



**EUROCORES Programme**  
European Collaborative Research

## **EUROSYNBIO**

Synthetic Biology: Engineering Complex Biological Systems

### **Programme-wide Conference “Progress in synthetic biology” Groningen 3-5 October, 2012**

#### **Wednesday 3 October 2012**

15.30 Welcome & registration at Groninger Museum (Job Lounge)

17.00 Keynote talk (Middenzaal, Coop Himmelblau)

Introduction by **Prof. Oscar Kuipers**

Keynote speaker: **Prof. Ben Feringa**, University of Groningen, Stratingh Institute of Chemistry, the Netherlands

Lecture: “Designing Bioinspired Molecular Systems”

18.00 Tour Groninger Museum

**19.30 DINNER at Groninger Museum (Mendini restaurant)**

#### **Thursday 4 October 2012**

08.45 Registration at Het Kasteel (ground floor)

9.00 Welcome and Introduction at Het Kasteel (Congreszaal)

9.15 SYNAPTA session

Chair: Dr. Philipp Holliger

**Dr. Philipp Holliger**, “Synthetic genetic polymers”

10.00 SYNAPTA invited speaker

**Dr. Philippe Marlière**, Global Bioenergies, Evry, France

Lecture: “Chemical morphing of living organisms”

**10.45 COFFEE BREAK**

11.00 SynDiv session

Chair: Prof. Petra Schwille

**Prof. Cees Dekker**, “What sets the dividing plane in E. coli bacteria?”

**Prof. David Sherratt**, “In vivo coordination of cell division with chromosome segregation”

**Prof. Petra Schwille**, “In vitro reconstitution of Min oscillations – a protein clockwork”

11.45 SynDiv invited speaker

**Prof. Victor Sourjik**, University of Heidelberg, Zentrum für Molekulare Biologie, Germany

Lecture: "Min system in bacterial cell division and beyond"

12.30 **LUNCH**

14.00 SynMet session

Chair: Dr. Trygve Brautaset

**Dr. Trygve Brautaset**, "Genetic and biochemical understanding of methylotrophy as a basis for engineering of this trait into new bacterial hosts"

**Prof. Wim Quax**, "Turning Bacillus subtilis into a methylotrophic terpenoid produce"

14.45 SynMet invited speaker

**Prof. Matthias Heinemann**, University of Groningen, Molecular Systems Biology, The Netherlands

Lecture: "Stochasticity in E. coli's central metabolism and consequences for engineering"

15.30 **COFFEE BREAK**

16.00 Policy funding session

Chair: Dr. Markus Schmidt

**Dr. Annette Kremser**, Projektträger Jülich, Biologische Innovation und Ökonomie, EU und Internationales (BIO3), Forschungszentrum Jülich GmbH, Germany

&

**Dr. Andy Boyce**, Biotechnology & Biological Sciences Research Council (BBSRC), U.K.

Lecture: "European funding opportunities in Synthetic Biology: ERASynBio, FP7 and HORIZON 2020"

16.30 Session on ELSA

**Dr. Markus Schmidt**, BIOFACTION KG, Vienna, Austria

Lecture: "Biosafety and synthetic biology: risk analysis, genetic firewall, and amateur biologists"

17.00 ELSA invited speaker

**Dr. Joachim Boldt**, Institut für Ethik und Geschichte der Medizin, Albert-Ludwigs-Universität Freiburg, Germany

Lecture: "Engineering Life. Ethical Issues in Synthetic Biology"

17.30 Presentations by iGEM teams from Groningen and Wageningen:

**iGEM Groningen**: Elbrich Hendriks & Renske van Raaphorst

**iGEM Wageningen**: Kees van der Ark, Wouter Elings & Hugo de Vries

18.10 Closure of day

19.00 **DINNER at Het Kasteel**

20.30 Poster session with drinks

Friday 5 October 2012

9.00 NANOCELL session  
Chair: Prof. Daniel Müller

**Dr. Daniel Harder**, “Engineering, characterization and assembly of energizing and transport modules for NANOCELLS”

**Dr. Denys Pogoryelov**, “Engineering the ATP synthase rotor: customized ion-to-ATP ratios and ion specificity”

9.45 NANOCELL invited speaker  
**Prof. Hagan Bayley**, University of Oxford, Chemical Biology, U.K.  
Lecture: “Droplet networks containing engineered protein pores”

10.30 **COFFEE BREAK**

10.45 SYNMOD session  
Chair: Prof. Oscar Kuipers

**Dr. Martin Held**, “High-throughput screening in nL-reactors”

**Dr. Martin Schlag**, “Expression of novel lantibiotics in *Staphylococcus carnosus*”

11.30 SYNMOD invited speaker  
**Prof. Nediljko Budisa**, Technical University of Berlin, Institute of Chemistry, Germany  
Lecture: “Ribosomal synthesis of congeneric peptide-based complex natural products”

12.15 **Prof. Bert Poolman** Closure of conference

12.30 **LUNCH**

13.30 – 15.00 **Scientific Committee meeting** (Project Leaders only) in Het Kasteel