



## CMOP Undergraduate Intern Mentoring Opportunity

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Name/Title/Institution(s) of senior mentor(s): Jon Waterhouse (Indigenous Peoples Scholar) OHSU

Name/Title/Institution(s) of frontline mentor(s): Charles Seaton (Research Associate) OHSU

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**Project Title:** Development of data management system and user interface for Indigenous Knowledge Network (IKN) data

**Context for Project:** This project will take an existing data management and visualization system and integrate an existing data collection.

**Brief Description.**

This project is intended to provide data access and data management for an existing (but difficult to access) data set. Scientific data collected in the Yukon River (Alaska) and Lena River (Siberia) as part of the IKN currently exists as a collection of relatively inaccessible files. The CMOP data management and data visualization systems currently allow the display of similar data sets (e.g. via [http://www.stccmop.org/datamart/observation\\_network/dataexplorer](http://www.stccmop.org/datamart/observation_network/dataexplorer)). This project will develop code to parse the IKN data files and add them to the CMOP database with appropriate metadata to allow the data to be accessed and displayed via the CMOP tools. In addition, the intern may work with Yakut people to develop goals for a web interface (possibly similar to the CMOP watch pages) that would be more informative and useful than the standard CMOP interface.

**Proposed Outcomes/Broader Impact:**

This project will make it easier for scientists and other data users to explore and analyze IKN data.

**Proposed timeline (within a 10 week span):**

Week 1-2: Develop familiarity with CMOP data management system.

Week 2-3: Develop familiarity with IKN data organization.

Week 4-8: Develop process for ingesting IKN data and metadata into CMOP data management system

Week 3-8 (in parallel): Work with Jon and with Yakut informants to develop guidelines for development of a new user interface for IKN data

Week 8-9: Test ingestion of IKN data within CMOP data management system

Week 10: Documentation and presentation

**Intern academic experience and skill set should include:**

Computer science or anyone with web and database programming experience. A more experienced intern is probably required for this project. Languages needed for this project are sql and any reasonable scripting language (preferably python and postgres sql, but that is not required).