

POSTDOCTORAL RESEARCH ASSOCIATE POSITION

Dairy Science Department University of Wisconsin-Madison

Position Title: Postdoctoral Research Associate

Start Date: As soon as possible after 1 July 2019

The University of Wisconsin-Madison *Dairy Brain* project invites applicants for a 12-month, full-time position of a Postdoctoral Research Associate position. We are looking for a mature, independent, innovative, highly analytical, and collegial professional to join a multidisciplinary team (dairy science, computer science, and data management) for an exciting project about developing and applying dairy farm simulation modeling, artificial intelligence, expert systems, optimization algorithms, and decision-making tools using big data analytics applied to real-time integrated data streams: i.e., support the development of what we are calling the *Dairy Brain*.

RESPONSIBILITIES: The successful candidate will be in charge on performing research on the interaction of big data, simulation, optimization techniques, expert systems and artificial intelligence as well as development of decision support tools, with the main aim of improving dairy farm decision-making and management. The individual will work on the inception, development, and deployment of decision support tools. The individual will serve as a liaison among project's graduate students, project's faculty team in the departments of Dairy Science and Computer Science and will interact with the dairy farm management team on a permanent basis. The successful candidate is expected to support the development of an internationally recognized research and extension program in dairy farm decision-making and management using real-time big-data streams conducive to high quality scientific publications and computerized decision support tools for practical use on dairy farms.

MINIMUM QUALIFICATIONS: A Doctorate Degree in Dairy Science, Computer Science, or a closely related field, with strong data analysis and computer simulation emphasis, completed by first day of employment is required. Ability to communicate effectively with diverse audiences and excellent oral and written communication skills are required. It is also essential that the individual demonstrates strong organizational, time management and interpersonal skills. Selected individual must have the ability to work in a team environment.

Department of Dairy Science

PREFERRED QUALIFICATIONS: Experience in data science and web-based applications; Demonstrated experience with research in the area of dairy farm (or related) management and decision-making; Demonstrated experience in publishing in peer reviewed journals and scientific meetings; Familiarity with Python, SQL (postgres) and related code programming environments as well as artificial intelligence methodologies.

UNIVERSITY/COMMUNITY: The University of Wisconsin-Madison is a top U.S. research institution and the Dairy Science at UW-Madison is a World-Class department highly regarded for research, extension, and instruction. Wisconsin is the largest dairy farm state with 7,000 farms, in which dairying contributes half of the agricultural economy, has an impact of \$43 billion a year, and supports 80,000 jobs.

APPLICATION DEADLINE: Position is open until filled and full consideration will be given as soon as an application is received. Salary will be commensurate with qualifications and experience.

APPLICATION PROCESS: To apply, please send an email to Victor E. Cabrera victor.cabrera@wisc.edu with a single attachment. This attachment must include: Cover letter arguing candidate's professional match with position and possible project's contributions; Curriculum Vitae; Reference page with the contact information for three professional references. Any offer of employment is contingent on the University of Wisconsin-Madison's verification of credentials and other information required by law and/or university policies, including but not limited to a criminal background check.