an Interbull webinar which also presented the new Interbull pipeline for identifying and selecting potential new traits to be included in the international evaluations (see https://interbull.org/static/web/Interbull Webinar PREP%26New_Traits.mp4).

Electronic forms for the following trait groups are currently available in PREP:

- DAIRY: Production and Calving
- BEEF: Adjusted Weaning Weight and Calving

As part of the process of adding information in the PREP electronic forms, all currently available information from all countries/breeds have been reviewed and included in the electronic forms of the PREP database.

Organisations needing to update the descriptive information for the above-mentioned traits (as a requirement for participation in international evaluations or otherwise) will from now on need to submit these updates via the PREP database; Word and PDF versions of GE/BEEF forms will no longer be accepted once the trait group has been transferred to PREP.

Through additional efforts at the Interbull Centre, PREP forms for the remaining trait groups will become available and replace the current (word/pdf versions of) GE/BEEF Forms. The PREP database, accessed through https://prep.interbull.org, is always open to receive new, updated information.

Upcoming Events:

IDEA Webinars

A number of users have asked to refresh their knowledge about the use of the Interbull Data Exchange Area ("IDEA"), especially since several organisations have new staff involved with Interbull activities. To honour this request, we will organise webinars on the use of IDEA. The first one will be on 27 April 2023. The target audience is active IDEA users, and they will be contacted with detailed information.

2023 ICAR Meeting

The ICAR meeting takes place from 21-26 May 2023 in Toledo, Spain. Visit https://icar2023.es for information on the program, registration and accommodation. The theme of the meeting is "Breeding for resilience: Transitioning diverse livestock farming systems into the future". Some topics of specific interest to the Interbull and Interbeef communities:

23 May: - Interbeef Technical and WG meetings, Interbeef Genomic meeting

- Interbull Centre Services: Benefits and Value
- European Animal Genetic Resources (with contributions from EURC for Endangered Animal Breeds, and Interbull Centre/EURC for Zootechnics)

25 May: - "Beef on Dairy".

2023 Interbull Annual Meeting

The 2023 Interbull Annual Meeting will be held in conjunction with EAAP from 26 to 28 August 2023, in Lyon, France. The call for papers is now open. Details for submission of title, abstract and papers are available on the Interbull website: https://interbull.org/ib/2023 eaap interbull.

The Interbull website will also provide detailed information on the Interbull Annual Meeting program as and when it becomes available.

Visit https://eaap2023.org/ for the general program, registration and accommodation.