



Post-doc in yeast strain engineering

18 months post-doc

Toulouse White Biotechnology, UMS INRA INSA CNRS 1337, Toulouse, France

Strain engineering team

Job description

The project is part of IBISBA European project “Industrial Biotechnology Innovation and Synthetic Biology Accelerator”, organised into 8 work packages: five networking activities (WP1-WP5), two joint research activities (WP6-WP7) and one WP dedicated to consortium coordination and project management (WP8).

The joint research project (WP6) aims to improve interoperability among European industrial biotechnology operators. It focuses on the various steps of the DBTL (design, build, test, learn) cycle and simultaneously demonstrates the capacity of the IBISBA 1.0 network to perform collaborative work in a framework of standardised and shared protocols and harmonised procedures.

A multi-partner task force will perform DBTL cycle on host strains used in biotechnology. Three partners are involved, engineering the same metabolic pathway in two host strains. TWB as INRA partner will work with the yeast *Saccharomyces cerevisiae*.

In the build step, we will use a range of technical operations (e.g. DNA synthesis, assembly and genome engineering using for example CRISPR-Cas9), employing or developing standard operating protocols that will form part of the network shared assets. In the Test phase, we will assess the strain performances in bioreactors and tackle scale-up issues.

The candidate will join TWB strain engineering team and will work in interaction with bioprocess and analytics teams.

Job knowledge and skills

Applicants should have a PhD and a strong background in metabolic and molecular engineering as well as in yeast genetics, with experience in state-of-the-art synthetic biology techniques. Experience with yeast fermentation process and/or analytics is a plus but is not mandatory.

We are looking for candidates with good communication skills and team spirit, with the ability to work independently. Fluency in English, both written and spoken, is a requirement for this position. Experience in multi-partners collaborations will be also strongly appreciated.

Send application to twb-recrutement1@inra.fr before 10/03/2019.