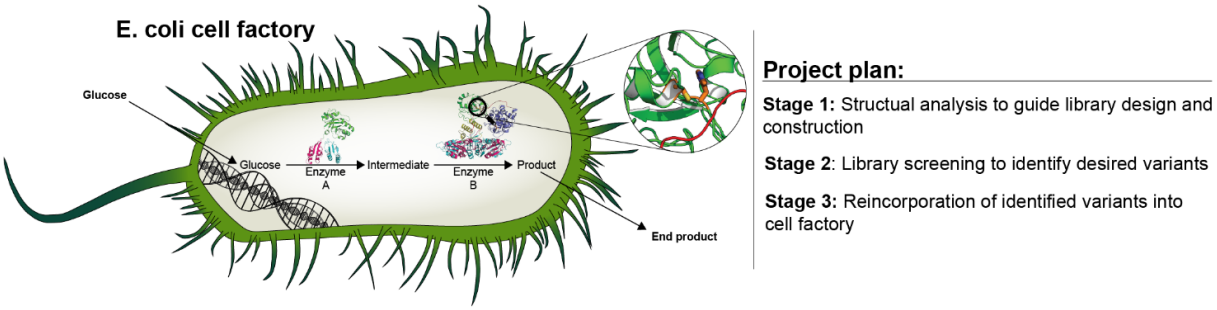
Industrial M.Sc. project in protein engineering

- *Are you excited to pursue your Master thesis in a start-up biotech company which focuses on sustainable production of biochemicals?*
- *Do you want to gain hands-on experience in state-of-the-art protein engineering tools?*
- ***Cysbio ApS is offering a M.Sc. Project in protein engineering starting from Q1 of 2022***

About the project

Cysbio specializes in metabolic engineering to make *E. coli* cell factories producing biochemicals. The advertised project is centered around engineering one or more enzymes along the desired product pathway to optimize product yield and titer in the resulting cell factory **(Fig 1 left)**. The project is a classic protein engineering project and working in strong collaboration with our expert scientists you will: 1. Analyze the relevant literature and protein structures to design a library of protein mutants using state-of-the-art bioinformatic and molecular biology tools. 2. Develop a screening assay to identify variants from the library with the desired properties. And 3. characterize and incorporate the identified variants into the relevant cell factory to quantify the effect of the introduced mutations on the production of the end-product **(Fig. 1 right)**.



What we offer

The opportunity to learn modern protein and bacterial strain engineering techniques including several molecular biology techniques, protein production and screening as well as fermentation in an industrial setting. You will be working in close collaboration with our experts in the field and be part of a young and dynamic team. We recently relocated to new facilities in DTU Science Park in Hørsholm.

Your profile

- You are pursuing a master's degree in the field of Biochemistry, Biotechnology or similar.
- You have knowledge of common molecular biology techniques such as PCR, restriction cloning, Gibson assembly.
- Hands on experience in the above methods is highly desired.
- You have a good understanding of protein chemistry and structure.
- Knowledge about fermentation processes is nice to have.
- You are a team player and attentive to detail.
- You are fluent in English (spoken and written).

How to apply

Please submit a single pdf-file to careers@cysbio.com and include CB21MT1 in the subject line. The application should contain in this particular order: your application and *curriculum vitae*, your Bachelor and Master grades, list of references and recommendation letters if available.

The application deadline is December 14th, 2021, but applications will be evaluated as they are received.

Contact

If you have any questions about the position, please contact Sebastian Brøndum (ssb@cysbio.com)