

External Talks in Building 28

Receptor endocytosis as fine-tuning mechanism to regulate IL-6-mediated inflammatory responses

PD. Dr. Heike Hermanns Medizinische Klinik und Poliklinik II, Universität Würzburg

Time & Place The seminar talk takes place on November 13, 2014 at 5.00 p.m. in building 28, room 027 at Universitaetsplatz 2.

<http://www.systembiologie.ovgu.de/Aktuell.html>

Optimality, Feedback and Noise in Genetic Regulation of Metabolism

Diego Oyarzún Dept of Mathematics Imperial Colleague London England

Time & Place The seminar talk takes place on September 29, 2014 at 2.00 p.m. in building 28, room 027 at Universitaetsplatz 2.

Abstract Cell survival depends on the interaction between biochemical networks that sense, transmit and process environmental cues. In particular, the interplay between metabolism and gene regulatory networks allows cells to switch on or off specific pathways in response to changing environmental conditions. This control strategy typically appears in the form of feedback loops where key regulatory metabolites up- or down-regulate enzyme expression. In this talk I will present some of my work on the analysis and design of coupled genetic-metabolic networks. I will briefly describe our use optimal control and hybrid systems theory to predict metabolic phenotypes and to design of genetic feedback circuits for metabolic engineering. The rest of the talk will be devoted to recent results on the propagation of stochastic fluctuations between gene expression and metabolic products, providing new insights on the role of biochemical noise in modulating metabolic phenotypes across bacterial populations.

Short CV Diego Oyarzún holds a Junior Research Fellowship in Biomathematics at the Department of Mathematics, Imperial College London. More information in

<http://www.imperial.ac.uk/people/d.oyarzun>

<http://ifatwww.et.uni-magdeburg.de/syst/news/seminars/seminar%20Diego%20Oyarzun>

Thursday, 17.07.2014, 3.00 p.m., Seminarroom 027

Prof. Dr. Raymond Kaempfer, Hebrew University of Jerusalem, School of Medicine, IMRIC Biochemistry and Molecular Biology

- „The stress response mediated by translation factor eIF2-alpha phosphorylation controls splicing of tumor necrosis factor mRNA“

invited by Prof. Schaper

Friday, 23.05.2014, 2.30 p.m., Seminarroom 027

Dr. Timothy M. Palmer, University of Glasgow, Institute of Cardiovascular & Medical Sciences

- „Cavin-1 and AMP-activated protein kinase (AMPK) as new regulators of JAK-STAT pathway“

invited by Prof. Fred Schaper

From:

<https://wikis.ovgu.de/cds/> - **CDS - Das Forschungszentrum
Biosystemtechnik**

Permanent link:

https://wikis.ovgu.de/cds/doku.php?id=external_talks

Last update: **2014/09/24 17:58**

