

01.02.2023

Open position: Postdoctoral Research Scientist in Metagenomics

We're looking for an enthusiastic Bioinformatician to investigate the evolution and dynamics of microbial communities. The ideal candidate will have experience in metagenomics, population genetics, or comparative genomics (eukaryotic or prokaryotic). You'll work alongside multidisciplinary researchers and have access to cutting-edge infrastructure to develop and apply novel metagenomics approaches. This post is offered as a strategic 3+2 years BBSRC-funded core position. While the successful applicant will work on independent research projects, research is conducted in a collaborative team context.

Project

What is a bacterial species in an ecosystem context? In complex microbiomes, such as the human gut or soils, thousands of pro- and eukaryote species enable a diverse and robust ecosystem. Most of these microbes interact by competing for similar resources, exchanging metabolites, or preying on each other. This can be enabled by adaptive processes that microbial genomes undergo in a matter of years or even weeks. To understand these dynamics, the project will explore microbial genome plasticity by combining classical bioinformatics (assembly, genome binning, gene predictions) and population genetics with recent advances in sequencing technology and deep learning. This work will contribute to developing the next generation of metagenomic analysis at unprecedented resolution, resolving ecoevolutionary processes in a community, and quantifying resilience and functional plasticity in microbial communities.

Requirements and position details

The applicant needs to hold a PhD (or equivalent) in biology, bioinformatics, molecular biology or a related discipline at time of start date with a background and/or interest in at least one of the following subjects:

- Ecology, Evolution, Microbiomes
- Genomics and biodiversity
- Third/next generation sequencing
- Machine Learning

Some exposure to statistics and programming languages (either R, python, Perl, C++, or equivalent) is expected. Specialized skills will be taught and developed through mentorship and collaborations.

How to apply

Interested applicants are encouraged to send their CV and cover letter through the NRP website:

[Postdoctoral Research Scientist in Metagenomics | Earlham Institute](#)

Closing date is Tuesday 27th of February and interview will be held in early March.

The hosting group

The Hildebrand group uses metagenomics to research the diversity, community interactions, and evolution of microbes in communities. We develop our own bioinformatic software to tackle microbiome questions from unique & novel research angles. The group has a joint appointment between the Earlham Institute and Quadram Institute Bioscience, Norwich, UK. Both Institutes are part of the Norwich Research Park (NRP), hosting 17,000 students, 3,000 researchers and clinicians, and over 115 companies. Norwich ranked in the top 10 for UK cities with a beautiful, historical town center and an active gastropub & coffee aficionado scene.

<https://www.earlham.ac.uk/>

<https://falk.science>

Additional information:

Anticipated start date is summer semester 2023 (1.4.2023), though the exact start date is negotiable. The position is open to National and International applicants (EU and worldwide) and funded for 36 months with a possible extension for an additional 24 months. Salary on appointment will be within the range £33,050 to £40,750 per annum depending on qualifications and experience.