



## **CRBS Summer Bootcamp**

### **Probing Protein Dynamic Structure with Hydrogen-Deuterium Exchange Mass Spectrometry (HDX-MS)**

Instructor: Christopher Thibodeaux

Date: Tuesday, July 21, 2020

Time: 1 – 4 PM

<https://mcgill.zoom.us/j/93119203820>

Meeting ID: 931 1920 3820

Password: CRBS2020

In this boot camp seminar, you will learn the fundamentals, practical aspects, and applications of HDX-MS – a powerful emerging tool for characterizing protein structural dynamics. The tutorial will focus on 1) the essential theory of HDX-MS and how the HDX-MS measurement reflects relevant structural properties of the protein of interest, 2) the various experimental formats for performing HDX-MS measurements on proteins, 3) technical aspects related to performing HDX-MS assays and collecting HDX-MS data, 4) methods for evaluating the reproducibility and quality of data, and 5) case studies of how HDX-MS has revealed mechanistically informative properties of proteins. An emphasis will be placed on continuous exchange, bottom-up HDX-MS, as this approach is the most common and most accessible to researchers who are new to the field.

The session will take about 2 hours, but it may overflow to 3 hours depending on how many questions we get.

A recording of the tutorial will be made freely available to those who registered for the Bootcamp.

Looking forward to seeing you tomorrow!

Chris Thibodeaux