

**University of Alaska Museum  
Ancient DNA Laboratory  
User Agreement**

The UAM Ancient DNA Lab (aDNA lab) was created to make possible genetic analyses on material that was not specifically collected for this purpose—for example, study skins, skeletons, fluid-preserved specimens, or other degraded DNA sources such as permafrost preserved material, feces or hair. The aDNA lab is not intended for research on human DNA and may not be appropriate for that purpose. It is intended to be used for specific projects and by only a limited number of people at a time. The lab should be used in situations in which DNA yield or quality is expected to be low and in which the risk of contamination by other sources of tissue or DNA is particularly high. For this reason, it is critical that we keep outside DNA outside and maintain the room's sterility. This means keeping the number of simultaneous users and the amount of access as low as is reasonable.

General management of the aDNA lab is the responsibility of the Genomic Resources (GR) Collection Manager. Policies and procedures regarding the use of this facility is determined by the Genomic Resources Oversight Committee composed of affected or interested curators.

Individual users (not PIs or entire labs) will be approved, and only those individuals should enter the lab. Access will be approved only if space and lab resources are available. All decisions regarding access will be made by the department heads, in consultation with the current lab users. Approved users will be granted access to the museum's lower level and receive a key to the aDNA lab. Museum access will be revoked and the key must be returned upon completion of the approved project. Failure to return keys promptly will jeopardize a user's (and a PI's) participation in the future. Users may not copy, share or loan their keys.

All aDNA users must follow aDNA lab sterility protocols, safety procedures, and common lab practices as listed below. Failure to abide by these policies may impact a user's (and a PI's) access to lab in the future as decided by the MGL Oversight Committee in consultation with the GR Collection Manager and Museum Operations Manager. These procedures and protocols are for the safety of all users, in compliance with UAF policy, and for the integrity of everyone's research.

**STERILITY:**

- Prior to entry, you must shower after being in a PCR building or wearing clothes that have been in a PCR building. The shower in the museum restroom is available for aDNA users.
- Users must have **dedicated aDNA lab clothing** that must not have been worn in any post-PCR building. There is space in the museum molecular lab for clothing storage.
- Users should not go from any organismal lab (mammal lab, bird lab, etc.) or collection range while wearing aDNA lab clothing.
- Users must **wear protective coverings**, including lab coat, gloves, shoe covers (or dedicated lab shoes), hair net, and mask. These items can be re-used until determined to be in need of replacement. They should be stored in the lab entry, labeled with your name.
- **No clothing, gear, supplies, or equipment that has been in any post-PCR lab** shall enter

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the aDNA lab. Leave your outerwear, laptops, backpacks, cloth watchbands, notebooks, badges, jump drives, etc. outside the lab, in the molecular lab or another lab.

- Any supplies not already stocked in the lab can be brought in if it is newly purchased and delivered to the museum (primers, reagents, kits, etc.). Lab equipment will be brought into the lab by museum staff ONLY.
- Work in the aDNA lab should be planned as the first thing in the day, to minimize contamination.
- Users are expected to maintain clean, uncluttered counter and shelf spaces. Counters should be regularly cleaned with a 10% bleach solution followed with ethanol. Glassware or other instruments that have been washed and are drying should be put away in a timely fashion.

#### ENTRY PROCEDURE

- Get everything you need (specimens, supplies, etc.) prepared before showering and changing and stage it in the molecular lab space designated for the aDNA lab.
- Shower and/or change into aDNA clothes in the museum and change into your dedicated aDNA lab clothing.
- Enter the airlock, let the first door close. Put on the protective covering items: gloves, lab coat, shoe covers (or dedicated lab shoes), hair net, and mask.
- At least 30 seconds must pass between the closure of the first door and opening of the second door – it will probably take at least that long to put on the lab coat, mask, etc.

#### SAFETY:

- No open-toed shoes or midriff-exposing clothing are allowed in the lab. Pants must be worn.
- No food or drink is allowed in the lab.
- The lab's eye wash stations and shower must be accessible at all times.
- Know the location of the Material Safety Data sheets (MSDs) and how to use them. Do not remove them.
- **Chemicals must be labeled with contents, date, and the preparer's name. Unlabeled chemicals will be disposed of by Environmental Health and Safety.**
- Chemicals must be stored in appropriate containers in accordance with the directions in the MSDs. Improperly stored chemicals will be disposed of by Environmental Health and Safety.
- All users will keep the Genomic Resources Collection Manager, Kyndall Hildebrandt, apprised of chemicals that are stored and used in the lab.
- No chemicals or chemical waste will be disposed of in the sinks. All chemicals and chemical waste will be disposed of by the Museum Operations Manager, Kevin May.
- No known mutagenic chemicals, compounds, or reagents (e.g., EtBr) are allowed in the lab.
- No Taq that is not hot start Taq is allowed in the lab.
- No chemicals or supplies can be stored in the fume hood.

#### COMMON LAB PRACTICES:

- Do NOT use other people's chemicals, supplies (tubes, racks, etc.), or equipment (pipettes, centrifuges, heat blocks, etc.) without their permission.

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- The aDNA lab is equipped with standard molecular lab equipment and supplies including; pipettes, large and small centrifuges, an incubator, shaker, gram scale, a chemical hood, reaction preparation hood, -20 freezer, refrigerator, and many miscellaneous tubes, holders, containers, markers, etc. There is a computer (Apple) with Internet access and a printer. In an effort to limit the items going into the lab we ask that you email to yourself any documents you need while working (protocols, publications, notes, etc.) and print them inside the aDNA lab.
- If you do not know how to use any of the equipment, ask someone who does. If you have problems with any of the equipment, notify the Genomic Resources Collection Manager immediately.
- Everything in the refrigerators and freezers must be clearly labeled with the PI's name, your name, and a description of contents. Drawers and storage containers also need to be labeled with your name (please use removable tape or labels). When you are done with your research and use of this facility, everything needs to be removed unless you have made arrangements with the Genomic Resources Collection Manager.

**EMERGENCY CONTACTS:**

Kyndall Hildebrandt, 474-6914, Rm. 008

Kevin May, 474-5358, Rm. 007

Your PI

In case of an emergency, contact UAF Dispatch (474-7721) or call 911 if there is an immediate threat of harm to life or property.

User's Printed Name

User's Signature

Date

Supervising PI Signature

Department

Date

**GENOMIC RESOURCES COLLECTION MANGER:**

Please contact Kyndall Hildebrandt [kbhildebrandt@alaska.edu](mailto:kbhildebrandt@alaska.edu) or x6914, if you have any questions or concerns.