

Signalling and Synthetic Biology

12-20 March 2012

Lecture Hall, Institute of Biology I,
Hauptstr. 1, Freiburg

Monday 12.03.

- 09:30 Michael Reth / Wilfried Weber (University of Freiburg)
Welcome and introduction
- 11:15 Wilfried Weber (University of Freiburg)
Synthetic gene switches and networks
- 19:30 Keynote Lecture: Martin Fussenegger (ETH Zurich)
Biomedical application of Synthetic Biology

Tuesday 13.03.

- 09:30 Travis Bayer (Imperial College London)
Rewiring and repurposing biological control networks
- 11:15 Alfonso Jaramillo (CNRS Genopole)
Engineering regulatory circuits by computational design and their
characterization in *E.coli*

Wednesday 14.03.

- 09:30 Martin Ehrbar (University Hospital Zurich)
Cell-instructive hydrogels for tissue engineering and regeneration
- 11:15 Andreas Herrmann (University of Groningen)
BioBricks from nucleic acid and synthetic materials for biomedicine

Thursday 15.03.

- 09:30 Eva-Kathrin Sinner (Boku Vienna)
Synthetic (Bio) architectures for sensing applications
- 11:15 Ferenc Nagy (Hungarian Academy of Sciences)
Phytochrome regulated light induced signalling in the model
plant *Arabidopsis thaliana*

Friday 16.03.

- 11:15 Jeff Tabor (Rice University Texas)
Light-regulated gene expression in bacteria
- 14:00 Corinne John (Redbiotech)
Synthetic Biology for virus-like particles: pharma applications
- 15:45 Joachim Boldt (University of Freiburg)
Ethical issues in Synthetic Biology. Lecture and discussion

Monday 19.03.

- 09:30 Sven Vogel (TU Dresden)
Synthetic Biology of cell division
- 11:00 Awarding of the Barbara-Hobom Prize
- 11:30 Cornelia Weber (Novartis Pharma AG Basel)
Antibodies: from bench to bedside

Tuesday 20.03.

- 09:30 NN
- 11:15 Michael Reth (University of Freiburg)
Synthetic Immunology: studying lymphocyte activation with approaches
of Synthetic Biology