# Faculté de pharmacie

## Séminaire de l'axe

« Médicament et santé des populations »

# The expansive role of counterfactuals and the non-parametric causal inference framework

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Pavillon Jean-Coutu
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In this overview talk, I will present some of the fundamental ideas of causal inference and my work on two case studies in HIV/AIDS and pediatrics. Causal inference is the analytical approach to estimating causal effects when the treatment is non-randomized, such as in an observational cohort. I will describe some basic requirements and methods for estimating a treatment effect in such a context. Using the two case studies as motivating examples, I will also emphasize the importance of reducing parametric assumptions in both the models of interest and the working models. Finally, I will describe future directions for my research program as a new faculty member.

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