



Bioprocess for testing engineered cho cell lines using single-use bioreactors

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BIOPROCESS FOR TESTING ENGINEERED CHO CELL LINES USING SINGLE-USE BIOREACTORS

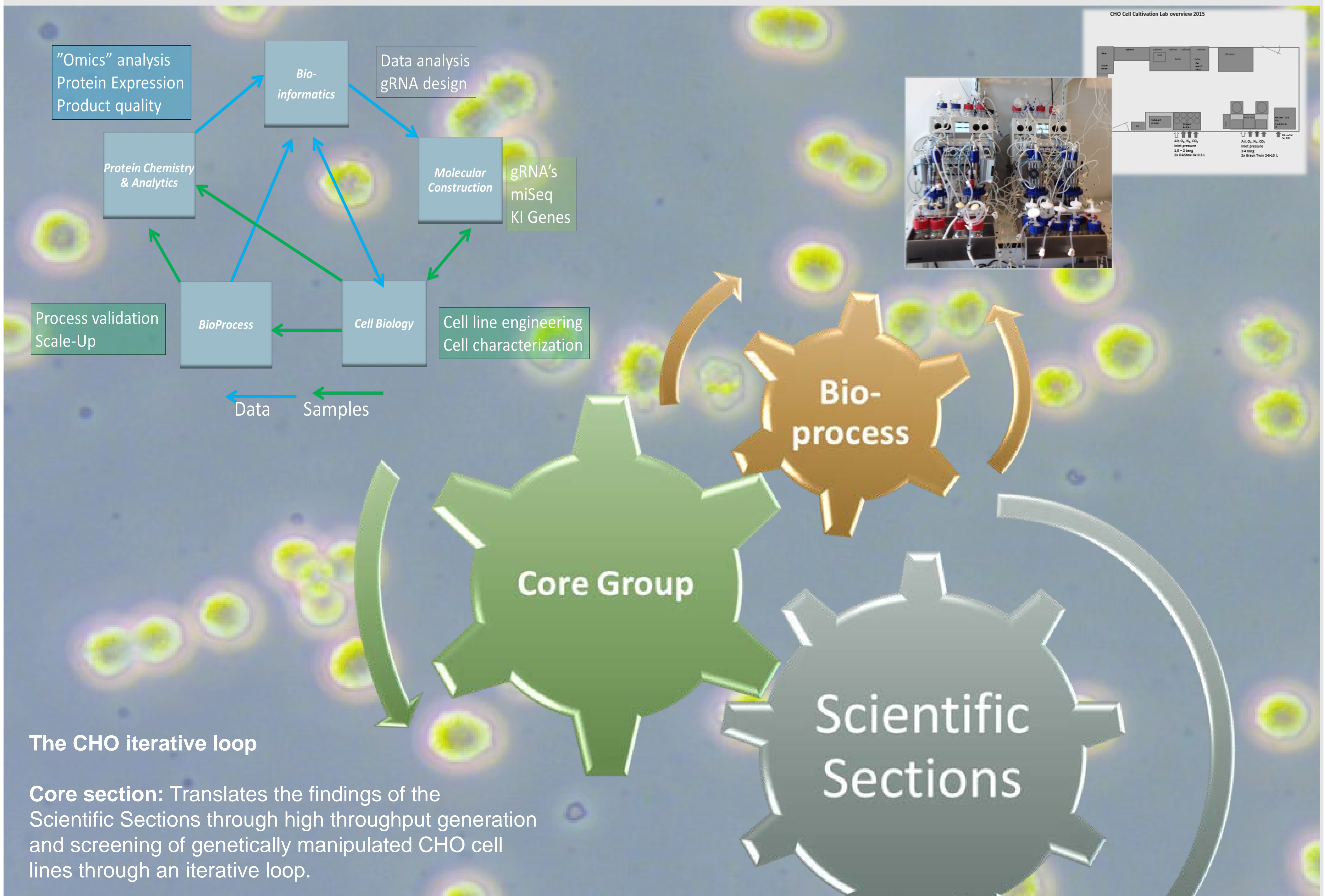
Marianne Decker

THE PURPOSE

Quality verification of engineered cell lines with improved technological qualities suited for industrial production of therapeutic proteins. Parameters in focus for optimization are homogenous glycosylation, fast growth, limited apoptosis, high yield and facilitated downstream processing.

THE KEY ACTIVITIES

- 1) Set up a bioprocess lab with the most suited equipment and scale – Start May 2014
- 2) Set up standard bioprocess process: Testing 1-4 cell-lines per month for testing bioprocess cell-line technological qualities
- 3) Generate data for mathematical modelling including growth, morphology, apoptosis and multi-omics



The CHO iterative loop

Core section: Translates the findings of the Scientific Sections through high throughput generation and screening of genetically manipulated CHO cell lines through an iterative loop.

THE PERSPECTIVES

The CHO research and Core sections at Center for Biosustainability (CFB) operate in the space between industry and university, performing basic research aimed at publications as well as translational research aimed at commercialization (e.g. out-licensing, establishment of spin-off companies etc.).

The CHO project at CFB is constantly looking for collaborators to initiate projects for the benefit of both parties and for the CHO-based industrial production of therapeutic proteins.



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