



April 2021 Executive Summary

This executive summary reports the latest information about the Interbull Centre and important decisions taken by the Steering Committee in their meetings on 16 February, 24 March and 14 April 2021.

Interbull Centre Personnel

- **Simone Savoia** has been appointed as the Interbull Centre representative on the Interbull Technical Committee.
- **Alexis Michenet's** last day at the Interbull Centre was 28 February 2021. We like to thank Alexis for the nice way of working during the many improvements he brought to the Interbeef services and the pleasant, and wish him good luck at his new job in the French beef breeding industry.
- We are welcoming the following two Genetic Data Analysts, bringing the team at the Interbull Centre back to full strength:
Fernando Macedo completed his Ph.D. in March 2021, and will start at the Interbull Centre on 1 May 2021. Linked to the family farm since childhood, Fernando Macedo decided to pursue a career in Veterinary Medicine. At the University, he began his academic activity as a teacher of Animal Breeding. After the Veterinary degree, Fernando earned his M.Sc. at INIA (Uruguay), developing a SNP panel to check paternity in Uruguayan Merino and Corriedale sheep. At INIA, he also worked in studies of residual feed intake and carcass and meat quality in Hereford beef cattle. Fernando's Ph.D. study at INRAE (France) addressed the analysis of bias in genetic and genomic evaluations of dairy sheep.
Katrine Haugaard earned her Ph.D. at the Norwegian University of Life Sciences in 2012 with the thesis "Genetic analysis of pathogen-specific mastitis ". She then stayed on at the university for two more years working with fertility related disorders in Norwegian Red dairy cattle. Since 2015 she has been working in the beef industry, as a researcher in TYR - the Norwegian beef breeding association. Her main tasks there have been routine genetic evaluations and implementation of new traits.

Interbull Services

Post processing windows

No commentary has been received on the Post-processing windows which were adapted in the January Test Run. They were subsequently used in the April 2021 Routine Run.

Interbull Service Calendar 2022

The Interbull Service Calendar for 2022 is available on <https://interbull.org/ib/servicecalendar>:



Clinical Mastitis Evaluation (CMA) for SNP training introduced in January 2021

The first official cma MACE test and routine evaluations were performed in January 2021 and April 2021 respectively. The aim of the CMA evaluation is to provide better data (than the current MAS evaluation which includes both MAS and SCS data) for SNP training for the genomic evaluation of Clinical Mastitis. The CMA evaluation results will only be provided to the participating countries and may not be used for publication purposes.

Following approval by the SC, Chapters 6 (requirements) and 10 (services fees) of the CoP have been updated to account for the introduction of “MACE for SNP training”.

Participation in cma evaluation: The table below shows the populations participating in the April Routine evaluation for cma. As a minimum of two populations are required to perform MACE, the official routine evaluation included 6 Holstein, 2 Jersey and 2 Brown Swiss populations. With one RDC and one SIM population already requesting the service, only one additional population for each breed will be needed to provide the cma evaluation for Red Dairy Cattle and Simmental.

Country \ Breed	Holstein	Jersey	Brown Swiss	Total
Switzerland	X		X	2
Canada	X	X		2
Germany/Austria	X			1
France	X		X	2
The Netherlands	X			1
USA	X	X		2
Total	6	2	2	10

Genomic-Free EBV Webinar (11 February 2021)

In recent years a lot of effort has been put on the development of single step methods for national routine evaluations. Many countries participating in the MACE Interbull Service have implemented or are working toward implementing a single step procedure in their national evaluations.

During the Genomic-free EBV Webinar, the 84 participants learned that the Genomic-Free EBV Working Group strongly advised National Genetic Evaluation Centres against the use of ssGEBVs as input for MACE evaluations. The WG identified both long-term as well as short term solutions. The Interbull SC has adopted the WG's recommendation for the Interbull community to use the following two short-term solutions:

- Generate EBVs from pre-adjusted phenotypes, using estimates of environmental effects from single step model;
- Generate EBV from a BLUP evaluation excluding genotypes.

While participants accepted these short-term solutions, the working group also highlighted the need and plans to keep working on the improvement of long-term solutions, including:

- Submit ssDYD instead of EBV to Interbull for MACE (long-term);
- Deregressed ssGEBV Proofs (long-term);
- Generate EBVs from unbiased pseudo-phenotypes (long-term).

Full details are available on:

- https://interbull.org/ib/2021_genomic_free_ebv_webinar and
- https://interbull.org/ib/2021_webinar_summary



International Bull Evaluation Service

INTERBULL is a permanent sub-committee of ICAR (www.icar.org)



The 2021 Virtual 2021 ICAR-Interbull conference offers an excellent opportunity to get in touch with the latest development in the sector. This conference is of great interest for policy makers on future farming systems, for researchers, for staff and for managers involved in cattle breeding, animal performance recording and sensor technology around the globe.

Interbull Business Meeting 2021.

This year's Interbull Business Meeting will be held on 29 April 2021, from 14:00-16:00 CET, as part of the Virtual ICAR-Interbull 2021 Conference. Participants to the Interbull Business Meeting will need to register to the Conference (www.icar2021.nl).

The Agenda, and other relevant information for the Business Meeting can be found on our website: https://interbull.org/ib/Business_Meeting_2021. Similar to 2020; Introductory Business Meeting videos will be made available on this page from 19 April 2021. Registered participants will be able to access these (and videos for the Open Meeting) through the conference portal from the same date.

Interbull Open Meeting

Monday 26 April 2021 (14:00-17:10C CET):

Session 1: Meta-analytical methods in animal genetic and genomic evaluation

Session 2: Implementing new traits in genetic and genomic evaluation systems: Health & Fertility

Session 3: New developments in Single Step genomic evaluations and validation methods.

Friday 30 April 2021 (14:00-17:00 CET):

Session 4: Experiences with Single Step genomic evaluations.

Session 5: Genetic and Genomic evaluations in beef and cross bred cattle.

Session 6: Implementing new traits in genetic and genomic evaluation systems:
Feed Efficiency & Environmental Impact

The full ICAR and Interbull programmes are available on: <https://www.icar2021.nl/program/>

Registration

If you register by 18 April 2021, you will be provided with access to all materials on the Conference Platform on 19 April 2021. You may register through <https://www.icar2021.nl/registration/>.

We look forward meeting you at ICAR-Interbull 2021!