



ACIB – the Austrian Centre of Industrial Biotechnology – is one of the leading research centres in the field of industrial biotechnology. ACIB is dedicated to joint research at the industrial-academic interface. Seven Austrian Universities and more than 50 leading industry partners are working together within the ACIB research program.

ACIB offers in Vienna a

## PhD Position

### Yeast hybrids for improved protein production

Working group **Prof. Diethard Mattanovich**  
Position for **three years, starting with March/April 2019**

#### Researchfield

Most yeasts can undergo a sexual cycle including mating, meiosis, and spore formation, leading to a recombination of the genomes of the mating partners. While this cycle is well understood for a few model yeasts, there is still a lot of open questions for many yeasts of biotechnological interest, such as *Pichia pastoris*. We have recently published the first stable mating-type strains and an in-depth characterization of mating regulation (Heistingner et al. 2018. *Mol Cell Biol.* 38:2 e00398-17). This opens huge opportunities to recombine natural genomes, engineer complex genetic traits and evolve production strains.

The aim of this project is the characterization of genetic traits determining the protein production potential of *Pichia pastoris* and related species. The method spectrum will include crossing of yeast strains, analysis of the offspring with classical genetic methods, next-generation sequencing and analysis of quantitative trait loci by QTL mapping as well as state of the art molecular biology methods like Golden Gate cloning and CRISPR/Cas9.

Research will take place in the working group “Microbial Biotechnology” at the Department of Biotechnology of the University of Natural Resources and Life Sciences Vienna (BOKU)  
<http://www.biotec.boku.ac.at/15653.html>

#### Your requirements

- Completed Master’s degree (or equivalent) in biotechnology, molecular biology, genetics, biochemistry, or similar study.
- Strong background in molecular and cell biology, biochemistry and biotechnology.
- Strong practical experience in molecular biology requested.
- 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.

We are looking forward to receiving your application comprising a detailed CV, publication list, copies of your university degree documents, contact information (phone number and email) and contact details of up to 3 academic referees.

Please submit the application via our application portal [application.acib.at](http://application.acib.at) (ref. 11\_2018)

#### Application Deadline: 15.01.2019