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**NSERC Industrial Research Chair in Infectious Diseases of Dairy Cattle
Dr. Herman Barkema, University of Calgary**

Dr. Herman Barkema was appointed as a Natural Sciences and Engineering Research Council (NSERC) Industrial Research Chair in Infectious Diseases of Dairy Cattle in June 2014. NSERC will be matching industry contributions (\$180,000/year) from Dairy Farmers of Canada, Alberta Milk, Westgen Endowment Fund, the Canadian Dairy Network, BC Dairy Association, Dairy Farmers of Manitoba, and CanWest DHI for a total commitment of \$1.8 million over a period of five years.

The Chair will focus on the two most pressing diseases that affect the dairy industry: Johne's disease (JD) and mastitis. The proposed JD studies will focus on transmission of *Mycobacterium avium subspecies paratuberculosis* infection to the calf, genetic susceptibility, early diagnosis, and adoption of prevention and control practices by dairy farmers. The proposed mastitis studies will focus on the role of coagulase-negative staphylococci in mastitis, antimicrobial resistance, and heifer mastitis. The ultimate goal is to decrease the effect of these diseases on the Canadian dairy and semen industry. This will be achieved through research and through training highly qualified personnel (graduate students and postdoctoral fellows) in the context of that research.

The vast majority of infectious diseases in dairy cattle are the result of an interaction between the genome, microbes, host immunology, and the environment. The research initiated by the Chair will therefore be collaborative and multidisciplinary in nature. The research projects will build upon the extensive research efforts that are already being conducted within University of Calgary's Dept. of Production Animal Health, the opportunities available through the Canadian Bovine Mastitis Research Network, and the research needs for the improvement of the Alberta Johne's Disease Initiative and other provincial JD prevention and control programs.

Substantial new knowledge will be generated from these projects. Knowledge transfer and exchange will therefore be a logical and important extension of the research program and fully integrated into all research activities and results disseminated to Canadian dairy producers and Veterinary practitioners.