PhD position "Bioinformatic pipelines for metagenomic data from sedimentary ancient DNA" (m/f/d)

Background
How ongoing warming effects Arctic ecosystems is uncertain also because ecological time-series are lacking. Sedimentary ancient DNA (sedaDNA) is a new method to decipher past taxonomic compositional changes. This project will generate and apply bioinformatic pipelines for a comprehensive (paleo)metagenomic data analyses. Thereby, established bioinformatic pipelines will be tested, extended or replaced by newly established analytical steps which will help to improve trimming processes, taxonomic classification and visualization of ancient metagenomic DNA data. These pipelines will be used to synthesize existing palaeogenomic datasets in order to track past ecological changes at ecosystem scale.

Tasks
You will
- select, adapt, document and apply bioinformatic analyses tools suitable for the investigation of metagenomic data from sedimentary ancient DNA
- develop new routines and concatenated pipelines for the analyses (paleo)metagenomic data

Requirements
- Master or equivalent degree in (bio-)informatics, (bio-)mathematics, data science, biology (or related disciplines)
- Good knowledge in bioinformatic data analyses and programming
- Basic knowledge in biology/genetics and statistics
- Very good English language skills (written and spoken) and good communication, team and writing skills
- Experience in in R or Matlab programming is a benefit.
- Willingness to join field works in remote arctic is of advantage.

Further Information
For further information, please contact Prof. Dr. Ulrike Herzschuh (Ulrike.Herzschuh@awi.de; +49(331)288-2165) or Dr. Kathleen Stoof-Leichsenring (Kathleen.Stoof-Leichsenring@awi.de; +49(331)288-2184)

The position is limited to 3 years. The salary will be paid in accordance with the Collective Agreement for the Public Service of the Federation (Tarifvertrag des öffentlichen Dienstes, TVöD Bund), up to salary level 13 (66%). The place of employment will be Potsdam.
All doctoral candidates will be members of AWI's postgraduate program **POLMAR** or another graduate school and thus benefit from a comprehensive training program and extensive support measures.

**The AWI is characterised by**
- our scientific success - excellent research.
- collaboration and cooperation - intra-institute, national and international, interdisciplinary.
- opportunities to develop – on the job, aiming at other positions and beyond AWI.
- a culture of reconciling work and family – an audited and well-supported aspect of our operation
- our outstanding research infrastructure – ships, stations, aircraft, laboratories and more.
- an international environment – everyday contacts with people from all over the world.
- having an influence – fundamental research with social and political relevance
- flat hierarchies – facilitating freedom and responsibility
- exciting science topics, with opportunities also in technology, administration and infrastructure

Equal opportunities are an integral part of our personnel policy. The AWI aims to increase the number of female employees and therefore strongly encourages qualified women to apply.

Disabled applicants will be given preference when equal qualifications are present.

The AWI fosters the compatibility of work and family in various ways and has received a number of awards as a result of this engagement.

**We look forward to your application!**
Please submit your application, including (1) a letter of motivation, (2) CV and copies of relevant certificates (master degree; training), (3) two letters of recommendation or the contact information of two references and (4) a list of publications, by **February 17th, 2021** exclusively online.

Selected candidates will be invited to present their research ideas and motivation during the "Annual recruitment days", planned from **01. to 23. April 2021 and expected to be online.**

Reference number 21/35/D/INSPIRES-b

**APPLY NOW!**