

April 4, 2024

Position for an MSc or a PhD student.

Of the nearly 1.8 million chicken tons slaughtered in Canada in 2023, 20,000 tons were condemned. Although condemnations do not represent a big loss, the number of condemned animals is immense (more than 11 million per year). Today, cellulitis is the leading cause of condemnation in Canada's poultry industry, and it has been increasing over time. There are not only economic reasons for trying to reduce condemnations in slaughter plants, but also sustainability and animal health reasons.

We are looking for a candidate to develop a Ph.D. (or MSc) with emphasis in Animal Data Science to develop research that will include environmental sensors, production, and health data to predict cellulitis in poultry production in Quebec. The candidate will also work on evaluating the economic implications of prevention and control strategies.

The desired profile of the candidate:

1. **Coding:** Familiar with a programming language (Python or R).
2. **Statistics:** medium knowledge of statistical methods, such as regression analysis, PCA, and machine learning.
3. **Domain knowledge:** experience or willingness to learn about animal (poultry) science.
4. **Social skills:** optimism and ability to work within a team!
5. **Language:** basic French (or willingness to learn) and advanced English are required – oral and written communication skills are a must.

The research group and financial aid:

The student will be part of a unique and multidisciplinary team: the [Platform AI-Agrosante \(PIAAS\)](#) that adapts artificial intelligence (AI) tools to improve agri-food production and animal health in Quebec and Canada. The candidate will be financed by the project.



If interested, send the following documents to pablo.valdes.donoso@umontreal.ca:

1. Motivation letter (1 page)
2. CV
3. University transcripts
4. Contact of 2 referees: email, phone number, and function.

Do not hesitate to ask questions to:

Pablo Valdes Donoso DVM MPVM MSc PhD

IVADO Assistant Professor

Director of the Platform AI-Agrosante (PIAAS).

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