

# Analysis of ancient DNA expanding the toolbox

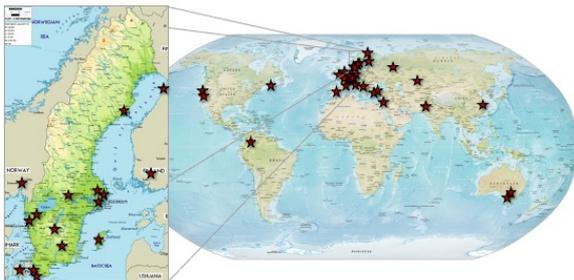
## Studying the past with ancient DNA

DNA carries information about living organisms and can be preserved for hundreds or thousands of years, providing a valuable source of information about life in the past, especially in combination with other type of analysis. DNA is being used to investigate sex, family relationship, migration, and ancestry of humans. Ancient DNA analysis is also valuable for analyzing of remains of wild and domesticated animals.



## The SciLifeLab Ancient DNA unit

Analysis of ancient DNA requires dedicated laboratories, procedures and data analysis. The ancient DNA unit provides full support with both laboratory procedures and data analysis to e.g. academic researchers, museums and contract archaeologists. We routinely analyze osteological material and have users across the world, and is a part of Swedish universities and the European Iperion Heritage Science infrastructure.



Maps of SciLifeLab Ancient DNA users



## Ancient DNA - not just in bones

The Ancient DNA unit is providing and developing a range of analyses of different types of samples and materials:

**Hair and soft tissue** – an alternative source of DNA when osteological material is not available or suitable for analysis.

**Microorganisms** – we have new analysis pipelines for identifying DNA from microorganisms, including pathogens, in e.g. human and animal remains.

**Demography** – we can provide basic analysis to investigate ancestry of an individual.

**Dental calculus** – allow analysis of oral microorganisms and food items. Service is in development.

**Sediment** – Sediment cores provides a way to study which organisms, e.g. plants, that was present in the catchment at different points in history

**Plant material** – Waterlogged and desiccated plant material can preserve DNA for long periods of time, allowing analysis of flora, incl. crops, in the past. Service is in development.

**Protein analysis** – An alternative for e.g. animal species identification, and a source of information when DNA is degraded. Service is in planning.

## Contact information

You are welcome to contact us to learn more about our services or to discuss projects.

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