

# Application of InterGenomics Concept to Holstein (IgHol)

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### Background

- Large international consortia exist for exchange of genotypes in order to perform genomic selection
- Small/other Holstein populations have been searching for ways of ensuring cost efficient solutions for genomic selection
- In small HOL populations there are limited chances for commercially driven implementation of genomic selection
- After the successful implementation of <u>InterGenomics</u> for BSW the idea of implementing this concept for small/other HOL populations has arisen

## The Aim of IgHol project

- use well known methodology, which is routinely used for BSW
- that each country (involved in the project) prepares data following experiences from InterGenomics in BSW
- countries which have experiences with <u>InterGenomics</u> for BSW can provide support for countries that have no experiences
- Interbull could make a pilot run for interested countries
- after such a pilot run partner countries, will check the results and additional opportunity to invite or to join the initiative will be given to other interested countries

### Main steps of the project IgHol

- Interbull SC decision for supporting idea
- Interbull centre find the possibilities to support idea/initiative
- Ask potential countries (HOL populations) about interest for cooperation in the project
- Use experiences from InterGenomics for BSW to plan for data preparation using GenoEx platform and define the desired services to be offered (proven sires, young bulls, females?)
- Use of InterGenomics methodology to estimate international genomic evaluation on each country scale for participating HOL populations
- Conduct a first pilot run and assess results
- Discussion of costs/fee structure and interest for routine service
- Plan for implementation of routine service

#### Contacted countries (MACE is required)

- Belgium
- Croatia
- Czech Republic
- Estonia
- Greece
- Hungary
- Ireland
- Latvia
- Lithuania
- Portugal
- Slovakia
- Slovenia

- Australia
- Izrael
- Mexico
- New Zealand
- South Africa
- South Korea
- Uruguay
- Turkey

Early interest has been received from various countries representing three continents.

#### Next steps

- F2F discussion with people from potential countries during INTERBULL/ICAR meeting this week
- To get better view in the structure of data available in these countries (traits included in MACE, genotyping of males and females, future plans regarding genotyping, ....) as well as the services desired
- Work with Interbull Centre to define best practices for sending data and calculation of genomic evaluations
- Examining opportunities for funding the initial research to pilot run