



Post-doctoral position in bioinformatics/genome scale metabolic modeling

University of Tartu (UT), Estonia is collaborating with the Center of Food and Fermentation Technologies (CFFT) to develop a platform for the characterization and optimization of microbes.

BACKGROUND

University of Tartu belongs to the top 2% of Universities in the world and ranks 3rd in the QS University Rankings for Emerging Europe and Central Asia. ERA Chair in Synthetic Biology (SynBio) at the University of Tartu is a research group established in 2016 to advance bio-based technologies for energy and chemical production using microorganisms. In collaboration with the CFFT, SynBio group wants to develop a platform for the characterization of next-generation probiotics (NGPs) using genome-scale modeling (GEM) and omics technologies. The characterization of NGPs will be on a single strain level and within consortia.

With an ambition to become an expert in GEM, TU is looking for a new bioinformatics post-doc to help and lead analysis on metabolic modeling and large-scale data analysis. Duration of the project is 2 years.

MAIN DUTIES/RESPONSIBILITIES

As a post-doc in the project, the candidate will have the chance to work on different microorganisms (yeast and bacteria). The candidate will develop and apply different computational approaches, including constraint-based methods for ecosystems, metabolic reconstructions and applies integrative data analysis of large-scale data sets. The candidate will be involved in several smaller projects. Strong interaction with the other bioinformaticians and experimental group will be essential.

Applicants are requested to write a letter, in which they describe their abilities and motivation, accompanied by their curriculum vitae and the names and contact information of at least two referees. Written applications should be sent before March 28th, 2019, by email to: lahtvee@ut.ee. Work will be carried out at the University of Tartu, Estonia.

SUPERVISION

The candidate will be supervised by Dr. Petri-Jaan Lahtvee.

QUALIFICATIONS

We are looking for a highly motivated, critical, and ambitious postdoctoral researcher with a background and experience in computer science (bioinformatics), (bio)physics or (computational) systems biology. The candidate should be flexible and eager to work in a research consortium in a dynamic setting. Ph.D. degree in Bioinformatics / Computational Biology / Biostatistics or equivalent subject is required.

PREFERRED EXPERIENCE

- Prior experience in stoichiometric modeling using genome-scale models.
- Prior experience working with large-scale omics datasets.
- Strong background in statistics.

SKILLS & PERSONAL CHARACTERISTICS

- Organisation and precision in work.
- Openness and an excellent ability to communicate with others.
- Ability to independently solve problems and know when to seek help.
- Strong drive and motivation for personal development.
- Good English language skills.