

Programme Overview

The hands-on-pichia course will intensify your experience in:

- designing of expression cassettes
- strain design & genome engineering (including methanol-free inducible strains)
- exploiting library technologies
- applying screening concepts and methods
- performing molecular and physiological strain characterization
- computing feed strategies and designing process control schemas
- utilising advanced evaluation of bioprocess data
- understanding factors affecting product quantity and quality
- Detailed timetables will be handed out with the course materials.

Sunday, 2 September 2018, from 16:00 pm to 18:00, afterwards small Get-Together

Overview on Evolution of Pichia Technologies & a Get-Together Reception

The course participants will enjoy an introduction covering important milestones in the development of *Pichia pastoris* (*Komagataella phaffii*) towards an FDA-approved, safe (GRAS), well established and highly competitive expression host with strong secretory capacities for the manufacture of pharmaceuticals, feed and food ingredients, cosmetics as well as biomaterials and industrial enzymes for biocatalysis and diagnostics. The Reception provides the opportunity to informally get to know other participants and course specialists.

Monday, 3 September 2018, from 9:00 to 18:00, afterwards dinner in old town

Expression Strategies: Starting the Right Way

Participants will acquire skills necessary to decide between different available host strains, vectors and other elements of *Pichia* expression systems, and , thus, better understand their influence on different stages of development from molecular strain construction to the cultivation process in a bioreactor.

Tuesday, 4 September 2018, from 9:00 am to 16:00, afterwards excursion and dinner

Physiology and Screening of Production Strains

Participants will learn the importance of screening in the development of high-level *Pichia* production strains and to recognise screening setups that are most suited to the different phenotypes and promoters used.

Wednesday, 5 September 2018, from 9:00 to 18:00 pm

Making Use of the Full Potential of Molecular Biology

Participants will learn how to develop a suitable process strategy combining the requirements of target product and the chosen molecular design. In conclusion, specific needs of the participants as well as possibilities for further collaboration within the *Pichia*-community will be discussed.

Thursday, 6 September 2018, from 9:00 for about 90 min

Post course meeting – Open question session & discussion feedback, final lab results

We want to invite participants, who have not departed, to a final discussion round.

Own Laptop

We kindly ask you to bring your own laptop to perform some of the exercises. Please let us know if this is not possible.

Internet Access

Wireless Internet access will be available in the seminar room, and the pass code can be obtained at the registration desk.

Latest Information Updates

<http://www.hands-on-pichia.com>