



NCSB Symposium 2010

Dates: Thursday, 2010 October 21 & Friday, 2010 October 22

Venue: Kontakt der Kontinenten, Amersfoortsestraat 20, Soesterberg

Thursday, 2010 October 21

10:00 - 10:30 Registration, coffee

10:30 - 10:45 **Roel van Driel** *NCSB director*
Welcome & Opening

Theme 1: Signal transduction

Chairperson: Gerco Angenent

10:45 - 11:30 **Hans Lehrach** *Germany*
Genetics, Genomics and Systems Biology: the path to an individualised treatment of cancer patients

11:30 - 11:55 **Gabino Sanchez-Perez** *CBSG (postdoc)*
PLETHORA: understanding a complex meristem regulatory network

11:55 - 12:20 **Joep Vanlier** *CMSB (PhD)*
Parameterisation of signalling pathways using Western blot data

12:20 - 12:45 **Claire Price** *KC (postdoc)*
Characterisation of the cellular composition of evolved strains of *Lactococcus lactis*

12:45 - 14:00 Lunch

Theme 2: Pattern formation

Chairperson: Roeland Merks

14:00 - 14:45 **Malcolm Bennett** *United Kingdom*
Systems analysis of lateral root development: an emerging story...

14:45 - 15:10 **Eva Deinum** *CBSG (PhD)*
Underground comparative development: nodules and lateral roots

15:10 - 15:35 **Margriet Palm** *NISB (PhD)*
Cell elongation and cell-cell adhesion suffice for blood vessel network growth

15:35 - 16:00 **Harm Nijveen** *NBIC (postdoc)*
Visualisation of complex data

16:00 - 16:30 Coffee, tea

16:30 - 17:00 **Poster flashes: a 2.5 min pitch with 1-2 slides**

Chairperson: Roeland Merks

1 Karen van Eunen Modelling of fatty acid beta-oxidation
2 Anisha Goel In-vivo-like maximum enzyme activities for *Lactococcus lactis* at varying growth rates: purely metabolic regulation?

3 Marian Groenenboom Flavonol glycosidation in tomato
4 Marit Heblj Continuous cultivation of *Saccharomyces cerevisiae* under diurnal temperature cycles

5 Hannes Hettling Analysing the functional properties of the creatine kinase system using a multiscale 'sloppy' modelling approach

6 Richard Immink Quantitative modelling of the gene regulatory network underlying floral timing

7 Jan-Bert van Klinken Estimating the contribution of physical activity to total energy expenditure in mice with indirect calorimetry

8 Pinar Ozturk An optimisation approach for prediction of microbial growth strategies

9 Anne Schwabe Noise propagation in networks with non-exponential waiting times

10 Christian Tiemann Revealing liver X receptor induced molecular adaptations in hepatic lipid metabolism

17:00 - 17:20 **YISB kick-off: Young Investigators in Systems Biology**

17:20 - 18:30 **Poster session**
Drinks & bites

18:30 - 20:00 Dinner

20:00 - 21:00 **Matthias Reuss** *Germany, NCSB & KC (visiting scientist)*
Multiscale modelling

21:00 - 23:00 Socialising with drinks

Friday, 2010 October 22

08:00 - 09:00 Breakfast

09:00 - 09:15 **Colja Laane** *NGI director*
Beyond the NGI-II era

Theme 3: Metabolism

Chairperson: **Bas Teusink**

09:15 - 10:00 **Dan Beard** *United States*
Systems analysis of metabolic function in the heart: from molecules to cells to whole-organ function

10:00 - 10:25 **Albert de Graaf** *TIFN (senior scientist)*
Measuring and predicting intestinal SCFA production

10:25 - 10:50 **Luisa da Cruz** *KC (PhD)*
Temperature dependency of yeast central metabolism: experimental findings and modelling approaches

10:50 - 11:20 Coffee

11:20 - 11:45 **Milan van Hoek** *NISB (postdoc)*
Genome-scale models predict that cost of glycolysis is key to inefficient metabolism

11:45 - 12:10 **Floor Hugenholtz** *TIFN (PhD)*
Gut microbiomics of SCFA metabolism

12:10 - 13:15 Lunch

Theme 4: Gene networks

Chairperson: **Jan-Bert van Klinken**

13:15 - 14:00 **Hidde de Jong** *France*
Gene regulatory networks in bacteria: from structure to dynamics

14:00 - 14:25 **Johann de Jong** *CGC (PhD)*
Oncogene discovery by direct association of insertion features with gene expression

14:25 - 14:50 **Martijn van Iersel** *NBIC (postdoc)*
Adapting pathway visualisation tools to systems biology standards

14:50 - 15:15 **Marieke Simonis** *CGC (postdoc)*
Transcriptional networks in a genetic model system

15:15 - 15:30 Wrapping up & closing

15:30 - 16:15 **NCSB-PI meeting**
Meeting of NCSB group leaders