
WEDNESDAY, NOV 10, 2004

14:00 – 15:30 Registration

15:30 Welcome Address

Session 1: Membranes and Channels

Chair: Bettina Böttcher

15:40 – 16:10 Andreas Engel

G-protein coupled receptors are team workers

16:10 – 16:40 Titia K. Sixma

Analyzing AChBP structures to understand ligand binding and diversity in nicotinic acetylcholine receptors

16:40 – 17:10 Coffee Break

17:10 – 17:40 Andrej Sali

Modeling the structure of proteins and macromolecular assemblies

17:40 – 18:00 Anke Terwisscha van Scheltinga

Mechanisms of photoprotection and non-photochemical quenching in pea light-harvesting complex at 2.5 Å

18:00 – 18:20 Thomas Marlovits

Armed bacteria: Structural insights into the assembly of the type III secretion needle complex

18:20 – 19:00 Poster session and drinks

19:00 Dinner

THURSDAY, NOVEMBER 11, 2004

Session 2: DNA and chromatin

Chair: Dietrich Suck

09:00 – 09:30 Ernest Laue

HP1 Family Proteins: From structure to function

09:30 – 10:00 Karolin Luger

Nucleosome structure and dynamics

10:00 – 10:30 Jan Ellenberg

**Quantitative temporal and spatial analysis of cell division by
4D imaging**

10:30 – 11:15 Coffee break

11:15 – 11:45 Patrick Cramer

The mRNA transcription cycle

11:45 – 12:05 Sebastiaan Werten

**Interaction of a universal transcription cofactor with
opposing strands of unwound DNA**

12:05 – 12:25 Anastassis Perrakis

**Targeting the human genome: the endonuclease of the
human LINE-1 retrotransposon**

12:30 – 14:00 Lunch

Session 3: RNA

Chair: Michael Sattler

14:00 – 14:30 Reinhard Lührmann

Structural dynamics of the spliceosome

14:30 – 15:00 Jody Puglisi

**Structure and dynamics in prokaryotic and eukaryotic
translation**

15:00 – 15:30 Traci Hall

**Size selective recognition of siRNA by an RNA silencing
suppressor**

15:30 – 16:00 Coffee break

16:00 – 16:30 Marat Yusupov

Translational operator of mRNA on the ribosome: How repressor protein excludes ribosome binding

16:30 – 16:50 Bruno Klaholz

Molecular interactions during termination of protein synthesis analysed using cryo-EM and crystallography

16:50 – 17:10 Lars Ferbitz

Trigger factor in complex with the ribosome forms a molecular cradle for nascent proteins

17:10 – 19:00 Poster Session and drinks

19:00 Dinner

20:30 Evening Speaker: Richard Henderson

Prospects for electron cryomicroscopy

FRIDAY, NOVEMBER 12, 2004

Session 4: Transport and targeting

Chair: Irmi Sinning

09:00 – 09:30 Stephen Harrison

Assembly and uncoating of clathrin lattices

09:30 – 10:00 David Owen

Clathrin adaptors: Structure and function

10:00 – 10:30 Eva Pebay-Peyroula

ADP/ATP transport in mitochondria: a molecular insight

10:30 – 11:15 Coffee break

11:15 – 11:45 Roland Beckmann

Cryo-EM snapshots of cotranslational protein targeting

11:45 – 12:05 Lei Zheng

The mechanism of ammonia transport based on the crystal structure of AmtB of E. coli

12:05 – 12:25 Irmi Sinning

Regulation of the SRP cycle by structural changes in SRP and SR GTPases

12:30 – 14:00 Lunch

Session 5: Cytoskeleton

Chair: Achilleas Frangakis

14:00 – 14:30 Jan Löwe

The bacterial cytoskeleton and DNA segregation

14:30 – 15:00 Ron Milligan

Structure and action of myosins and kinesins: variations on a theme

15:00 – 15:30 Coffee break

15:30 – 16:00 James Spudich

Cell dynamics, tension sensin, and the myosin family of molecular motors

16:00 – 16:20 Marcel Knossow

Regulation of microtubule assembly by stathmin, colchicine and tubulin

16:20 – 16:40 Sergei Strelkov

Intermediate filaments: from atomic structure of the elementary dimer to the complete filament architecture

16:40 – 19:00 Poster session and drinks

19:00 Dinner

SATURDAY, NOVEMBER 13 2004

Session 6: Signal Transduction

Chair: Klaus Scheffzek

09:00 – 09:30 Jacqueline Cherfils

Mechanism and inhibition of a guanine nucleotide exchange factor

09:30 – 10:00 Alfred Wittinghofer

Signaling downstream from the Rho GTP-binding protein

10:00 – 10:30 Jim Hurley

Structural mechanism for lipid activation of the Rac-specific GAP, beta2-chimaerin

10:30 – 11:00 Coffee break

11:00 – 11:30 Dorothee Kern

On the move in the NMR tube and in the crystal: Protein dynamics during catalysis and signaling

11:30 – 12:00 Tilman Schirmer

Structural basis of activity and allosteric control of diguanylate cyclase

12:00 – 12:30 Klaus Scheffzek

A novel structural module in the neurofibromatosis type 1 protein

12:30 – 14:00 Lunch

Session 7: New structures

Chair: Elena Conti

14:00 – 14:15 Carlo Petosa

Architecture and function of the nuclear export factor CRM1/Exportin1

14:15 – 14:30 Ralf Ficner

Structural basis for m3G-cap mediated nuclear import of snRNPs by snurportin1

14:30 – 14:45 Noemi Fukuhara

Structure and function of SMG7 in nonsense-mediated mRNA decay

14:45 – 15:00 Dierk Niessing

She2p is a novel RNA-binding protein with a basic helical hairpin motif

15:00 – 15:15 Omri Drory

Crystal structure of yeast v-atpase subunit C reveals its stator function

15:15 – 15:30 Corinna Wilken

Crystal structure of DegS: How a PDZ domain recognizes misfolded protein and activates a protease

15:30 – 16:15 Coffee break

Session 8: Future perspectives

Chair: Ilme Schlichting

16:15 – 16:45 Philip Anfinrud

Watching proteins as they function with 150-ps time-resolved X-ray crystallography

16:45 – 17:15 Duncan McRee

Structural proteomics of human drug targets

17:15 – 18:00 Coffee break

Chair: Rob Russell

18:00 – 18:30 Wolfgang Baumeister

Exploring the inner space of cells by cryoelectron-tomography

18:30 – 19:00 Gerhard Wagner

Perspectives for NMR in structural biology

19:00 Conference Dinner

20:30 Conference Dinner Talk: Sir Tom Blundell

High-throughput crystallography for drug discovery: opportunities and challenges

21:30 Party with live music by Rob& Co.