

## Geochemical Characterization of Neolithic Floor Deposits, Orkney, Scotland SCRP 2024

This SCRCP project will take place at the on-site field science laboratory at the [Ness of Brodgar](#) excavations, Orkney, Scotland. The aim of the research is to perform a systematic geochemical survey on floor sediments from the large enigmatic Neolithic structures uncovered at the site. The geochemical data is an integral part of a multi-method, multi-year approach to identify and interpret different use areas within the large buildings.

This is the final season of excavation at this important UNESCO World Heritage site and promises to be exciting. The SCRCP participant will be conducting research alongside archaeologists and archaeological scientists in a dedicated-space located at the site excavation house (a great place to be when it is raining). The on-site laboratory is equipped with a handheld x-ray fluorescence spectrometer (hhXRF) that will be used to extract geochemical data from recently excavated samples recovered during the current excavation season. The successful SCRCP participant will conduct hhXRF analysis following established protocols, process the data, and interpret results. The data will be incorporated with previous years' data to look for geochemical patterns within the floor sediment samples.

The SCRCP participant will be embedded within Willamette's archaeology field school at the Ness of Brodgar. They will live with the field school students at Brown's Hostel in Stromness, ride in the same van to and from site, attend the field school's weekly lectures and participate in the various field trips. The SCRCP participant is also expected to adhere to the same rules and regulations of the field school students and contribute to the proper upkeep of the hostel. Note that the inclusive dates for this project are from July 13 -August 16.

Lodging and travel costs to Orkney are covered by the SCRCP program. A modest stipend will also be awarded.

### **Application Assignment**

1. Write a 300-500 typed reflection that describes how your education up to this point has prepared you to undertake an extensive geochemical study of archaeological sediments from the Ness of Brodgar.
2. Write a 300-500 typed reflection on how participation in this SCRCP project will advance your education and future goals.