

## Institut für Vogelforschung

"Vogelwarte Helgoland"
Wilhelmshaven



## Bioinformatician (E14 TV-L, 100%) (m/w/d) at the Institute of Avian Research (Wilhelmshaven, Germany)

We are hiring - come and work with us!

We are recruiting a bioinformatician for (i) the establishment of supercomputing services (HPC), (ii) the addition of bioinformatic expertise as well as support and development of services in the field of research data management, and (iii) setting up own research at the Institute of Avian Research (IAR).

The IAR is a research center in the portfolio of the Lower Saxonian Ministry of Science and Cultural Affairs. The headquarter is located in Wilhelmshaven. The main research areas are bird migration and life history biology. A field station with one of the world's oldest continuously operated trapping gardens is located on the island of Helgoland. In addition, the IAR houses the Bird Ringing Centre for Northwest Germany.

As part of the institute's goal to strengthen bioinformatic approaches, we aim to establish high-performance computing, extend storage resources and complement research programms. The successful candidate therefore will spearhead the high-performance computing services and research data management together with colleagues from the IT team, support the bioinformatic analyses of various research projects, and set up a personal research line. Funding for the position is secured for 5 years, with the aim to extend. The starting date is negotiable, but the sooner the better.

## Tasks

- realise, develop, maintain and document central services in the field of high performance computing
- establish, develop, document and use analytical workflows in the field of evolution and/or population genomics
- support scientists in designing, planning, establishing and configuring of research data services and statistical evaluations
- organise workshops to enable employees of the institute and national and international cooperation partners to use the established services
- advise on and/or (co-)supervise bioinformatic analyses, development of analytical pipelines, their interpretation and visualization, up to publication
- implement novel research on questions of personal interest

## Profile

- PhD in biology, bioinformatics or a related field, ideally with a background in evolutionary genomics
- good knowledge in the field of HPC, preferably both as a scientific user and as administrator
- experience of installing and running bioinformatics tools, such as read mappers (BWA, NGM-LR), filtering / parsing tools (vcftools, samtools), and variant callers (GATK, Sniffles)
- advanced level knowledge of bash and python scripting: developing bioinformatic pipelines involving writing wrappers that use existing tools and manipulate input and output files
- advanced level knowledge of the R programming language: performing statistical analyses (e.g., linear modeling, subsampling) and visualization (ggplot2) of results

- knowledge of development environments (e.g. PyCharm) and distributed version control systems (e.g. Git, Gitlab)
- experience in designing, establishing, and leading large-scale genomics projects and the analysis and interpretation of genomic data
- commitment to organising and teaching workshops and training courses
- excellent communication and teamwork skills
- systematic, efficient and goal-oriented working and management skills
- good knowledge of German and English, including specialist terminology in research and IT, both spoken and written is beneficial
- interest in research on birds
- publication activity and provision of research data
- knowledge on open publication of research data (Open Science, FAIR data principles)
- firm understanding of sequencing data of various technologies and platforms (Illumina, PacBio, Oxford Nanopore) is beneficial, but not required

Applications should include (i) a cover letter describing motivation and relevant experience, (ii) a max 1-page statement of research profile and interest, and (iii) a detailed CV with copies of relevant certificates.

Applications can be sent until 10.06.2022 and should be submitted as a single PDF file to poststelle@ifv-vogelwarte.de. (First) digital interviews are planned to take place on 22.06.2022.

The Institute of Avian Research is an equal opportunity employer, committed to inclusion and diversity and welcomes applications from people from all groups and backgrounds. In addition, the IAR is committed to (i) increase the proportion of women in successful scientific careers (§11 of the Niedersächsisches Gleichberechtigungsgesetz), (ii) promote the equality of (severely) disabled and non-disabled people, and (iii) provide opportunities for people with a migration background. As such, it especially welcomes applications from female scientists, (severely) disabled scientists and immigrated scientists. In case of equal suitability and qualifications, these applications will be given preference. Application costs cannot be reimbursed. Application documents will be destroyed four weeks after the hiring process has been completed. Further information on our data protection policy during the recruitment processes can be found at our website: https://ifv-vogelwarte.de/generischenavigation/datenschutz.