SedDNA Meeting

Report of Contributions

Contribution ID: 1 Type: not specified

Going north: postglacial arrival of animals to N Fennoscandia in relation to vegetation changes

Tuesday 6 June 2023 13:20 (20 minutes)

Presenter: ALSOS, Inger (The Arctic University, Norway)

Session Classification: Symposium

Contribution ID: 2 Type: not specified

Welcome & outline of the day

Tuesday 6 June 2023 13:00 (20 minutes)

Presenters: STOOF-LEICHSENRING, Kathleen; HERZSCHUH, Ulrike

Session Classification: Symposium

Contribution ID: 3 Type: **not specified**

Benchmarking Variables Affecting Taxa Classification of Ancient Metagenomics Data

Tuesday 6 June 2023 14:20 (20 minutes)

Presenter: WANG, Yucheng (University of Cambridge, UK)

Session Classification: Symposium

Contribution ID: 4 Type: **not specified**

Paleogenetic perspectives on life and climate history in Southeast Alaska

Tuesday 6 June 2023 13:40 (20 minutes)

Presenter: LINDQVIST, Charlotte (University at Buffalo, USA)

Session Classification: Symposium

Contribution ID: 5 Type: **not specified**

Vegetation dynamics from sedimentary ancient DNA

Tuesday 6 June 2023 14:00 (20 minutes)

Presenter: HERZSCHUH, Ulrike (Alfred Wegener Institute Potsdam, Germany)

Session Classification: Symposium

Contribution ID: 6 Type: **not specified**

Recovering ancient DNA from the seafloor to reconstruct Antarctic ecosystems

Tuesday 6 June 2023 16:20 (20 minutes)

Presenter: ARMBRECHT, Linda (University of Tasmania, Australia)

Session Classification: Symposium

Contribution ID: 7 Type: **not specified**

Microbial functional genes recovered with metagenomics from sedimentary archives

Tuesday 6 June 2023 16:40 (20 minutes)

Presenter: CAPO, Eric (Instituto de Ciencias del Mar, Spain)

Session Classification: Symposium

Contribution ID: 8 Type: **not specified**

Assessing the response of microeukaryote communities to anthropogenic changes in temperate lakes through the sedDNA approach

Tuesday 6 June 2023 17:00 (20 minutes)

Presenter: BAROUILLET, Cecilia (INRAE, France)

Session Classification: Symposium

Contribution ID: 9 Type: not specified

Sedimentary ancient DNA reveals plankton community shifts in subarctic western Bering Sea back to the Eemian interglacial

Tuesday 6 June 2023 17:40 (20 minutes)

Presenter: STOOF-LEICHSENRING, Kathleen (Alfred Wegener Institute Potsdam, Germany)

Session Classification: Symposium

Contribution ID: 10 Type: not specified

SedaDNA in Polar Paleoceanography

Tuesday 6 June 2023 17:20 (20 minutes)

Presenter: DE SCHEPPER, Stijn (Norce, Norway)

Session Classification: Symposium

Contribution ID: 11 Type: not specified

Welcome & outline of the day

Wednesday 7 June 2023 08:55 (5 minutes)

Presenter: KATHLEEN STOOF-LEICHSENRING, Ulrike Herzschuh, (Alfred Wegener Institute Potsdam, Germany)

Contribution ID: 12 Type: not specified

Ancient DNA damage accumulation in time-series data

Wednesday 7 June 2023 09:00 (20 minutes)

Presenter: PEDERSEN, Mikkel (University of Copenhagen, Denmark)

Session Classification: Symposium

Contribution ID: 13 Type: not specified

From where, from when and how? Assessing the provenance and spatiotemporal fidelity of sedimentary DNA

Wednesday 7 June 2023 09:20 (20 minutes)

Presenter: EPP, Laura (University of Konstanz)

Session Classification: Symposium

Contribution ID: 14 Type: not specified

Hunting for the causes and consequences of mammoth extinction on Wrangel Island

Wednesday 7 June 2023 09:40 (20 minutes)

Presenter: HEINTZMAN, Pete (Stockholm University, Sweden)

Session Classification: Symposium

Contribution ID: 15 Type: not specified

Can de-extinction become real?

Wednesday 7 June 2023 10:00 (20 minutes)

Presenter: HOFREITER, Michael (University of Potsdam)

Session Classification: Symposium

Contribution ID: 16 Type: not specified

Population genetics from sediments: challenges and perspectives

Wednesday 7 June 2023 11:20 (20 minutes)

Presenter: VERNOT, Benjamin (Max Planck Research Group for MPI Evolutionary Anthropology,

Germany)

Session Classification: Symposium

Contribution ID: 17 Type: not specified

Bioinformatic Resources for Ancient Metagenomics

Wednesday 7 June 2023 11:00 (20 minutes)

Presenter: YATES, James Fellows (Max Planck Institute for Evolutionary Anthropology, Germany)

Session Classification: Symposium

Contribution ID: 18 Type: not specified

Ecological insights derived from contemporary spatio-temporal eDNA analyses

Wednesday 7 June 2023 11:40 (20 minutes)

Presenter: CREER, Simon (Bangor University, UK)

Session Classification: Symposium

Contribution ID: 19 Type: not specified

Some thoughts for using ⊠plant sedDNA to reconstruct climate⊠ by adapting the pollen-based method CREST

Wednesday 7 June 2023 12:00 (20 minutes)

Presenter: CHEVALIER, Manuel (University of Bonn, Germany)

Session Classification: Symposium

Contribution ID: 20 Type: not specified

Detecting critical transitions with paleo-records: a multivariate approach

Wednesday 7 June 2023 12:20 (20 minutes)

Presenter: TARANU, Zofia (Université de Montréal, Canada)

Session Classification: Symposium

Contribution ID: 21 Type: not specified

SedDNA Community Meeting

Wednesday 7 June 2023 13:40 (40 minutes)

Presenter: CAPO, Eric

Contribution ID: 22 Type: not specified

Welcome & outline of the day

Thursday 8 June 2023 08:55 (5 minutes)

Contribution ID: 23 Type: not specified

Labtours

Thursday 8 June 2023 09:00 (1 hour)

Contribution ID: 24 Type: not specified

Method Discussion

Thursday 8 June 2023 10:30 (1h 30m)

We will have nine break out groups. Please find your breakout group on the information board next to the registration desk.

Break out room Moderator Room

- 1 Katharina Dulias A45 S 001 lecture hall
- 2 Weihan Jia A45 S 208 Office Ulrike
- 3 Kevin Nota A45 S 002 Library
- 4 Josefine Weiss A5 Meeting Room
- 5 Tuluğ Ataman A45 S 003 right
- 6 Sam Hudson Lecture Hall Haus H
- 7 Emilie Saulnier-Talbot A45 S 003 left
- 8 Jordan Von Eggers Foyer Haus H
- 9 Barbara Moguel A43 Conference Room

Contribution ID: 25 Type: not specified

Ancient DNA and network analyses - joint project initiative

Thursday 8 June 2023 13:00 (2 hours)

This will be a brainstorming workshop where we can share our ideas about potential future collaborative projects on this and other topics. Please bring slides on: (maximum 3 slides)

- 1.Examples of species interactions inferred from sedaDNA
- 2. Examples of network analysis using environmental/ancient genomic data
- 3. Funding opportunities for collaborative projects
- 4.Further joint project ideas in other sedaDNA topics

During the workshop we will work on this document, you can already check and add ideas now. If you want to share slides, you can add them there or bring on your stick.

Presenter: HERZSCHUH, Ulrike

Contribution ID: 26 Type: not specified

Hands-on workshop metagenomics

Thursday 8 June 2023 15:30 (2h 30m)

The hands-on workshop will be about the data analyses pipelines of metagenomic shotgun data. This workshop is recommended for students and early PhDs.

Co-author: STOOF-LEICHSENRING, Kathleen

Presenter: STOOF-LEICHSENRING, Kathleen

Contribution ID: 27 Type: not specified

Modelling workshop on detecting aquatic transitions in sedDNA records (PAGES PaleoECOGEN))

Thursday 8 June 2023 15:30 (2h 30m)

The PaleoECOGEN workshop will be split into parts:

- The first part (Thursday) will be an R workshop, open an to all people, on methods used to detect critical transitions. In particular, the workshop will present Online Dynamic Linear Models (Online DML) for uni- and multivariate datasets.
- The second part (Friday), again open to all, will be a bring your own data session followed by a group discussion to brainstorm on potential future collaborative projects. Participants will thus be able to apply the R code from part one of the workshop to their own data (2 hours), and then regroup to discuss commonalities about questions and datasets (1 hr), ending off with a brief discussion of research questions that could be applied to our combined datasets in the future (1 hr).

Link for workshop content - please download everything and save on your computer: xxx

Presenter: TARANU, Zofia

Contribution ID: 28 Type: not specified

Hands-on Workshop metabarcoding

Thursday 8 June 2023 13:00 (2 hours)

Implementation of a DNA metabarcoding pipeline using obitools4

OBITools have been around for over 15 years. OBITools4 is their latest version, with a considerable improvement in terms of computational efficiency and ease of installation. During this tutorial, based on the analysis of a toy dataset, we will review the principles behind OBITools, the main algorithms they implement, their advantages and disadvantages.

This workshop is recommended for students and early PhDs.

Presenter: COISSAC, Eric

Contribution ID: 29 Type: not specified

Modelling workshop on detecting aquatic transitions in sedDNA records (PAGES PaleoECOGEN))

Friday 9 June 2023 09:00 (4 hours)

The PaleoECOGEN workshop will be split into parts:

- The first part (Thursday) will be an R workshop, open an to all people, on methods used to detect critical transitions. In particular, the workshop will present Online Dynamic Linear Models (Online DML) for uni- and multivariate datasets.
- The second part (Friday), again open to all, will be a bring your own data session followed by a group discussion to brainstorm on potential future collaborative projects. Participants will thus be able to apply the R code from part one of the workshop to their own data (2 hours), and then regroup to discuss commonalities about questions and datasets (1 hr), ending off with a brief discussion of research questions that could be applied to our combined datasets in the future (1 hr).

Presenter: TARANU, Zofia