



From data to knowledge: Study design and analytical steps for large scale biomonitoring programs using eDNA metabarcoding

Wednesday June 21th, 2023

Using a large-scoping environmental survey as a model, this workshop will address several key aspects to establishing long-term eDNA survey protocols within a regulated industry. The Nuclear Waste Management Organization (NWMO) is committed to the long-term management of Canada's used nuclear fuel. To this end, the process has begun to identify a suitable location for a deep geological repository to house spent nuclear material. Several key aspects to the geological repository include the environmental assessment of potential sites, the commitment to ongoing environmental monitoring of the selected site, and the selection and ongoing commitment to share data with informed and willing hosts at the selected site, including governments, residents, and first nations.

The presentations and discussions for this long term and large in scope environmental monitoring program will focus on key elements such as establishing robust and reproducible methods with imbedded quality control and assurance steps to reflect regulatory needs.

Topics will include:

- Program purpose and engagement
- Program overview and survey designs
- Field collection methods, including data acquisition and quality assurance protocols.
- Metabarcoding molecular methods
- Data processing and informatic analyses
- Steps to evaluate the veracity of species identifications
- Data security, transfers, and long-term storage ensuring data adhere to FAIR principles
- Ongoing feedbacks within the project to continually inform methodological processes.

Note that this a special event happening on Wednesday June 21st.

Sign up in our registration page:

<https://confreg.uoquelfh.ca/registration/Register/default.aspx?code=C000102>