Institut für Vogelforschung

„Vogelwarte Helgoland“

Wilhelmshaven

Postdoctoral researcher (f/m/d) in Bioinformatics in the Cluster of Excellence NaviSense – Institute of Avian Research (IAR), Wilhelmshaven

The IAR is a research center in the portfolio of the Lower Saxonian Ministry of Science and Cultural Affairs and part of the Cluster of Excellence *NaviSense*. The IAR 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.

Paygrade
E13 TV-L

Working hours
100%

Institution
Institute of Avian Research, Wilhelmshaven - Cluster of Excellence NaviSense

Location
Wilhelmshaven

Application Deadline
24.09.2025

First day of work
01.01.2026

Limited
7 years

About us
The newly funded Cluster of Excellence **NaviSense** for the Sensory Basis, Mechanisms, and Impacts of Animal Navigation is a highly collaborative, interdisciplinary research project hosted at the University of Oldenburg and involving national and international partner institutions. As a diverse and international team of scientists from biology, physics, chemistry, computer sciences and social sciences we provide a thorough, interdisciplinary understanding of the senses and mechanisms used by animals to navigate, and how these mechanisms can inspire technology and impact society, ecology, and biodiversity.

NaviSense performs research in the areas of (1) animal navigation mechanisms and their underlying senses, (2) quantum effects at ambient temperature in model systems and biology, (3) ecological and conservation related consequences of animal navigation, and (4) links biological and technical systems through models, algorithms, and devices. The acquired knowledge can help to solve major societal questions related e.g. to the biodiversity crisis, GPS independent navigation, and quantum sensing at ambient temperature. For more information see https://navisense.org/.

The **migration group at the IAR** will work towards understanding how animals detect sensory cues and how they process and integrate these cues to navigate as part of research area (1), and how animals define home, how migratory animals navigate to this home and how their navigation is affected by anthropogenic disturbances as part of research area (3). As a bioinformatician within NaviSense you will establish, develop and document analytical workflows in the field of evolution and population genomics of various migratory study species. The position entails a strong service aspect and you will be the go-to-person for advice in designing, planning and analysis of sequencing strategies and bioinformatics analyses, because many projects within NaviSense will be collaborative and rely on your analytical expertise. Besides collaborating within NaviSense you will implement novel research on questions of personal interest that fit within the overall theme of NaviSense.

Your tasks

- establish, develop, document and use analytical workflows in the field of evolution and/or (comparative) population genomics
- support scientists within NaviSense in designing, planning and configuring of sequencing strategies and bioinformatics analyses because many projects within NaviSense will be collaborative and rely on your advise
- advise on and/or (co-)supervise bioinformatic analyses, their interpretation and visualisation
- implement novel research on questions of personal interest that fit within the overall theme of NaviSense
- collaborate with other researchers on interdisciplinary research projects and publications
- participate in NaviSense events like retreats and seminars to present your research, strengthen scientific discussions and team building
- involvement in teaching e.g. a bioinformatic module within the NaviSense Summer School on Animal Navigation

Your profile

Required skills or qualifications:

- PhD in biology, bioinformatics or a related field
- background in evolutionary genomics
- background in behavioural genomics
- experience in designing, establishing, and leading large-scale genomics projects
- experience in the analysis and interpretation of genomic data
- publication activity and experience in provision of research data
- fluency in spoken and written German and English
- knowledge on open publication of research data (Open Science, FAIR data principles)

Preferable/Desirable:

- enthusiasm for engaging in interdisciplinary and international collaborations
- excellent communication and teamwork skills
- knowledge of sustainable use of biodiversity (genetic resources, samples) is desirable
- previous experience in supervising projects is a bonus
- commitment to organising and teaching workshops and training courses
- systematic, efficient and goal-oriented working and management skills
- interest in research on migratory animals
- dedication for nature conservation and outreach

We offer

- access to a powerful supercomputing service (HPC), a very wide range of expertise, modern equipment and state-of-the-art techniques

- a unique interdisciplinary, collaborative, international and diverse research community and scientific environment
- a supportive and family-friendly environment with flexible working hours

Apply now
Please send your application, including (i) a cover letter describing your 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 along with the names and addresses of at least two references who are familiar with your work in a joint pdf document to **Miriam Liedvogel (miriam.liedvogel@ifv-vogelwarte.de) until 24.09.2025**. You are welcome to let us know which pronouns you use and how we may address you. Online interviews are planned to take place on 01.10.2025.

The IAR 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 unfortunately 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/generische-navigation/datenschutz.