



# Post Doc Position on Algae Synthesis of Biomolecules

## The Project

Algae synthesize important biomolecules. This project aims to analyze, annotate and characterize a biosynthetic pathway connected to the Golgi apparatus of algae. Respective genes coding for the envisioned pathway shall be identified from genomics and proteomics data, available either from public data sets and/or from Golgi isolations and proteome data, established during this project. Enzymatic activities shall then be expressed and characterized in a yeast model.

The basic research project is fully funded by the Austrian Science Fund (FWF).

Research will take place at the Institute of Microbiology & Microbial Biotechnology, Department of Biotechnology at the University of Natural Resources and Life Sciences Vienna (BOKU)

<https://boku.ac.at/dbt/immb/>

## Requirements

We are looking for

- ❖ a solution-oriented, persistent researcher with an independent, well-structured and goal-oriented working style;
- ❖ PhD or equivalent degree in Biotechnology, Molecular Biology, Biochemistry, Bioinformatics or a similar field of study,
- ❖ strong practical experience in molecular biology techniques and bioinformatics tools to analyze sequencing and proteomics data, experience in organelle preparations desired;
- ❖ Fluent with basic and advanced computational tools for processing and annotating sequencing data.
- ❖ excellent skills in spoken and written English

## Main duties

- ❖ Identification of a specific biosynthetic pathway from algae from genome sequences and proteomics data
- ❖ Process raw sequencing data into annotated information
- ❖ Preparation of the Golgi apparatus from algae and yeast
- ❖ Proteomics sample preparation and data analysis
- ❖ Cloning of genes and expression in yeast
- ❖ Characterization of the enzymatic activities using suitable methods
- ❖ Publication of data
- ❖ Co-supervision of Bachelor or Master students

**Application deadline: 24.11.2021** **Start: Jan 2022** **Scientific Contact:** Hans Marx

Please apply by email to [birgit.marckhgott@boku.ac.at](mailto:birgit.marckhgott@boku.ac.at) with a **single PDF file** containing:

**Ref no #08\_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