

Post Doc Position on Promoter Engineering of *Pichia pastoris* for Customised Protein Production

Research field

Yeasts are valuable hosts for production of heterologous proteins. The aim of this project is to identify and engineer promoters of the methylotrophic yeast *Pichia pastoris* that are specific growth conditions in bioreactor cultures, and to validate their performance.



Within this project we aim to develop a *P. pastoris* expression platform that is specifically designed for its performance in non-standard bioreactor setups and cultivation conditions. Gene expression data will be used to identify suitable promoters, which will be further engineered based on computational analysis of their structure. Performance of the newly designed promoters will be evaluated in bioreactors and the best performing will be implemented in the expression platform.

Research will take place in the group "Metabolic and Cell Engineering" at the Institute of Microbiology and Microbial Biotechnology at the University of Natural Resources and Life Sciences Vienna (BOKU) <u>https://boku.ac.at/dbt/immb/research-groups/mattanovich-lab-metabolic-and-cell-engineering</u>

Requirements

- Completed Master and PhD degree (or equivalent) in biotechnology, biochemical engineering, molecular biology, genetics, biochemistry, or similar study.
- Strong background in synthetic biology, molecular biology, yeast metabolism, biochemical engineering or related disciplines.
- Strong practical experience in molecular biology, biochemistry and microbiology requested, and scientific interest in bioreactor cultivation desired.
- Excellent skills in spoken and written English, an organized approach with strong attention to detail and good communication skills with ability to work well in teams.

Application deadline: 26.3.2021 Start: May-June 2021

Please apply by email to <u>birgit.marckhgott@boku.ac.at</u> with a single PDF file containing: Ref. No. **#01_2021**

a detailed CV and publication list, a motivation letter, copies of university degree documents, contact information (phone number and email) and contact details of up to 3 academic referees

Contact: Prof. Dr. Diethard MATTANOVICH