

# **Council on Dairy Cattle Breeding Geneticist Position Description**

Job Title: Geneticist  
Reports To: Council on Dairy Cattle Breeding Chief Executive Officer  
Prepared Date: July, 2019

## **Summary**

This position serves as Geneticist of the Council on Dairy Cattle Breeding (CDCB) organization. The CDCB is a 501 (c) (5) non-profit organization which recently assumed the service responsibilities for calculating and distributing the genetic evaluations and genomic predictions, for managing data storage, and for analyzing and distributing dairy cattle data, tasks that previously were performed by the United States Department of Agriculture – Agricultural Research Service – Animal Genomics and Improvement Laboratory (USDA-ARS-AGIL). The CDCB allied partners cooperator database is the largest in the world devoted to dairy animals with over 70 million female phenotypic records and over 3,000,000 animals receiving genomic predictions.

The Geneticist is to review and improve CDCB's genetic evaluation methods and processes. Interaction with internal and external individuals and organizations of the CDCB and particularly with the AGIL staff will be important to evaluate and enhance the CDCB genetic evaluation system. Providing clear reporting on the performance of the models, from data extraction to public files result creation are key responsibilities of this position. This includes establishing the necessary programming framework and interacting with the current system to provide successful genetic evaluations and genomic predictions on behalf of the CDCB.

## **Essential Duties and Responsibilities**

Enhance the tools and capabilities of CDCB technical staff to deliver genetic evaluations and genomic predictions as well as summaries of dairy management information for the US dairy industry. Collaborate with the CDCB Technical Director to provide top-tier quality service to the US dairy Industry.

### **Data quality:**

- Support the technical staff in further developing the on-going data flow, data editing, and database maintenance.
- Review the proper protocols for data acquisition, safety and usage that are adopted in the CDCB database.
- Develop software to periodically monitor data quality being used by CBCD in genetic evaluations, as well as genetic evaluation results provided to service users.

#### Research and Development (R&D):

- Conduct investigation on research priorities defined by the CDCB management team.
- Get acquainted with ongoing AGIL staff R&D project results; assess the impact of proposed changes, advising the CDCB Technical Director prior to implementation.
- Cooperate with other national and international research organizations on projects in which the CDCB is involved.

#### Genetic Evaluation and Genomic Prediction:

- Support the technical staff for the development and operation of the on-going genetic evaluations and genomic predictions.
- Support the technical staff to facilitate the transference the know-how from R&D to a production environment.
- Produce documentation according to CDCB standards on the projects conducted and software developed.

#### Communication

- Write or collaborate on scientific and popular articles about CDCB services and products.

### **Qualifications**

The individual in this position must be able to perform essential duties satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **Education and/or Experience**

PhD degree in agriculture or applied statistics.

Experience and success in data analysis for genetic/genomic evaluations is mandatory. Knowledge should include quantitative genetics, genomics, programming languages and statistics. Broad knowledge of agriculture and food industry is highly desirable.

#### Knowledge and experience should include:

- Consistent professional experience as quantitative geneticist.
- Strong data handling and analysis skills.
- Ability to work with stakeholder members and government agencies.
- Service oriented attitude.
- Good communications skills.
- Background and experience in agriculture, agri-food industries or non-profit organizations is preferred.

### **Salary and Benefits**

Salary is commensurate with experience and includes a competitive benefit package.

### **Travel**

Some domestic and international travel will be required for meetings and for participating with internal and external individuals and organizations. A valid passport or appropriate work permits for entry into the USA and other countries is required. Travel arrangements as appropriate for transport to and from work and outside sites will be expected as normal work effort.

**Language Skills**

Must have excellent English skills with competency in oral and written communication.

**Physical Demands**

Should be able to lift and carry 50 pounds. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Transportation to work and meetings should be readily available.

**Location**

The Council on Dairy Cattle Breeding office is located in Bowie, Maryland.

**Application Process and Format**

Candidates should submit an electronic file format (PDF or Microsoft Word document) cover letter, resume and two references to the CDCB CEO at [joao.durr@uscdcb.com](mailto:joao.durr@uscdcb.com). Screening will continue until a suitable candidate is identified.

The Council on Dairy Cattle Breeding is an Equal Opportunity Employer.