

**NSF/UVM Community Cosmogenic Facility**  
*Memorandum of Understanding for Collaboration*

In order ensure that our interactions as collaborators are as straightforward, efficient, safe, and productive as possible, we require all users of the Community Cosmogenic Facility (CCF) to read and sign this Memorandum of Understanding.

**For both the Primary Investigator AND the in-person visitor: please read each item below and initial, then sign at the end of the document. Return a PDF version to Facility Manager Dr. Lee Corbett at Ashley.Corbett@uvm.edu.**

Section 1: Philosophy, Collaboration, and Planning

**1A.** Because the CCF is a facility focused on training and on generating the best data and interpretations possible, CCF staff work collaboratively with visitors throughout the project, including during grant writing, strategizing about sample collection, sample preparation, data reduction, interpretation, presentation, and publication. *I understand that CCF staff expect to work with me as active collaborators, with a focus on ensuring data quality, throughout the project. I will include Dr. Bierman and/or Dr. Corbett as authors on abstracts and papers and will send drafts well in advance of submission.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**1B.** Because the CCF is not a “fee for service” laboratory, visitors will process only their own samples and only those samples that are related to the project described and agreed upon with CCF staff. *I agree to process only samples for the project(s) previously agreed upon.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**1C.** Because the CCF needs to know about the proposed project and samples in order to most effectively help collaborators, several items will be required prior to arrival at the lab including a Powerpoint slide describing the project and a detailed sample inventory. *I agree to return all required paperwork promptly. I understand that work on my project cannot begin until all required paperwork is completed and sent to Dr. Corbett.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**1D.** For visitors preparing quartz at their home institutions: In order to ensure sufficient time for ICP-OES testing of quartz, additional etching as necessary, and sample digestion, all prepared quartz must be at the laboratory no less than six weeks in advance of the planned start date in the extraction laboratory. *I understand that if this deadline is not met, my visit schedule may be delayed and that I may need to alter my travel plans.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_  
(only if you are preparing your own quartz prior to arrival at the CCF)

**1E.** Communication is a critical component of safe laboratory practices and visitor training. *I understand that, for safety reasons, all visitors must have a high level of proficiency in English, including listening, speaking, and reading. Visitors agree to receive constructive feedback enthusiastically and make adjustments to their work as needed.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**1F.** All visitors are in charge of making their own travel and housing arrangements and for covering all associated costs. *I agree to be responsible for all of my travel needs and costs, including any that arise from altered schedules that may result from items described in this document.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**1G.** Project scope may evolve over time and the CCF staff will attempt to accommodate changes in scope or focus. However, changes may not be possible, particularly if they involve additional samples or work. *I understand that CCF staff will do their best to meet my project's needs, but may not be able to make changes to the number or type of samples beyond the original commitment due to high demand for laboratory time.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

Section 2: Conduct, Safety, Schedule, and Expectations During Sample Preparation

**2A.** The CCF has a very robust and redundant HVAC system and significant redundancy in laboratory equipment. However, in rare cases, an HVAC or other major equipment failure (e.g., water systems) may require deviation from the planned schedule. *I understand that I may need to alter my project timeline in the event of a significant equipment failure that is outside of the CCF staff's control, which could include having to modify travel plans.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**2B.** *In situ* cosmogenic nuclide methods are reliant upon the presence of quartz. If the samples do not contain quartz, they will not yield usable data. If the samples contain less quartz than expected, the project schedule and/or budget may need to be adjusted. *I understand that successful and timely sample processing is dependent on the presence of sufficient quartz in my samples.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**2C.** Safety for all of the laboratory's users is the highest priority. Visitors who will be doing hands-on work are responsible for completing all online safety training modules in advance of arrival and for abiding by all laboratory safety procedures including proper use of Personal Protective Equipment. *I understand that I will not be able to commence hands-on work in the laboratory until the trainings have been completed and that I will be asked to leave the CCF if I do not abide by safety policies.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**2D.** The CCF retains the right to ask visitors to leave the facility if their conduct makes for an unsafe or hostile environment. Such conduct could include but is not limited to failure to follow directions, failure to work within the laboratory’s policies, failure to follow safety guidelines, or any behavior that is unsafe, disrespectful, or harassing. *I understand that such conduct will not be tolerated at the CCF and that any such behaviors could result in the termination of a visit.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**2E.** To ensure the safety of laboratory occupants, the facility itself, and the samples, all safety or methodological incidents must be reported immediately to the laboratory manager. This is especially critical in the event of a possible acid exposure. *I understand that any incident, whether safety-related or methodological, must be reported to laboratory staff immediately.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

Section 3: Data, Billing, and Publication

**3A.** The CCF (through the University of Vermont Accounts Payable System) will issue a bill after the completion of sample preparation to the person whose information is provided below. The CCF is unable to split bills between different people and/or accounts, unable to accept credit cards, and unable to cover funds for AMS analysis. The project PI is responsible for setting up a billing account with the AMS laboratory of their choice, budgeting properly for AMS costs, and paying the AMS bill. *I understand the fiscal obligations of working with the CCF and will budget for the costs and pay them as described above when the bill is issued.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**3B.** Because the CCF monitors blanks and quality control samples as part of its standard operating procedure, all AMS data are returned to CCF staff, who will do an initial data reduction including a process blank subtraction. CCF staff will provide a data table in publication format as well as a basic description of methods used for data reduction and sample preparation. *I understand that CCF staff will have access to all AMS data and that the AMS schedule is out of our collective control.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

**3C.** The CCF is made available to the community by the US National Science Foundation, which provides full time support for Dr. Corbett to oversee the lab as Facility Manager and to work closely with and train all visitors. The NSF does *not* provide any support for the facility itself or for consumables; therefore the CCF recovers such direct costs from users. *I agree that every publication including data from the CCF will include the following acknowledgement.*

*“Cosmogenic data in this publication were generated with the support of NSF-EAR 1735676”. I agree to pay to the University of Vermont the per-sample costs agreed upon in my CCF budget to cover laboratory consumables.*

Project PI Initials: \_\_\_\_\_ Visitor Initials (if different from PI): \_\_\_\_\_

## Collaboration Details and Agreement

Name of the person who should receive the bill:

Affiliation:

Billing address:

Phone number:

Email address:

*By signing below, I/we understand the agreement with the NSF/UVM Community Cosmogenic Facility and will work within the guidelines described above.*

\_\_\_\_\_  
Project PI signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Visitor signature if different from PI

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bill recipient signature if different from PI

\_\_\_\_\_  
Date