NSERC Canadian Network for Aquatic Ecosystem Services

CNAES
HQP Research & Collaborative Exchange Funding

Visit report

1. Exchange information

Visitor: **Matthew Heerschap, MSc Candidate, Laurentian University, CNAES Project I-5**

Supervisor: Tom Johnston/ John Gunn

Location: **Biotron, Western University, London Ontario**

2. Objective/Purpose

The objective of this exchange was to complete methylmercury analysis of nearly 400 fish muscle samples using Biotron's direct mercury analyzer and gain valuable training and experience using this piece of equipment.

3. Description of the visit

During my time at the BioTron facility I was able to analyze all of the samples I will require to complete a robust analysis of methylmercury concentrations in both freshwater resident and anadromous large bodied fish. The project incorporates fish samples from 11 coastal rivers as well as further intensive interspecific analysis of fish mercury concentrations in the Moose River. The samples were analyzed using BioTron's Milestone direct mercury analyzer (DMA) to obtain the methylmercury concentration in each sample. This data will be paired with data on other metals of concern such as arsenic, chromium, nickel and selenium to assess the risk associated with consuming fish in each river. Personally, working with quality equipment and experienced technicians at the BioTron lab was a valuable experience and will greatly further my analytical and working knowledge of mercury analysis.