

Meeting Program

Sunday, July 12, 2009

3:00 pm – 6:00 pm Arrival/Check-in and Registration

5:30 pm – 7:00 pm Dinner

Oral Session 1 (Chair, Walid Houry): Clp chaperones and bacterial infection

<i>Start</i>	<i>End</i>	<i>Speaker</i>
7:20 pm	7:30 pm	Welcome and organization
7:30 pm	8:05 pm	Bernd Bukau (EMBO Plenary Lecture) Title: Cellular roles and mechanism of the ClpB/Hsp104 chaperone
8:05 pm	8:40 pm	Tania Baker Title: Strategies for substrate recognition by the AAA+ unfoldases and proteases
8:40 pm	9:05 pm	Kursad Turgay Title: Adaptor mediated activation and localisation of the Hsp100/Clp protease ClpCP from <i>Bacillus subtilis</i>
9:05 pm	9:30 pm	Yoshiharu Sato Title: Atomic-scale analysis of recognition mechanism of the FlhD4C2 complex by ClpX

9:30 pm – 12:00 am Reception

Monday, July 13, 2009

7:00 am – 8:30 am Breakfast

Oral Session 2 (Chair, Helen Saibil): Clp like chaperones and links to infectious diseases

<i>Start</i>	<i>End</i>	<i>Speaker</i>
8:30 am	9:05 am	Mike Maurizi Title: Functional consequences of asymmetric binding of ClpS to ClpA hexamers
9:05 am	9:40 am	David Dougan Title: Towards an understanding of the N-end rule pathway in E. coli
9:40 am	10:05 am	Steven Glynn Title: Crystal structures of asymmetric hexamers reveal nucleotide-dependent motions in the ClpX protein-unfolding machine
10:05 am	10:30 am	Usheer Kanjee Title: Interaction between the Escherichia coli MoxR-AAA+ protein RavA and the inducible lysine decarboxylase LdcI – structural and functional insights

10:30 am – 11:00 am Coffee break

Oral Session 3 (Chair, Bernd Bukau): ClpB/Hsp104

<i>Start</i>	<i>End</i>	<i>Speaker</i>
11:00 am	11:35 am	Helen Saibil (Canadian Centre for Electron Microscopy Lecture) Title: Structural basis for the action of Hsp104
11:35 am	12:10 pm	James Shorter Title: Mechanisms and applications of the protein disaggregase, Hsp104
12:10 pm	12:35 pm	Ronnie Lum Title: Peptide and protein binding to yeast chaperone Hsp104
12:35 pm	1:00 pm	Nicolas Werbeck Title: Coupling and dynamics of the hexameric chaperone ClpB

1:00 pm – 2:30 pm Lunch

Oral Session 4 (Chair, Mike Maurizi): Lon

<i>Start</i>	<i>End</i>	<i>Speaker</i>
3:00 pm	3:35 pm	Carolyn Suzuki Title: Multitasking in the mitochondrion by the Lon protease in protein and mtDNA quality control
3:35 pm	4:10 pm	Irene Lee Title: Chemical tools for studying the ATP-dependent protease Lon
4:10 pm	4:35 pm	Eyal Gur Title: An active role for substrates in setting the degradation rate and operational efficiency of the AAA+ Lon protease
4:35 pm	5:00 pm	Eva Kutejová Title: Structure of the proteolytic domain of human mitochondrial Lon protease

5:30 pm – 7:00 pm Dinner

Poster Session

<i>Start</i>	<i>End</i>
7:30 pm	12:00 am

Tuesday, July 14, 2009

7:00 am – 8:30 am Breakfast

Oral Session 5 (Chair, Dale Wigley): p97 and links to cancer

<i>Start</i>	<i>End</i>	<i>Speaker</i>
8:30 am	9:05 am	Hemmo Meyer Title: The ubiquitin-dependent chaperone Cdc48/p97(Ufd1-Npl4) regulates Aurora-B kinase on mitotic chromosomes
9:05 am	9:40 am	Thomas Sommer Title: Protein quality control and degradation at the endoplasmic reticulum
9:40 am	10:15 am	Paul Freemont Title: Structural insights into p97 adaptor protein specificity
10:15 am	10:40 am	Yihong Ye Title: The role of p97-associated deubiquitination in protein homeostasis and its implication in cancer therapy

10:40 am – 11:00 am Coffee break

Oral Session 6 (Chair, Isabelle Rouiller): p97 and links to neurodegenerative diseases and aging

<i>Start</i>	<i>End</i>	<i>Speaker</i>
11:00 am	11:35 am	Thorsten Hoppe (EMBO Young Investigator Lecture) Title: The ubiquitin-selective chaperone CDC-48 modulates protein homeostasis and aging
11:35 am	12:10 pm	Virginia Kimonis Title: Developments in VCP- associated inclusion body myopathy associated with Paget disease of bone and/or frontotemporal dementia
12:10 pm	12:45 pm	Teru Ogura Title: Molecular mechanisms of homologs of spastin and p97/VCP related to human genetic disorders
12:45 pm	1:10 pm	Conrad Weihl Title: Impaired autophagy underlies the pathogenesis of p97/VCP associated disease

1:00 pm – 2:30 pm Lunch

Oral Session 7 (Chair, John Mayer): AAA in organelles

<i>Start</i>	<i>End</i>	<i>Speaker</i>
3:00 pm	3:35 pm	Phyllis Hanson Title: Role organelle associated AAA+ ATPases in membrane trafficking and structure
3:35 pm	4:10 pm	Wes Sundquist Title: Biochemical and structural studies of the ESCRT-III/VPS4 membrane fission machine
4:10 pm	4:35 pm	Takashi Tatsuta Title: Intersubunit signalling coordinates ATP-hydrolysis and controls substrate handling by m-AAA protease ring complexes
4:35 pm	5:00 pm	Yukio Fujiki Title: Dynamic and functional assembly of the AAA Peroxins, Pex1p and Pex6p, and their interacting partners in peroxisome Biogenesis

5:30 pm – 7:00 pm Dinner

Oral Session 8 (Chair, Phyllis Hanson): AAA motors

<i>Start</i>	<i>End</i>	<i>Speaker</i>
--------------	------------	----------------

7:30 pm	8:05 pm	Chikako Shingyoji Title: Regulation of motile activity of dynein in beating flagella: Roles of AAA+ domains in the dynein molecule
8:05 pm	8:40 pm	Andrew Carter Title: Structure and functional role of dynein's microtubule-binding domain
8:40 pm	9:05 pm	Takashi Ishikawa Title: Three-dimensional arrangement and conformation of axonemal dyneins in flagella and cilia revealed by electron cryo-tomography
9:05 pm	9:30 pm	Richard McKenney Title: Novel force regulation of the dynein AAA+ motor by LIS1 & NudE

Wednesday, July 15, 2009

7:00 am – 8:30 am Breakfast

Oral Session 9 (Chair, Daniel Finley): Proteasome

<i>Start</i>	<i>End</i>	<i>Speaker</i>
8:30 am	9:05 am	Alfred Goldberg Title: Roles of the 19S or PAN ATPase complexes in regulation of substrate entry into the 20S proteasome
9:05 am	9:40 am	Michael Glickman Title: Six ATPases (RPT1-6) and a central toroidal unit (Rpn1-2) come together in the Base of the Proteasome 19S regulatory particle
9:40 am	10:05 am	Stephan Nickell Title: New insights into the molecular architecture of the 26S proteasome
10:05 am	10:30 am	Frank Striebel Title: Bacterial ubiquitin-like modifier Pup is deamidated and conjugated to substrates by distinct but homologous enzymes

10:30 am – 11:00 am Coffee break

Oral Session 10 (Chair, Teru Ogura): Proteasome and links to neurodegenerative diseases

<i>Start</i>	<i>End</i>	<i>Speaker</i>
11:00 am	11:35 am	Daniel Finley Title: Chaperone-mediated assembly of the proteasome RP
11:35 am	12:10 pm	R. John Mayer Title: Conditional regional genetic ablation of a 26S proteasomal ATPase gene in the mouse brain recapitulates features of Parkinson's disease and dementia with Lewy bodies
12:10 pm	12:35 pm	Leticia Santos Title: Association studies of the Notch signaling pathway and the ATPases of the AAA family in murine macrophages stimulated by Mycobacterium antigens
12:35 pm	1:00 pm	David Smith Title: Functional consequences of nucleotide binding to the proteasomal ATPases

1:00 pm – 7:00 pm Box lunch/Free time/Trip to Niagara Falls

7:30 pm – 9:30 pm Banquet

Thursday, July 16, 2009

7:00 am – 8:30 am Breakfast

Oral Session 11 (Chair, Hemmo Meyer): AAA in DNA/RNA binding

<i>Start</i>	<i>End</i>	<i>Speaker</i>
8:30 am	9:05 am	Tsutomu Katayama Title: The replication initiator DnaA is reactivated in a specific nucleoprotein complex
9:05 am	9:40 am	Dale Wigley Title: The “Glutamate Switch” : a link between ATPase activity and ligand binding in AAA+ proteins
9:40 am	10:05 am	Walid Houry Title: The role of Rvb1/2 helicases in rRNA processing
10:05 am	10:30 am	Kevin Cheung Title: The curious case of the Rvb1/2 helicase: Controversies on its structure and oligomeric state

10:30 am – 11:00 am Coffee break

Oral Session 12 (Chair, Paul Freemont): AAA in DNA/RNA binding

11:00 am	11:35 pm	Xiaodong Zhang Title: Mechanism of transcription activation through bacterial enhancer-binding proteins
11:35 am	12:00 pm	Nicolas Joly Title: Engineering a type member AAA+ protein to reveal geometric requirements for activity
12:00 pm	12:25 pm	Helmut Bergler Title: The AAA-protein Drg1 interacts with the nuclear pore complex and is essential for early steps in cytoplasmic pre-60S ribosome maturation

Check-out is at 1:00 pm

12:30 pm – 2:00 pm Lunch

2:00 pm Departure