



Cell-Free Protein Synthesis

4th Public Status Seminar



How to find us:

BY TRAIN:

Berlin Hauptbahnhof: S-Bahn 7 (platform 16) or train RE 1 (platform 14, destination Magdeburg/Brandenburg, every 30 minutes) to Potsdam Hbf;
Potsdam Hauptbahnhof: Regional train RB 21 to *Golm* (platform 3, destination Wustermark/Flughafen Berlin-Schönefeld, every 30 minutes) or Bus 605 or 606 from Potsdam to *Wissenschaftspark Golm*
Golm Station: a ten minutes walk to the institute

BY CAR:

Autobahn A10 (Berliner Ring): exit Leest (north of Autobahndreieck Werder) towards Potsdam; at the end of Wublitzstr. turn right towards Golm, pass the roundabout (circle); the Fraunhofer IBMT is the last (orange) building on the left hand side.

From the bus stations, please use the road between the IAP and GO:IN, turn right on the gravel path. The main entrance of the IBMT lies on its northside (wooden deck).

January, 30th 2014

9.00 – 19.30

Fraunhofer IBMT
Potsdam

Registration:

The registration is free. Due to limited space please register informally with a short e-mail to: stephanie.schwarz@ibmt.fraunhofer.de

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4th Public Status Seminar: Cell-Free Protein Synthesis

Opening

09:00 Prof. Frank F. Bier
Fraunhofer Institute for Biomedical Engineering (IBMT)

09:15 Prof. Bradley C. Bundy
Department of Chemical Engineering
Brigham Young University, Provo, USA
"A Golden Age for Cell-free Synthetic Biology"

-- Coffee break --

Lectures

10:15 Dr. Stefan Kubick
Fraunhofer Institute for Biomedical Engineering (IBMT)
M.Sc. Marlitt Stech
"A continuous-exchange cell-free protein synthesis system based on extracts from cultured insect cells"

M.Sc. Dipl.Ing. Andreas Brödel
"IRES-mediated translation in eukaryotic cell-free systems"

M.Sc. Dipl.Ing. Rita Sachse
"Biological membranes in insect cell-free systems"

Dipl.-Biochem. Robert Quast
"Expansion of eukaryotic cell-free protein synthesis beyond the proteinogenic amino acids"

M.Sc. Devid Mrusek
"Fluorescent labeling of membrane proteins with incorporated non-canonical amino acids"

Dipl.-Biochem. Christian Hoffmeister
"Application of cell-free orthogonal systems for artificial posttranslational modifications"

-- 12:00 – 13:00 Lunch --

13:00 Prof. Nediljko Budisa
Biocatalysis Group, Department of Chemistry, TU Berlin
"Codon emancipation with bioorthogonal amino acids in protein translation"

13:30 Dr. Daniel Summerer
Department of Chemistry, University of Konstanz
"Designer Protein Functions for Studying Regulatory Mechanisms of Transcription"

14:00 Dr. Seok Hoon Hong
Department of Chemical and Biological Engineering, Institute for Nanotechnology and Medicine, Northwestern University, Chicago, USA
"Genome Engineering of *Escherichia coli* lacking Release Factor 1 Enhances Site-specific Incorporation of Nonstandard Amino Acids in Cell-free Protein Synthesis"

-- Coffee break --

15:00 Dr. Karolina Corin
Departments of Electrical and Information Engineering and Molecular Medicine and Haematology, University of the Witwatersrand, Johannesburg, South Africa
Center for Bits and Atoms, Massachusetts Institute of Technology, Cambridge, MA, USA

"Cell-Free Expression: A Robust and Rapid Method for Producing Soluble, Stable, and Functional G protein-coupled Receptors"

15:30 Dr. Jens Frauenfeld
Department of Medical Biochemistry and Biophysics
Karolinska Institute, Stockholm, Sweden
"Salipro Nanoparticles for the Integration of Membrane Proteins"

16:00 Dr. Barbara Maertens
Cube Biotech GmbH, Monheim
"A cell-free system for membrane protein expression"

16:30 Dr. Frank Bernhard
Center of Biomolecular Magnetic Resonance,
Goethe-University of Frankfurt
"Crystallization of cell-free expressed membrane proteins"

-- Coffee break --

17:30 Dr. Michael Taussig
Protein Technology Group and Cambridge Protein Arrays Ltd.
The Babraham Institute, Cambridge, UK
"High Density Protein Arrays"

18:00 Dr. Oda Stoevesandt
Protein Technology Group
The Babraham Institute, Cambridge, UK
"Protein arrays printed from DNA arrays by cell free protein expression: Application for antibody screening"

18.30 Dr. Matthias Harbers
CellFree Sciences Co. Ltd., Yokohama, Japan
"Accelerating protein research:
The wheat germ cell-free protein expression system"

19:00 Dr. Paul Majkut
RiNA GmbH, Berlin
"Developing tools to optimize function analysis of tyrosine phosphorylated proteins based on cell-free protein synthesis"

-- Poster Session and Snacks --