Council on Dairy Cattle Breeding Genetic Evaluation Methods Group (GEM)

These terms of reference for the CDCB GEM committee were approved by the CDCB Board of Directors on March 1, 2017 and amended on 02/16/2021.

1. Background

The Genetic Evaluation Methods Group (GEM) provides independent expert advice to USDA's Animal Genomic and Improvement Laboratory (AGIL) and the CDCB staff on dairy genetic evaluation methods and practices. It serves as the expert committee reviewing new research developments and proposals for developing or changing the CDCB genetic evaluations.

GEM members have expertise in quantitative genetics, statistical genetics, dairy data analysis and genomic methods.

2. Purpose

GEM exists to provide independent, objective, impartial advice and strategic guidance on the area of dairy genetic evaluations to AGIL and the CDCB staff. The groups' assignment is to provide input throughout the development of a genetic evaluation, not simply to make suggestions in the initial planning or review results when the evaluation is near completion. Its charge is to make recommendations that will lead to a highly accurate and comprehensive genetic evaluation system.

3. Term

GEM

This Terms of Reference is effective from March 1, 2017 and will be ongoing until terminated by the CDCB Board of Directors.

Members

- Representatives from different categories of stakeholders are nominated by agreement of AGIL and CDCB personnel and forwarded for approval for two- year terms by the CDCB Board of Directors.
- Given the specific knowledge and experience required, no limit on number of consecutive terms is imposed.

3. Membership

Artificial Insemination Industry expert¹ Chad Dechow, Penn State University Tom Lawlor, Holstein Association USA Cari Wolfe, American Jersey Cattle Asociation Christian Maltecca, North Carolina State University Kent Weigel, University of Wisconsin – Madison Robert Tempelman, Michigan State University Daniela Lourenço, University of Georgia - Athens Paul VanRaden, USDA - Animal Genomic and Improvement Laboratory Ezequiel Nicolazzi, CDCB

4. Accountability

The GEM is a non-executive body that reports back to the CDCB Board.

The GEM chair will be chosen every two years among the committee members and appointed by the CDCB Board of Directors.

5. Roles and responsibilities

GEM:

- To serve as the expert panel to evaluate research results supporting CDCB's genetic evaluation system coming from AGIL and/or the CDCB staff.
- To technically evaluate the accuracy and robustness of new developments and changes to the CDCB genetic evaluation system.
- To identify efficiency constraints and opportunities for improvement in the CDCB genetic evaluation system and propose ways of addressing them through research and development.

Membership:

- To put the interests of the CDCB above any personal or own-organization interests or preferences when making technical recommendations.
- To participate in all scheduled GEM meetings and conference calls.
- Tomaintain confidentiality on sensitive discussions of the GEM. Team members will sign a confidentiality agreement agreeing to not release or utilize any unpublished genetic information for the financial benefit of themselves, their family, friends, or their organization.

Chair:

• To facilitate the schedule of GEM meetings and conference calls.

¹ The Artificial Insemination Industry expert is an experienced geneticist with solid academic background in genetic evaluation methods which is nominated by the NAAB board of directors and appointed by the CDCB board of directors.

- To establish the agenda and organize the materials for meetings and conference calls.
- To chair meetings and conference calls.
- To provide reports with GEM recommendations to CDCB's Chief Executive Officer in a timely manner who will pass group recommendations on to the CDCB Board of Directors.
- To prepare or present a summary of GEM's activities for the CDCB industry meetings.
- The CDCB staff will provide logistic support to the Chair as needed.

6. Meetings

GEM will meet when necessary and have regular conference calls in order to fulfill its purpose and perform its roles and responsibilities.

Confidentiality Agreement:

As a member of the Council on Dairy Cattle Breeding's (CDCB) Genetic Evaluation Methods Group, I acknowledge that in the course of reviewing the evaluation materials that I will be exposed to valuable confidential data of the CDCB. I agree to treat all the information as confidential and to take necessary precautions against disclosure of such information to any third parties prior to the information being available to the public. I agree to review the genetic material provided to me by the CDCB in a confidential manner and I will not use the information for my own personal benefit or for the benefit of relatives, friends, or my employing organization prior to the time the information is available for public release.

Signature:

Name:

Date: