

Faculty of Agricultural and Environmental Sciences

Faculté des sciences de l'agriculture et de l'environnement **Jennifer Ronholm, PhD** Department of Animal Science Department of Food Science and Agricultural Chemistry

January 7, 2022

Post-doctoral Position in Agricultural Microbiology

Employer: McGill University **Location:** MacDonald Campus, Ste-Anne-de-Bellevue, QC **Closing Date:** March 15, 2022

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Job Description

Antimicrobial resistance (AMR) is one of the most complex and serious problems facing modern medicine. Approximately 80% of antibiotics that are produced internationally are used in food-production instead of in human medicine. Agriculture and food production are considered an important drivers of AMR proliferation. Unfortunately, several modern agricultural practices are built upon the availability of antibiotics for disease treatment, prophylaxis, and sometimes even growth promotion. The removal of antibiotics from food-production systems without alternatives, while maintaining current levels of food security is difficult. Our laboratory explores a variety of options for providing alternatives to antibiotics for use in animal agriculture including the development of novel probiotics, prebiotics, enzyme supplements, and an antibacterial system based on the CRISPR-Cas9 system. A fully funded PDF position is available starting **April 1, 2022** to work on a variety of exciting projects in agricultural microbiology that attempt to become a part of the solution to the AMR crisis.

The successful candidate will have experience in agricultural microbiology, animal feed trials,16S rRNA targeted amplicon sequencing, metagenomics, as well as traditional culture-based microbiology techniques. Previous experience in microbial ecology, microbiology, and molecular biology are essential. Experience operating the Illumina MiSeq or the Oxford Nanopore MinION as well as experience using the Mothur pipeline to process 16S rRNA targeted amplicon sequencing data are each assets. Experience using the DASbox mini bioreactor system (or experience with another type of bioreactor) would also be considered a highly desirable asset.

The successful candidate will have excellent written and oral communication skills and have a strong publication record in peer-reviewed journals.

This position will initially be for 1 year with the possibility for renewal. Stipend support will be in accordance with the policies established by McGill University (<u>https://www.mcgill.ca/gps/staff/postdocs</u>).

Application Instructions

We Welcome All Qualified Candidates

The Ronholm Lab is committed to creating an environment that embraces equity and diversity. We seek to be proactive in attracting excellent trainees who are members of designated groups, as identified by federal and provincial legislation, as well as McGill's Employment Equity Policy. These groups include women, Indigenous persons, persons with disabilities, ethnic minorities, racialized persons/visible minorities, and persons of minority sexual orientation or gender identity (LGBTT2SQ* persons).

Application Instructions

Send your Curriculum vitae, transcripts, recent publications, and a covering letter stating how your background and qualifications match the position to <u>Jennifer.Ronholm@mcgill.ca</u>

Dr. Jennifer Ronholm Assistant Professor McGill University <u>https://www.jenniferronholmlaboratory.com/</u>

