

HiWi jobs available at IOW

Topic 1: Data management

We are looking for someone to support the DNA sequence data management at IOW. Your tasks will include:

- Checking the completeness of provided metadata (i.e. background information and description of the sequencing data sets)
- Checking redundancy between files to save disk space
- Maintaining the mandatory directory and file structure for sequencing data, incl. the migration of old sequencing projects to the new structure
- Sequencing project and bioinformatic software documentation

With this HiWi job you will have the opportunity to acquire / deepen the following skills:

- Use of the linux command line
- Working with git repositories
- FAIR data management
- Implementation of metadata standards
- Use of ontologies
- Working with sequence data archives

If you have prior experience in data management or a computer language, this will be helpful, but it is not required, as long as you bring the necessary enthusiasm for these topics.

Topic 2: Knowledge extraction (AI-model training)

There are still major bottlenecks in the interoperability and reusability of archived sequencing data, mainly because of inconsistent or incomplete metadata. While the necessary information is available as part of scientific publications or other unstructured (i.e. natural) text, it is not machine-readable and therefore not suitable for automated data processing. Using AI-models for knowledge extraction is one approach to address this problem. In this HiWi job you will work on manually annotating unstructured text to develop a gold standard for training such an AI. It is highly interdisciplinary work where you will get insights into molecular biology, sequence data management, knowledge extraction and AI-tools.

If you are interested in one of these topics, please contact Christiane Hassenrück (christiane.hassenrueck@io-warnemuende.de).