CyanoFactory: An Emerging Technology for Solar Fuel
The Knowledge Base

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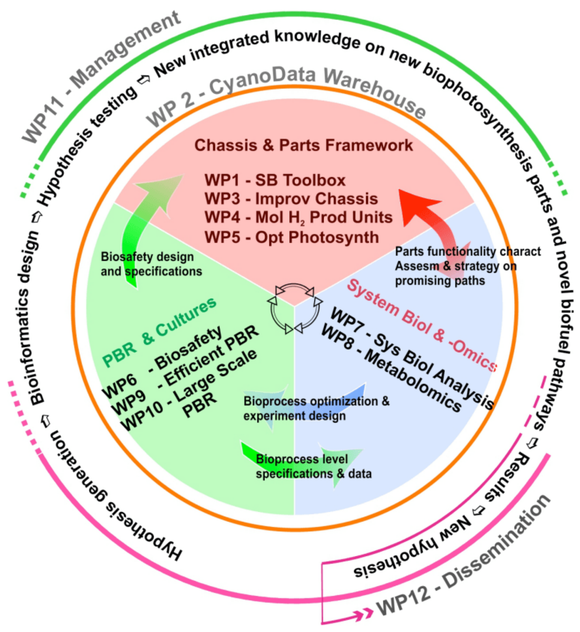
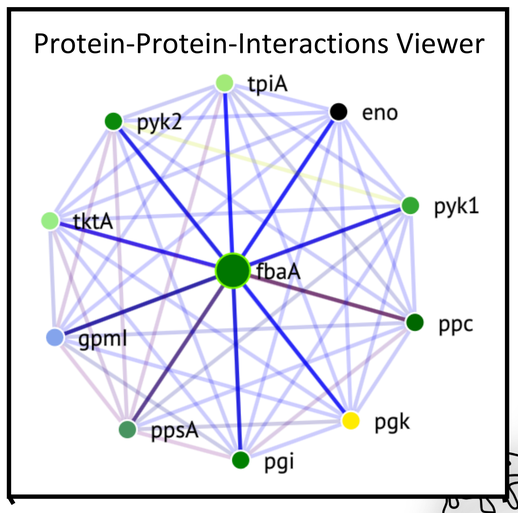
The development of efficient ways to produce renewable energy and biofuels is becoming a more and more important research topic. Therefore the research project CyanoFactory was founded by the European Union consisting of ten leading partners to achieve this goal.
Synthetic biology based methods and systems biology grounded metabolic analyses are employed to improve the hydrogen production of the model organism *Synechocystis* sp. PCC 6803. Further more the research is targeting the design of highly efficient photobioreactors.
In our group, a **knowledge base** based on a data warehouse system is developed to improve the collaboration between the research partners, to facilitate knowledge generation by data integration, cross-linking and modelling, and finally for dissemination.





Uppsala Universitet

Project Coordination, Synthetic Biology and improvement of Biofuel output

University of Sheffield

Analyses of the purpose designed cyanobacterial cells via proteomics and massspectrometry

Ruhr-University Bochum

Improvement of photosynthetic efficiency towards H_2-production and metabolic engineering

KSD Innovation GmbH

Development of an efficient photobioreactor unit

Instituto de Biologia Molecular e Celular

Improvement of chassis growth, functionality and robustness

Universidad Politécnica de Valencia

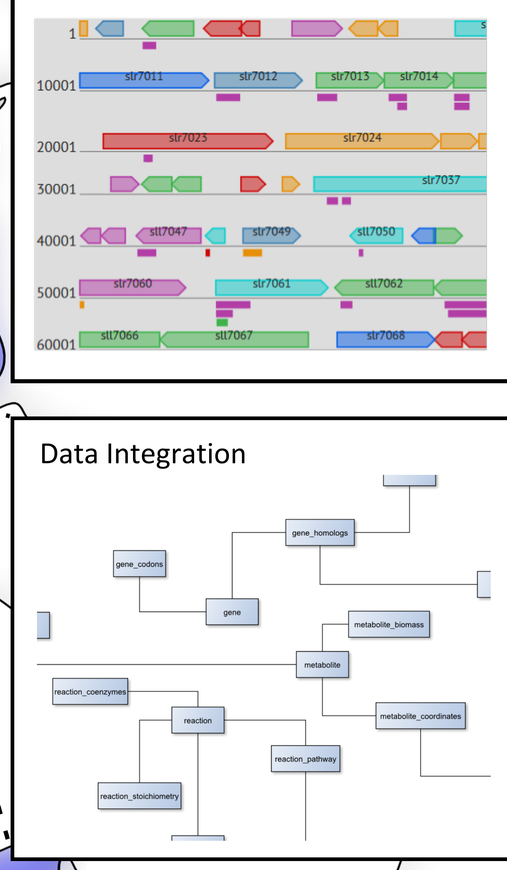
Metabolic modelling of engineered cells

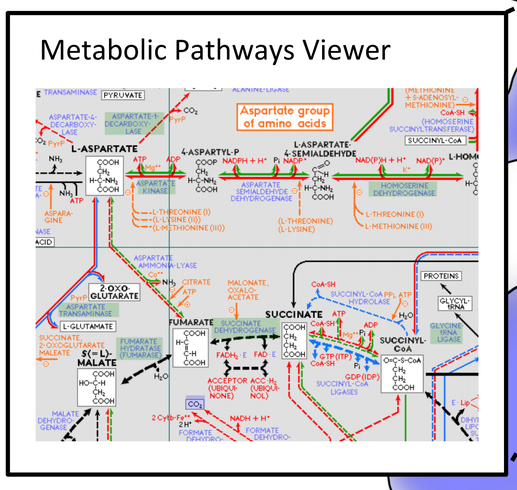
CNR-ISE & M2M Engineering S.A.S.

Assembly and performance assessment of a larger prototype photobioreactor system

University of Ljubljana

Biosafety





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