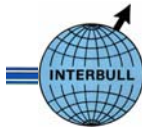




ICAR Subcommittee Interbull



Reinhard Reents

Chairman of the Interbull Steering Committee,
IT Solutions for Animal Production



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Outline

- Structure of Interbull
- Activities in communication
- International genetic evaluation service
- Current issues

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Steering Committee

- Reinhard Reents, Chairman, DEU

- Gerd Pedersen Aamand, DNK
- Juraj Candrak, SR
- Brian van Doormaal, CDN
- Marj Faust, USA
- Bevin Harris, NZL
- Sophie Mattalia, FRA (renominated)
- Enrico Santus, ITA
- Hans Wilmink, NLD (renominated)

- Jan Philipsson, secretary

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Technical Committee

- Hans Wilmink, Chairman, NLD
- Freddy Fikse, ITB
- Gerrit Kistemaker, CAN
- Tom Lawlor, USA
- Zengting Liu, DEU
- Esa Mantysaari, FIN
- Raphael Mrode, UK
- Paul van Raden, US

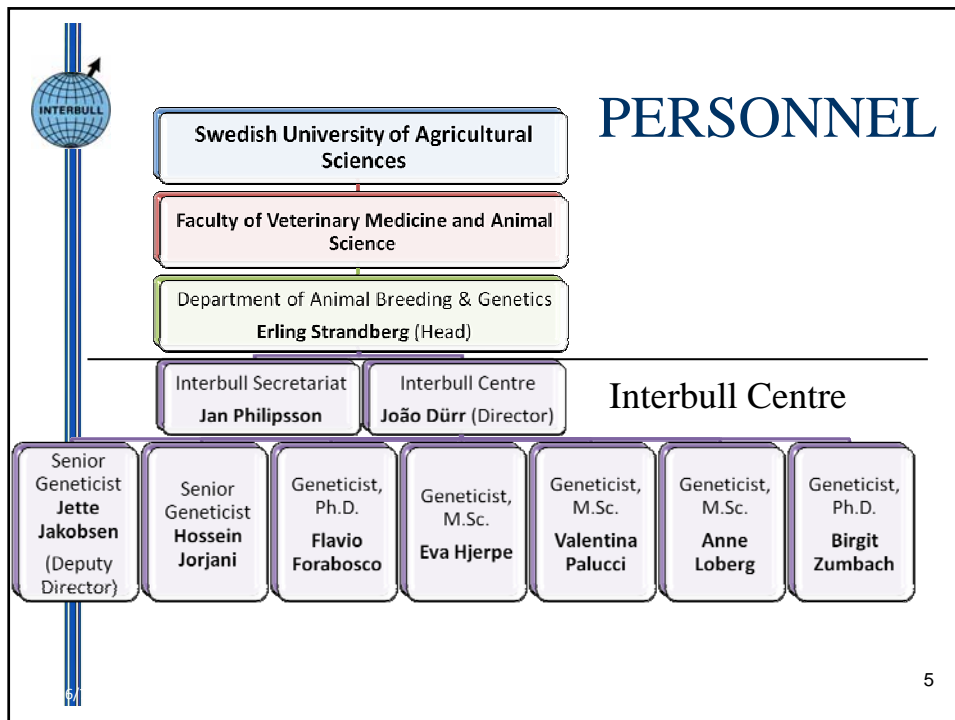
Genetic evaluation experts

Scientific Advisory Committee

- Georgios Banos, Chairman, GREECE
- Vincent Ducrocq, FRA
- Mike Goddard, AUS
- Larry Schaeffer, CAN

Outstanding scientists for animal genetics

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- Interbull Activities**
- 2009 Interbull meeting
 - Barcelona, Spain
 - August 2009
 - 151 participants from 32 countries
 - Interbull Technical Workshop
 - Uppsala, January 2009 (100 participants)
 - Interbull Technical Workshop + 2nd Industry Meeting
 - Paris, March 2010 (200 participants)
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International Genetic Evaluation Services

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New entries

- Production traits
 - Lithuania: Holstein and Red Dairy Cattle - January 2010
- Udder health
 - Slovak Republic: Holstein and Simmental
- Longevity
 - Check Republic: Holstein and Simmental - January 2010
- Calving trait
 - United Kingdom, Hungary and Switzerland (Red Holstein):
Holstein
- Female fertility
 - Poland: Holstein - January 2010
 - United Kingdom introduced an across breed evaluation
- Workability
 - France: Holstein - August 2009

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Participation Rate

Number of bull populations

Breed group	Production	Conformation	Udder health	Longevity	Calving	Female fertility	Workability
Brown Swiss	9	7	8	8	5	6	5
Guernsey	6	4	5	5	-	4	-
Holstein	27	21	24	21	12	17	6
Jersey	10	9	8	7	-	6	3
Red Dairy Cattle	12	8	10	9	3	7	4
Simmental	11	-	9	3	-	2	-
Total	73	49	62	51	17	41	17 ⁹



New Schedule in place

- Routine evaluations are scheduled with the following release dates:
 - 2010 August 17
 - 2010 December 7
 - 2011 April 5
 - 2011 August 9
 - 2011 December 6
- Test evaluation take place as follows:
 - 2010 September
 - 2011 January
 - 2011 September

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Research and Development MACE

- Female Pedigree in MACE
 - In combination with database implementation
- Variance components for reduced rank MACE

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Genomic evaluation

- Joint session of Interbull and ICAR in Niagara Falls, June, 2008
 - Excellent overview on development in various parts of the world
 - Establishment of a genomic task force
 - Validation
 - GMACE
 - Preparation of genomics workshops

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Interbull / ICAR meeting Jan. 2009

- Interbull workshop (27. - 28.1.2009, 101 participants)
 - Report Task Force (→ 7 experts from genetic evaluation centres)
 - Summary of the questionnaire
 - Conclusions and recommendations from the discussion groups
- Interbull Steering Committee (29.1.)
- ICAR Ex. Board (30.1.)



Validation

- Methodology developed by
 - Esa Mäntysaari
 - Zengting Liu
 - Paul van RadenDiscussed with genomic task force / ITC
- Methodology applied Feb 2010
 - Some refinements made until April 2010
- Again applied in May 2010
- Ready for implementation in August 2010 for protein yield
 - **results disseminated from ICAR → EC 427/2006**

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GMACE

- Methodology developed by
 - Pete Sullivan
 - Paul van RadenDiscussed with genomic task force / ITC

- Methodology applied April / May 2010
 - Not ready yet
 - Plan to simplify it
 - Apply sometime in the summer / fall 2010

- Discussed in a workshop early 2011

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Intergenomics

- Some countries seek implementation of genomic evaluation directly within Interbull centre
 - Increase size of reference sample
 - Decrease costs for technical implementation
 - IB hosts genomic SNP data
 - IB derives prediction formulas
 - Calculates DGV for these countries
 - Combination with conventional EBVs, incorporation into 'products' is done at the national levelInterest from
 - Brown Swiss breeders from several countries
 - → InterGenomics Project

Countries involved currently: AUT, CHE, DEU, FRA, ITA, SLO, USA

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Conclusions

- Very successful meeting in Riga
 - Interbull thanks the organisers

 - Genomics puts a very heavy workload on
 - Interbull as an organisation
 - Interbull centre as a service organisation

 - Many political issues make things more complex
 - (Sharing of knowledge)
 - Sharing of data
- So far very good spirit to solve these challenges

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