

Cyanobacterium *in silico* 2015
Workshop of the international CyanoNetwork
January 28–30, 2015, Brno, Czech Republic

Final program

Wednesday, Jan 28

14:00 – 18:00 Presentations by the local CyanoTeam

Jan Červený, Czech Globe

Ultradian metabolic rhythms in cyanobacteria

Thomás Zavřel, CzechGlobe

*Characterization of photoautotrophic growth of *Synechocystis* sp. PCC 6803*

Ralf Steuer, Humboldt University Berlin

Large-scale reconstructions of cyanobacterial metabolism

Stefan Müller, CzechGlobe

Metabolic optimality: enzyme allocation and kinetics

David Šafránek, Masaryk University Brno

A comprehensive web-based platform for cyanobacterial processes

Thursday, Jan 29

09:00 – 13:00 Presentations by the international CyanoNetwork (I)

09:00 – 10:40 Session 1: Physiology

Robert Burnap, Systems and photosystems: cellular limits of autotrophic productivity in cyanobacteria

Thomas Roitsch, Physiological phenotyping to analyse abiotic and biotic interactions

Maria Sinetova, Anna Zorina, Kirill Mironov, Regulatory systems in Synechocystis

11:00 – 12:40 Session 2: Modeling

Jiri Jablonsky, Multi-level kinetic model explaining metabolic regulation in cyanobacteria

Henning Knoop, Analyzing the metabolic network of *Synechococcus elongatus* PCC 7942

Christoph Flamm, Lumping together atom-to-atom mappings using rewrite rule composition

Frantisek Muzika, Turing patterns in glycolysis and logic gates

Lunch

14:00 – 18:00 Excursion to the CyanoTeam/CzechGlobe laboratory
(meeting point: hotel lobby, 13:50)

14:30 – 15:30 Presentation of laboratory facilities
and current collaborations within CyanoNetwork

16:00 – 17:30 Presentations by the international CyanoNetwork (II)

16:00 – 16:40 Session 3: Biotechnology

Filipe Branco dos Santos, Non-hierarchical flux regulation of heterologous pathways

Rudolf Ehwald, Ultra-high density cultivation of Cyanobacteria

16:50 – 17:30 Session 4: Rhythms

Pascal van Alphen, Sustained circadian rhythms in continuous light in *Synechocystis* sp. PCC 6803

Louis Sherman, Messenger RNA and protein expression over a 24 h period in Cyanothecce

Friday, Jan 30

09:00 – 13:00

Discussion of current/future collaborations within CyanoNetwork

Organizing committee:

Jan Červený

Stefan Müller

David Šafránek

Ralf Steuer



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ