

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

# INTERBULL EXECUTIVE SUMMARY

No. 2024-1: JANUARY - MARCH 2024

This first Interbull Executive Summary of 2024 includes the latest information about the Interbull Centre and important decisions taken during the Interbull Steering Committee Meetings of 15 February and 12 March 2024, and the Interbull Technical Committee Meeting of 14 March 2024.

## **Publications and Communication**

The following documents have been completed, and subsequently published during the first three months of 2024. They are available on the Reports page of the Interbull website: (<u>https://interbull.org/ib/itbcreports</u>).

- Interbull Centre Activity Report 2023
- Interbull Centre Financial Report 2023
- Interbull Centre Annual Operating Plan 2024

#### Governance

Two members of the Interbull Steering Committee (SC) will end their term in 2024. A process to (re)appoint SC members has commenced in collaboration with the Interbull Service Users in the two regions that they represent, in order to be concluded during the 2024 Interbull Business Meetings.

Name	Representing	End of Term
Daniele Vicario	Italy, Spain & Portugal	2024
Brian Van Doormaal (Vice-Chair)	North & South America	2024
Marija Klopčič	Central & Eastern Europe	2025
Ezequiel Nicolazzi	North & South America	2025
Matthew Shaffer (Chair)	Oceania, Asia & Africa	2026
Laurent Journaux	France & Wallonia	2026
Gert Pedersen Aamand	Denmark, Finland, Sweden & Norway	2027
Urs Schnyder	Germany, Austria & Switzerland	2027
Gerben de Jong	United Kingdom, Ireland, Netherlands & Flanders	2027

#### Interbull Steering Committee Composition



Two members of the Interbull Technical Committee (ITC) will end their term in 2024 and will be stepping down from this committee. A Call for Expression of Interest to become a member of the Interbull Technical Committee was issued in January 2024 and has now closed. A decision on the new ITC membership will be communicated ahead of the 2024 Interbull Annual Meeting in Bled, Slovenia. We thank all applicants for their expressed interest in getting involved in the Interbull community!

Name	Organisation	End of Term
Paul VanRaden	USDA, USA	2024
Tom Lawlor	HOLSTEIN USA, USA	2024
Zengting Liu	vit, Germany	2025
Raphael Mrode	SRUC, United Kingdom	2025
Valentina Palucci	Interbull Centre, Sweden	2026
Peter Sullivan	LACTANET, Canada	2026
Gerben de Jong (Chair)	CRV, The Netherlands	2027
Andres Lagarra	CDCB, USA	2027
Jan-Thijs van Kaam	ANAFIBJ, Italy	2027

#### Interbull Technical Committee Composition

#### In Memory of Gerrit Kistemaker

After a two-year battle against cancer, our friend and colleague, Gerrit Kistemaker, passed away peacefully on 28 February 2024, surrounded by his wife, Natalie, daughters Emily (26) and Daniella (24). Being born on a dairy farm in The Netherlands, he naturally began his studies at Wageningen University and then completed his PhD at the University of Guelph in 1998, under the supervision of Dr. Larry Schaeffer. In May 1998, Gerrit joined the team of geneticists at Canadian Dairy Network (now known as Lactanet Canada) and was promoted to Chief Geneticist in 1999. Gerrit dedicated his entire professional career in this leadership role over the past 25 years to the development and implementation of world class genetic evaluation services for dairy cattle breeds in Canada. Well known to the Interbull community, Gerrit was one of the first members of the Interbull Technical Committee and made significant contributions for over 20 years, in addition to be a regular contributor and attendee of Interbull conferences for over two decades. Gerrit's passion for the science of genetics and his strong personality characteristics will be missed by everyone who knew him.

#### **Expansion of Genetic Traits Exchange Services**

In recent years, the Interbull Centre developed the capacity for interested organisations to exchange gene test results for various monogenetic characteristics. These mainly include undesirable genetic recessive traits but may also include other favourable characteristics such as polled, beta casein, kappa casein, etc. The introduction of the Genetic Traits Exchange services commenced with the Holstein breed, and three countries – Germany, Great Britain and The Netherlands - have been participating. During 2022/2023, the Interbull



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Centre worked with Brown Swiss InterGenomics participants to develop the service for Brown Swiss - in addition to the current sharing of male genotypes and international genomic evaluations. The exchange of BSW genetic traits officially started in December 2023. Current BSW participants are Italy, Switzerland, USA, Germany and Austria.

Contact the Interbull Centre if you have questions about this service or send a signed agreement (below) to the Interbull Centre! The annual fee for this service is €1000 for participation with one breed and €500 for each subsequent breed. Relevant agreements and sections in the Interbull Code of Practice have been updated in line with the above decision

- a. Description of service (<u>https://interbull.org/ib/cop\_appendix\_xi</u>.)
- b. Agreement (https://interbull.org/ib/agreement\_genetic\_traits\_exchange)

#### New Agreement for Using of IDEA/AnimInfo

Following the Steering Committee decision to offer the exchange of genetic traits as a paid service, new agreements for the exchange of RED/HOL type and Breed percentage have been created. If you are currently using IDEA/AnimInfo for the exchange of either RED/HOL Type or Breed Percentage, please download the new agreement, sign it and send it back to the Interbull Centre. <a href="https://interbull.org/ib/agreement\_animinfo">https://interbull.org/ib/agreement\_animinfo</a>

#### Webinars

The IDEA webinar series held during 2023 were found to be very useful by the attendees. We will therefore continue with the webinar series in 2024. A webinar on the PREP database and its functionalities held on 8 February was attended by 46 people. Recordings of the webinar are available under the "Help" tab within the PREP database (https://prop.intorbull.org/). The pert webinar will address "GengEx-PSE", and will be held on

(<u>https://prep.interbull.org/</u>). The next webinar will address "GenoEx-PSE", and will be held on 18 April 2024. Further details will follow soon.

#### **Interbull Services**

<u>Dairy Evaluations</u>: **MACE, GMACE** and **InterGenomics** April 2024 Routine evaluations (2404r) are currently ongoing and are expected to be released <u>according to schedule</u>. Listed below are some of the main changes tested by countries during the January 2024 test run and implemented in the April 2024 MACE evaluation:

- Jersey Longevity: ITA participating for the first time
- **Simmental Production**: Inclusion of HUN data in the German (LFL) joint evaluation including data from Germany, Austria, Czech Republic, Slovakia and now Hungary
- Brown Swiss Fertility: First time for ITA providing data for two Interbull traits: HCO (Heifer's Conception Rate) and CC1 (Lactating cow ability to conceive 1).
- Holstein Calving: New data from GBR based on the Interbull Guidelines for Harmonisation of Calving Traits (https://interbull.org/static/web/Recommendations Harmonisation Calving Traits.pdf)



 Holstein Fertility: ITA changed trait definitions for two Interbull traits: HCO (Heifer's Conception Rate) and CC1 (Lactating cow ability to conceive 1)

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<u>InterGenomics</u>: Following the requests from some InterGenomics-BSW participants, it is now possible for organisations to share their *imputed female genotypes* through GenoEx-GDE among a list of organisations of their choice. Interested organisations should contact the Interbull Centre as this new functionality requires new file formats and agreements to be prepared.

<u>Beef Evaluations</u>: The **Interbeef** January 2024 Routine evaluation (2401r) has been delivered according to schedule. The April Test evaluation is ongoing. Results are expected to be distributed by 31 May 2024.

**<u>2025 Interbull Service Calendar</u>**: The 2025 Interbull Service Calendar has been approved by the Interbull SC and is available online: <u>https://interbull.org/ib/servicecalendar</u>.

**PREP Database:** Electronic forms for the remaining Interbull evaluated traits (udder health, longevity and workability) are being prepared and will be added to PREP during 2024. As PREP is replacing the '**GE Forms'**, National Genetic Evaluation Centres are required to maintain all existing electronic forms in PREP up to date and in line with all the latest changes implemented in their national evaluations.

Launch of Parentage Discovery ICAR Accreditation: The ICAR Accreditation of DNA Data Interpretation Centres for SNP-Based *Parentage Verification* was officially launched in 2018. The service has now been expanded to also include accreditation of organizations offering SNP-Based *Parentage Discovery* services. Organizations receiving the ICAR Accreditation for DNA Data Interpretation Centres have the possibility to subscribe to the respective GenoEx-PSE services.

The Interbull Centre assists ICAR with the required technical part of both Parentage Verification and Parentage Discovery accreditation services. Please contact ICAR directly for any enquiries and applications for the Parentage Verification and/or the new Parentage Discovery accreditation services!

**2024 Interbull Annual Meeting:** The 2024 Interbull Annual Meeting will be held in conjunction with the 47<sup>th</sup> ICAR Annual Conference (20 - 24 May 2024) in Bled, Slovenia. The Interbull **Business Meetings and Open Meetings will be on Monday 20 and Tuesday 21 May 2024**. The joint ICAR-Interbull session on "Data Collection for Beef on Dairy" will be held on Wednesday 22 May 2024.

The Interbull website (<u>https://interbull.org/ib/2024\_icar\_interbull</u>) provides detailed information on the Interbull Annual Meeting programme as they become available - with the scientific programme expected to be available by 30 April 2024.





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Please visit <u>https://icar2024.si/</u> for the general programme, registration and accommodation information. Deadlines for the submission of abstracts are: 1 April 2024 for the ICAR conference, and 8 April 2024 for the Interbull Open Meeting.



## Updates on the following Research and Development activities will be presented during the 2024 Interbull Meeting in Bled.

## Genomic Reliability Working Group (Chair: Zengting Liu)

A new set of Guidelines has been prepared by the working group, providing recommendations on the best practices to compute genomic reliabilities and providing an insight to the Interbull Genomic Reliability method. The following relevant documents are already available on the Interbull website:

## https://interbull.org/static/web/A\_technical\_document\_on\_derivation\_and\_application\_of\_adj ustment.pdf

and

https://interbull.org/static/web/A supplementary document to the Interbull genomic reliabil ity\_method-1.pdf

#### Interbull Trend Validation Tests WG (Chair: Paul VanRaden)

An enhanced version of the new GEBVtest software was presented during the 2023 Interbull Business and Open Meetings. The new software will be made available to all countries in the



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next couple of weeks, together with a new updated documentation to guide users in the correct preparation of required inputs and to better understand the changes introduced in the new enhanced software. The official release of the software is scheduled for August 2024.

## GPS-MACE Working Group (Chair: Peter Sullivan)

The working group has continued refining the model to better account for the genomic preselection bias present in the MACE data of genomic countries. Improvements have been made to the heterogeneous variance selection, which is currently only accounting for the higher mean and not for the reduced variance. The presentation at the 2024 Interbull Meeting will include details on this new approach and preliminary results.

#### New Traits Pipeline (Chair: Gerben de Jong)

The working group has further reviewed the information provided by organisations in the PREP "other traits" electronic form. A report has been prepared and shared with the SC, ITC and BFMTF.