List of recorded presentations of

FEBS-IUBMB 2005

Conference

(BETA.LIST)

List of recorded presentations of FEBS-IUBMB 2005 Conference

[+]: presantions's materials (ppt slides, animations) available

By Code

A1| Protein Function and Ageing

A1-001 ***Claudio Franceschi*** The genetics of human longevity [+]
A1-002 ***Efstathios Gonos*** Longevity and survival factors implicated in human ageing and longevity [+]
A1-003 ***Suresh I. S. Rattan*** Ageing intervention, prevention and maintenance of proteomic integrity. [+]
A1-004 ***Renu Wadhwa*** Cellular phenotypes with increased and reduced levels of mortalin protein [+]
A1-005 ***Tamas Fulop*** T-lymphocytes activation, lipid rafts and aging: links for immuno-senescense [+]
A1-006 ***Chitty Chen*** Glycoprofiling of N-linked serum protein: an aging biomarker? [+]

A2| Evolution of Protein Structure and Function

A2-002 ***David Eisenberg*** Structural studies of amyloid [+]
A2-005 ***Indronil Chaudhuri*** Trapping the building blocks of β-propeller proteins [+]

A3| Bioinformatics

A3-002 ***Zoltan N. Oltvai*** Functional organization of transcriptional-regulatory networks [+]
O1-183 ***Sándor Pongor*** Multiple weak hits confuse transcriptional regulatory networks [+]
A3-003 ***Piotr Zielenkiewicz*** Evolutionary history of the eukaryotic interactome [+]
A3-004 ***Jordi Villà-Freixa*** Per residue characterization of protein-protein interfaces: a relationship between stability and functionality? [+]

A4| Human Genomics and Diseases

A4-002 ***S E Antonarakis*** The mystery of conserved non-genic (CNG) sequences [+]
O1-178 ***Maria Sasvari-Szekely*** Endophenotypes Related to the Dopamine D4 Receptor Polymorphisms [+]
A4-005 ***Anton Buzdin*** Improving specificity of DNA hybridization-based methods. [+]

A4-006 ***Judit Oláh*** Triosephosphate isomerase deficiency: relationship between enzyme mutation and neurodegeneration [+]

***B1*| Proteases as Molecular Targets of Drug Development**

B1-001 ***Hanne B. Rasmussen*** DPP-IV structure and inhibitor design [+]
B1-004 ***Michael Teufel*** Identification of human carnosinase- a brain-specific metalloprotease [+]

***B2*| Protein Degradation**

B2-001 ***Wolfgang Baumeister*** The 20S proteasome: Mechanisms of assembly and substrate translocation [+]
B2-002 ***Colin Gordon*** Transferring substrates to the 26S proteasome in the fission yeast Schizosaccharomyces pombe [+]
B2-003 ***Michael H Glickman*** Non-proteasomal RPN10 raises the threshold for association of a ubiquitin-binding protein with the proteasome [+]
O1-186 ***Petra Kiss*** Zn^{2+}-induced reversible dissociation of subunit Rpn10/p54 of the Drosophila 26S proteasome [+]

***B3*| Serine Proteases and their Inhibitors**

B3-001 ***Francesc X. Aviles*** Structural and functional relationships between serine-and metallo.carboxy-peptidases and their protein inhibitors [+]
B3-002 ***Charles S Craik*** Regulating the activity of herpes virus proteases [+]
B3-003 ***Robert Huber*** Proteases and their regulation- from structures to mechanisms and new concepts for intervention
B3-004 ***James A. Huntington*** Shape shifting serpins [+]
B3-005 ***Robert A. Lazarus*** Structural lessons of serine proteases: Function and mechanism of the serine protease-like HGF as a growth factor in Met signaling [+]
B3-006 ***László Szilágyi*** Trypsinogen 4 with a 28 amino acid leader peptide on its N-terminus is the predominant form of the enzyme in human brain [+]

***B4*| Regulatory Proteases**

B4-001 ***Hiroyuki Sorimachi*** Calpain and connectin/titin in health and disease of skeletal muscle.
B4-002 ***Peter Tompa*** Inhibition and activation of calpain by its disordered endogenous inhibitor, calpastatin [+]

B4-003 ***Judith S Bond*** Meprin metalloproteases in inflammation and cancer [+]
B4-004 ***Nektarios Tavernarakis*** Biochemical pathways mediating necrotic cell death and neurodegeneration in Caenorhabditis elegans [+]
B4-017P ***Aleksi Sedo*** Dipeptidyl peptidase IV activity and/or structure homologues (DASH) in brain tumors
B4-006 ***Vilmos Fülöp*** β-propellers in enzyme catalysis and regulation [+]

C3| Receptor Proteins and Membrane Organization

C3-001 ***Frances M. Brodsky*** Pathways regulating the internalization of activated immune receptors [+]
C3-002 ***Thomas M Jovin*** Retrograde filopodial transport of activated EGF receptors
C3-003 ***Akihiro Kusumi*** Digital-like signal transduction? Investigations by single-molecule observations [+]
C3-004 ***Israel Pecht*** Cross-talk among membrane receptors: Regulation of mast cells' secretory response.
C3-005 ***Lawrence Rajendran*** Role of rafts and rabs in Alzheimer's disease [+]
C3-006 ***János Szöllösi*** Effect of lipid environment on signaling of ErbB2 receptor tyrosine kinase in Herceptin resistant and sensitive cell lines [+]

C4| Lipid-protein Interactions in Membrane

C4-001 ***Ben de Kruijff*** The ways peptide antibiotics can kill bacteria by interacting with specific lipids [+]
C4-003 ***Dieter Oesterhelt*** Why does nature form a two-dimensional membrane protein crystal? [+]
C4-012P ***John Edward Baenziger*** Fine-tuning nicotinic receptor function through the lipid bilayer [+]
C4-005 ***Sónia Troeira Henriques*** Uptake of beta-galactosidase mediated by the cell penetrating peptide pep-1 into large unilamellar vesicles and HeLa cells is driven by membrane potential [+]
C4-006 ***Jean-Marie Ruysschaert*** Requirement of phosphatidylethanolamine for the normal structure and activity of the multidrug transporter LmrP [+]

C5| Lysophospholipids in Cell Signaling

C5-002 ***Yasuyuki Igarashi*** Ceramide kinase is required for degranulation pathway in mast cell and regulated by Calmodulin/Ca^{2+} and PIP2 through specific interaction with their recognition domains

C6| Physical methods for studying protein-protein interactions

C6-003 ***Iain Donald Campbell*** Atomic resolution definition of protein-protein interactions [+]
C6-004 ***John L. Markley*** Automation in NMR investigations of protein structure and interactions [+]
C6-001 ***Alexandre M.J.J. Bonvin*** Data-driven docking for the study of biomolecular complexes. [+]
C6-002 ***Claudio Dalvit*** Efficient NMR methods for identifying inhibitors of protein-protein interactions [+]
C6-005 ***László Gráf*** Protease inhibitors of the grasshopper family: structure, molecular flexibility, specificity and mechanism of action [+]
C6-014P ***Lauren K Ely*** A new mode of recognition: an entropically favoured T-cell receptor

C7| Membrane proteins - membrane traffic

C7-001 ***Victor J Hruby*** New insights into the role of lipid rafts in GPCR signal transduction using Plasmon Waveguide Resonance (PWR) spectroscopy [+]
C7-002 ***Dale Laird*** Transport, assembly and turnover of wild-type and mutant connexins linked to human disease [+]
C7-003 ***Laurent Fagni*** The scaffolding protein Shank and associated glutamate receptors induce formation and maturation of dendritic spines [+]
C7-004 ***James E Rothman*** SNAREs Can Promote Complete Fusion and Hemifusion as Alternative Outcomes [+]
C7-006 ***Gyorgy Szabadkai*** Regulation of mitochondrial function by membrane fusion, fission and biogenesis [+]

D1| Extracellular Matrix Proteins

D1-001 ***Benoit de Crombrugghe*** Sox9 controls both chondrocyte differentiation and proliferation [+]
D1-002 ***Reinhard Fässler*** The role of chondrocyte-matrix attachment complexes in skeletal development [+]
D1-003 ***Mats Paulsson*** The matrilins - adaptor proteins in the extracellular matrix [+]
D1-004 ***Charles Streuli*** The central role of integrin-mediated adhesion in controlling epithelial cell survival and differentiation [+]
D1-005 ***Joseph Merregaert*** The extracellular matrix 1 gene (ECM1) is essential for early mouse development [+]

D2| Proteins in Development

D2-001 ***Krishna M Bhat*** A neurodegenerative disease in Drosophila mutant for the tumor suppressor protein Patched
D2-004 ***Gunter Reuter*** Histone methylation and the control of gene silencing in Drosophila [+]
D2-006 ***Miklós Szekeres*** How brassinosteroid-biosynthetic enzymes control plant morphogenesis? [+]

D3| Proteins Linking Innate and Adaptive Immunity

D3-001 ***Kurt Drickamer*** Carbohydrate-binding receptors in innate immunity [+]
D3-002 ***Luke A O'Neill*** Toll-like receptor signal transduction [+]
D3-003 ***Peter Parham*** Killer-Cell Immunoglobulin-like Receptors [+]
D3-004 ***Anna Erdei*** The β subunit of the type I Fcε receptor is a target for complement-derived peptides inhibiting IgE-mediated secretory response of mast cells [+]
D3-005 ***Rachel Levy*** Expression of Fc gamma RIIA in PLB cells during differentiation by $1,25(OH)_2D_3$ depends on Cytosolic $PLA_2$and is regulated via activation of CREB by PGE_2

E1| Protein Kinases

E1-004 ***Manuela Baccarini*** Biological functions of the Raf-1 'kinase' [+]
E1-005 ***Ganna Panasyuk*** Casein kinase 2 interacts with and regulates subcellular localization of S6K1 [+]
E1-006 ***Oliver Hantschel*** Structure-function analysis on the mechanism of BCR-ABL/C-ABL localization [+]

E4| Small GTPases and their Regulatory Proteins

E4-003 ***Andras Kapus*** Regulation of Rho family GTPases by physico-chemical parameters [+]
E4-004 ***Emmanuelle Caron*** Regulation of small GTPase function during macrophage phagocytosis [+]
E4-005 ***David Avram Sanders*** Structural basis of the processivity of an exopolyphosphatase with a novel regulatory GTPase fold [+]
E4-006 ***Valeria Mapelli*** Structure-based hypothesis on active role of RasGEF αG-helix [+]

F3| Rotary Motor Complexes

F3-003 ***Howard C. Berg*** Control of the bacterial flagellar motor [+]

G1| Molecular Chaperones

G1-001 ***Richard I. Morimoto*** Stress and misfolded proteins: modulators of neurodegenerative diseases and longevity [+]
G1-002 ***Bernd Bukau*** Chaperone machines of the cytosol [+]
G1-003 ***Judith Frydman*** The substrate spectrum of the eucaryotic chaperonin TRIC/CCT revealed by genomic approaches [+]
G1-004 ***Ineke Braakman*** Disulfide bond formation during protein folding in the endoplasmic reticulum
G1-005 ***Walid A Houry*** Navigating the chaperone network: an integrative map of physical, genetic, and chemical-genetic interactions mediated by the yeast Hsp90 chaperone system [+]
G1-006 ***Timea Gerczei*** Ribonucleic acid chaperones and their significance during ribosome biogenesis [+]

G2| Protein Structure and Stability

G2-002 ***Adam Liwo*** Ab initio simulations of protein folding pathways by molecular dynamics with the united-residue (UNRES) model of polypeptide chains [+]

G3| Protein-Protein Recognition

G3-001 ***David Jones*** Prediction of protein-protein and protein-ligand interactions from protein structures
G3-002 ***Christopher D Hardin*** Structural basis of glycolytic compartmentation: a cytoarchitect&#65533;s guide to metabolism [+]
G3-003 ***Ron Kopito*** The role of autophagy in degradation of intracellular protein aggregates [+]
G3-004 ***Mathias Uhlen*** A human protein atlas for proteome profiling in normal and disease tissue [+]
G3-005 ***Yury O. Chernoff*** Modulation of prion formation, aggregation and toxicity by cytoskeletal proteins of the vesicle assembly complex in yeast [+]
G3-015P ***Angelica Keller*** Interaction between enolase isozymes and cytoskeleton: a control mechanism of glycolytic energy utilisation. [+]

G4| Protein-Protein Interactions in Blood Coagulation

G4-001 ***Roger Lijnen*** Interactions between the fibrinolytic and matrix metalloproteinase systems and atherothrombosis [+]
G4-002 ***Colin Longstaff*** Clot busting drugs studied using fluorescent protein fusions. [+]
G4-003 ***David A Lane*** Regulation of thrombin [+]
G4-004 ***Björn Dahlbäck*** The anticoagulant protein C pathway [+]

G4-005 ***Krasimir Kolev*** Fibrinolysis in phospholipid environment: modulation through release of fatty acids [+]
G4-006 ***Mikhail A. Panteleev*** Factor VIIIa regulates substrate delivery to intrinsic tenase [+]

H1| **Protein Crosslinking by Transglutaminases**

H1-003 ***Chaitan Khosla*** Chemistry & Biology of Human Transglutaminase 2: Its Role in Celiac Sprue and Other Diseases [+]
H1-005 ***László Fésüs*** Transglutaminase 2 in the balance of cell survival and death [+]

H2| **Oxidation of Proteins**

H2-001 ***Angelo Benedetti*** Oxidation of proteins: an overview [+]
H2-002 ***Roberto Sitia*** Redox control in the endoplasmic reticulum. [+]
H2-003 ***Miklós Csala*** Endoplasmic reticulum lumen: a Janus-faced compartment [+]
H2-004 ***Peter John Ratcliffe*** Cellular oxygen sensing and the regulation of HIF by protein hydroxylation [+]
H2-005 ***Johanna Myllyharju*** Prolyl 4-hydroxylases, key enzymes in the synthesis of collagens and the response of cells to hypoxia [+]
H2-006 ***Karel W.A. Wirtz*** Detection of protein and lipid oxidation in living cells using fluorescent probes [+]

H3| **Protein Targets in Oxidative Stress**

H3-001 ***Eric Klann*** Reactive Oxygen Species Signaling in the Hippocampus [+]
H3-002 ***Ian J Reynolds*** Modulation of mitochondrial oxidant signals [+]
H3-003 ***Harry Ischiropoulos*** Functional consequences of protein tyrosine nitration and oxidation [+]
H3-004 ***Michel B. Toledano*** H2O2 signaling through cysteine modifcations [+]
H3-005 ***Cecilia Hidalgo*** Calcium release mediated by redox activation of ryanodine receptors induces CREB and ERK phosphorylation in N2a cells and hippocampal neurons.
H3-006 ***Cinzia Domenicotti*** ROS and PKC delta: a bidirectional intracellular talk able to decide cellular fate. [+]

H4| **Protein Networks in Cellular Functions**

H4-001 ***Ruedi Aebersold*** Quantitative proteomics and systems biology [+]

H4-002 ***Albert Laszlo Barabasi*** Network biology: from the metabolism to protein interactions. [+]
H4-003 ***David A Fell*** The substructure of large metabolic networks [+]
H4-004 ***George K Radda*** Metabolic control through gene expression in the failing and diabetic heart [+]
H4-006 ***Tamás Vicsek*** Uncovering the overlapping modular structure of protein interaction networks [+]

J2| Cell Cycle Control in Plants

J2-001 ***Pascal Genschik*** CULLIN-based ubiquitin ligases in plants: phytohormones signalling but not much about cell cycle yet [+]
J2-002 ***Luisa Mariconti*** Integration of cell cycle and epigenetic regulation during Arabidopsis development [+]
J2-003 ***Dirk Inze*** The control of endoreduplication in Arabidopsis [+]
J2-005 ***Alexandra Kroll*** The role of CDC20 isoforms in A. thaliana cell cycle regulation and development [+]
J2-006 ***Jana Hendrychová*** Kinase activity of cyclin-dependent kinase complexes in the cell cycle of chlorococcal algae [+]

J3| Circadian Rhythm Control in Plants

J3-001 ***Seth Jon Davis*** Detecting the boundaries of one day [+]
J3-002 ***Dorothee Staiger*** Post-transcriptional control in the Arabidopsis circadian system [+]
J3-003 ***Alex Webb*** Circadian regulation of signalling in plant cells [+]
J3-004 ***Garry C Whitelam*** The circadian clock gates shade avoidance responses in Arabidopsis [+]

J4| Nutriton/Metabolite Sensing in Plants

J4-002 ***Ian A. Graham*** Metabolite sensing in plants: a role for trehalose metabolism in seed development and embryo development [+]
J4-003 ***Sjef Smeekens*** A conserved uORF mediates sucrose-induced repression of translation. [+]
J4-004 ***Carol MacKintosh*** 14-3-3s as signalling integrators in plant and human cells [+]
J4-005 ***Jack Preiss*** Crystal structure of potato tuber ADP-glucose pyrophosphorylase catalytic subunit and conversion of the regulatory subunit into a catalytic subunit
J4-006 ***Peter Deckers*** Plant responses to cadmium stress: a proteomic approach [+]

K3| Nuclear Hormone Receptors

K3-001 ***Martin L. Privalsky*** Isoforms of nuclear receptors and of their coregulators diversify the transcriptional response. [+]
K3-002 ***E. Brad Thompson*** Functional consequences of the dynamic folding of the glucocorticoid receptor N-terminal transcription activating domain (AF1) [+]
K3-003 ***Keith R. Yamamoto*** Deciphering the specificity of response element-specific transcriptional regulatory complexes
K3-004 ***Mitchell A. Lazar*** Repression by nuclear hormone receptors [+]
K3-005 ***Malcolm Parker*** Role of the RIP140 corepressor in adipose biology and ovarian function [+]
K3-006 ***John Schwabe*** Recruitment and assembly of the nuclear receptor repression complex [+]

L1| Protein Diagnostics, Protein Determination

L1-003 ***Uwe Kobold*** IFCC reference method for HbA1c in human blood: a new concept for protein standardization by HPLC-MS [+]
L1-004 ***Helmut E. Meyer*** The HUPO Brain Proteome Project [+]
L1-005 ***Gustavo Henrique Martins Ferreira Souza*** Rapid screening of Bothrops snake venoms for peptides using high performance liquid chromatography coupled to tandem nano-electrospray mass spectrometry [+]
L1-026P ***Theo Klein*** Activity-based profiling of membrane-bound metalloproteinases [+]

L3| Genomics in Protein Biotechnology / Protein Biotechnology

L3-001 ***Bertold Hock*** Recombinant antibodies for analytics [+]
L3-002 ***Rainer Rudolph*** Creating novel proteins for therapeutic applications [+]
L3-003 ***Tairo Oshima*** Revival of a classical resource for thermophiles and thermophilic enzymes [+]
L3-004 ***Christian R Noe*** The Impact of Recombinant Proteins on the Pharmaceutical Sector [+]
L3-006 ***Judit Maria Nagy*** Characterization of antigens for an optimal TB vaccine [+]

M1| Peptidomimetics and Signal Transduction Inhibition

M1-003 ***Gerhard Müller*** Structure-based lead optimisation of kinase inhibitors: facts or fantasy? [+]

M1-005 ***Junichi Sakai*** Structure-based discovery of non-peptidic small molecule inhibitors of Caspase-3 [+]

M3| Role of Peptides in Neuroprotection and Neurodegeneration

M3-001 ***Tibor Harkany*** Nonfibrillar beta-amyloid arrests spike-timing-dependent LTP induction at excitatory synapses in layer 2/3 of the neocortex: involvement of AMPA receptors [+]
M3-003 ***Paul G.M. Luiten*** Amyloid-beta: neurotoxic mechanisms and neuroprotective approaches [+]
M3-004 ***Weihong Pan*** Regulated access of peripheral cytokines to the injured CNS [+]
M3-005 ***Anna Aris*** α_v integrins interacting peptides are neuroprotective after an excitotoxic lesion to the immature brain [+]
M3-006 ***Ingrid Dupiereux*** Prion peptide interactions with neuroblastoma cells and liposomes: a potential cytotoxicity mechanism [+]

N1| IUBMB 50th Anniversary Symposium: Protein Structure and Function

N1-004 ***Alfred Wittinghofer*** Signaling via GTP-binding proteins of the Ras superfamily [+]
N1-005 ***William J Whelan*** 50 Years of IUB(MB) [+]

N2| Media Relations Symposium

N2-001 ***Lone Frank*** The media - between science and fiction? [+]
N2-002 ***Louis-Marie Houdebine*** The role of media in GMO debate in France [+]
N2-003 ***Becky Morelle*** Science and the media- a poor fit?
N2-005 ***Balázs Ervin*** Who is manipulating whom? [+]
N2-006 ***István Palugyai*** Challenges of covering science in Europe' 25 [+]

N3| Apoptosis and Signal Transduction

N3-001 ***Jurg Tschopp*** The PIDDosome, a protein complex implicated in activation of caspase-2 in response to genotoxic stress [+]
N3-002 ***Dario Alessi*** Connecting signalling pathways regulated by exercise with cancer [+]
N3-003 ***Christopher John Marshall*** Interactions between small GTPase signalling pathways in tumour cell biology [+]
N3-004 ***Zsuzsa Szondy*** Nur77 an orphan transcription factor is induced in several apoptotic pathways of T cells [+]
N3-005 ***Arun Dharmarajan*** Expression of Secreted Frizzled Related

Protein and associated Wnt signalling in breast cancer [+]
N3-006 ***Boris Turk*** Cysteine cathepsins as apoptosis mediators [+]

N4| **ISN Symposium on System Neurochemistry: From Genes to Drugs**

N4-002 ***Daniela Kaufer*** Genetic manipulations of hormonal signaling in the hippocampus. [+]
N4-003 ***Eran Meshorer*** SC35 promotes prolonged stress- induced 3'alternative splicing of acetylcholinesterase

N5| **Mitochondrial Dysfunction in Disease**

N5-002 ***Sten Orrenius*** Mitochondrial regulation of caspase activation [+]
N5-003 ***Antonio Zorzano*** Mitofusins: from mitochondrial architecture to oxidative metabolism [+]
N5-004 ***Sergio Papa*** The cAMP cascade regulates mitochondrial respiration in mammalian cells. The role of complex I [+]
N5-005 ***Zsuzsanna Fekete*** The iron-sulphur protein Rli1p and mitochondria play an essential role in the biogenesis of cytosolic ribosomes [+]
N5-013P ***Dalia Marija Kopustinskiene*** Accumulation of long chain fatty acids decreases the cardioprotective effect of KATP channel openers [+]

N6| **IUBMB Symposium on the Education of Biochemistry and Molecular Biology: Visual Literacy in Biochemistry**

N6-005 ***Donald Nicholson*** 50 Years 'Making Metabolism Meaningful, Wonder-full - and FUN' [+]
N6-001 ***Trevor Ryan Anderson*** The importance of visual literacy and its assessment in biochemistry [+]
N6-004 ***Duane W Sears*** Designing visual literacy assessments in biochemistry: Finding out what students know, and do not know, as a prelude to effective instruction. [+]
N6-003 ***Michael H Patrick*** From cyberspace to real space: enhancing molecular visualization with physcial models of proteins and other biomolecules [+]
N6-009 ***Clare Sansom*** The use of molecular visualisation freeware in an internet-based structural biology course [+]
N6-002 ***Cecilia Hidalgo*** The Education Committee of the International Union of Biochemistry and Molecular Biology [+]

***N7*| FEBS Symposium on the Education of Biochemistry to the memory of Prof. Peter Campbell**

N7-001 ***Paul Anthony Millner*** Development of a protein purification practical: providing an integrated set of biochemistry laboratory skills. [+]
N7-003 ***Jozsef Szeberenyi*** Taking an Experimental Approach in Basic Science Education [+]
N7-004 ***Gary Walsh*** Maintaining subject interest through judicious choice of practicals [+]
N7-006P ***Gul Guner*** A model of biochemistry dry practical for learning liver functions and bilirubin metabolism in medical school; student feed back [+]
N7-007P ***Ivana Marova*** Teaching biochemistry at Technical University of Brno [+]

***P1*| FEBS Datta Plenary Lectureship Award**

P1-001 ***Ada Yonath*** Peptide bond formation, cotranslational folding and antibiotics synergism [+]

***P2*| 50th Anniversary IUBMB Lecture**

P2-001 ***Christopher M Dobson*** Protein misfolding and human disease: what we have learned from 50 years of protein science [+]

***P3*| Theodor Bücher Lecture and Medal**

P3-001 ***Douglas B Kell*** Metabolomics, modelling and machine learning in systems biology; understanding complex systems using genetic programming to produce simple interpretable rules. The Theodor Bücher Lecture and Medal. [+]

***P4*| PABMB Plenary Lecture**

P4-001 ***Natalie Catherine Jane Strynadka*** Structure-based antibiotic design on the bacterial membrane [+]

***P5*| Sir Hans Krebs Lecture and Medal**

P5-001 ***Thomas Jenuwein*** The epigenome in the context of the post-genomic era [+]

***P6*| Special Plenary Lecture**

P6-001 ***Keiichi Namba*** Molecular mechanisms of bacterial swimming and tumbling [+]

***P7*| EMBO Lecture**

P7-001 ***Maria Carmo-Fonseca*** Dynamics of spliceosome components in the living cell nucleus [+]

By Name

A

Ada Yonath ***P1-001*** Peptide bond formation, cotranslational folding and antibiotics synergism [+]
Adam Liwo ***G2-002*** Ab initio simulations of protein folding pathways by molecular dynamics with the united-residue (UNRES) model of polypeptide chains [+]
Akihiro Kusumi ***C3-003*** Digital-like signal transduction? Investigations by single-molecule observations [+]
Albert Laszlo Barabasi ***H4-002*** Network biology: from the metabolism to protein interactions. [+]
Aleksi Sedo ***B4-017P*** Dipeptidyl peptidase IV activity and/or structure homologues (DASH) in brain tumors
Alex Webb ***J3-003*** Circadian regulation of signalling in plant cells [+]
Alexandra Kroll ***J2-005*** The role of CDC20 isoforms in A. thaliana cell cycle regulation and development [+]
Alexandre M.J.J. Bonvin ***C6-001*** Data-driven docking for the study of biomolecular complexes. [+]
Alfred Wittinghofer ***N1-004*** Signaling via GTP-binding proteins of the Ras superfamily [+]
Andras Kapus ***E4-003*** Regulation of Rho family GTPases by physico-chemical parameters [+]
Angelica Keller ***G3-015P*** Interaction between enolase isozymes and cytoskeleton: a control mechanism of glycolytic energy utilisation. [+]
Angelo Benedetti ***H2-001*** Oxidation of proteins: an overview [+]
Anna Aris ***M3-005*** α_v integrins interacting peptides are neuroprotective after an excitotoxic lesion to the immature brain [+]
Anna Erdei ***D3-004*** The β subunit of the type I Fcε receptor is a target for complement-derived peptides inhibiting IgE-mediated secretory response of mast cells [+]
Anton Buzdin ***A4-005*** Improving specificity of DNA hybridization-based methods. [+]
Antonio Zorzano ***N5-003*** Mitofusins: from mitochondrial architecture to oxidative metabolism [+]
Arun Dharmarajan ***N3-005*** Expression of Secreted Frizzled Related Protein and associated Wnt signalling in breast cancer [+]

B

Balázs Ervin ***N2-005*** Who is manipulating whom? [+]
Becky Morelle ***N2-003*** Science and the media- a poor fit?

Ben de Kruijff *C4-001* The ways peptide antibiotics can kill bacteria by interacting with specific lipids [+]
Benoit de Crombrugghe *D1-001* Sox9 controls both chondrocyte differentiation and proliferation [+]
Bernd Bukau *G1-002* Chaperone machines of the cytosol [+]
Bertold Hock *L3-001* Recombinant antibodies for analytics [+]
Björn Dahlbäck *G4-004* The anticoagulant protein C pathway [+]
Boris Turk *N3-006* Cysteine cathepsins as apoptosis mediators [+]

C

Carol MacKintosh *J4-004* 14-3-3s as signalling integrators in plant and human cells [+]
Cecilia Hidalgo *N6-002* The Education Committee of the International Union of Biochemistry and Molecular Biology [+]
Chaitan Khosla *H1-003* Chemistry & Biology of Human Transglutaminase 2: Its Role in Celiac Sprue and Other Diseases [+]
Charles Streuli *D1-004* The central role of integrin-mediated adhesion in controlling epithelial cell survival and differentiation [+]
Charles S Craik *B3-002* Regulating the activity of herpes virus proteases [+]
Chitty Chen *A1-006* Glycoprofiling of N-linked serum protein: an aging biomarker? [+]
Christian R Noe *L3-004* The Impact of Recombinant Proteins on the Pharmaceutical Sector [+]
Christopher D Hardin *G3-002* Structural basis of glycolytic compartmentation: a cytoarchitect&#65533;s guide to metabolism [+]
Christopher John Marshall *N3-003* Interactions between small GTPase signalling pathways in tumour cell biology [+]
Christopher M Dobson *P2-001* Protein misfolding and human disease: what we have learned from 50 years of protein science [+]
Cinzia Domenicotti *H3-006* ROS and PKC delta: a bidirectional intracellular talk able to decide cellular fate. [+]
Clare Sansom *N6-009* The use of molecular visualisation freeware in an internet-based structural biology course [+]
Claudio Dalvit *C6-002* Efficient NMR methods for identifying inhibitors of protein-protein interactions [+]
Claudio Franceschi *A1-001* The genetics of human longevity [+]
Colin Gordon *B2-002* Transferring substrates to the 26S proteasome in the fission yeast Schizosaccharomyces pombe [+]
Colin Longstaff *G4-002* Clot busting drugs studied using fluorescent protein fusions. [+]

D

Dale Laird *C7-002* Transport, assembly and turnover of wild-type and mutant connexins linked to human disease [+]
Dalia Marija Kopustinskiene *N5-013P* Accumulation of long chain fatty acids decreases the cardioprotective effect of KATP channel openers [+]
Daniela Kaufer *N4-002* Genetic manipulations of hormonal signaling in the hippocampus. [+]
Dario Alessi *N3-002* Connecting signalling pathways regulated by exercise with cancer [+]
David Eisenberg *A2-002* Structural studies of amyloid [+]
David Jones *G3-001* Prediction of protein-protein and protein-ligand interactions from protein structures
David A Fell *H4-003* The substructure of large metabolic networks [+]
David A Lane *G4-003* Regulation of thrombin [+]
David Avram Sanders *E4-005* Structural basis of the processivity of an exopolyphosphatase with a novel regulatory GTPase fold [+]
Dieter Oesterhelt *C4-003* Why does nature form a two-dimensional membrane protein crystal? [+]
Dirk Inze *J2-003* The control of endoreduplication in Arabidopsis [+]
Donald Nicholson *N6-005* 50 Years 'Making Metabolism Meaningful, Wonder-full - and FUN' [+]
Dorothee Staiger *J3-002* Post-transcriptional control in the Arabidopsis circadian system [+]
Douglas B Kell *P3-001* Metabolomics, modelling and machine learning in systems biology; understanding complex systems using genetic programming to produce simple interpretable rules. The Theodor Bücher Lecture and Medal. [+]
Duane W Sears *N6-004* Designing visual literacy assessments in biochemistry: Finding out what students know, and do not know, as a prelude to effective instruction. [+]

E

E. Brad Thompson *K3-002* Functional consequences of the dynamic folding of the glucocorticoid receptor N-terminal transcription activating domain (AF1) [+]
Efstathios Gonos *A1-002* Longevity and survival factors implicated in human ageing and longevity [+]
Emmanuelle Caron *E4-004* Regulation of small GTPase function during macrophage phagocytosis [+]
Eran Meshorer *N4-003* SC35 promotes prolonged stress- induced 3'alternative splicing of acetylcholinesterase

Eric Klann ***H3-001*** Reactive Oxygen Species Signaling in the Hippocampus [+]

F

Frances M. Brodsky ***C3-001*** Pathways regulating the internalization of activated immune receptors [+]
Francesc X. Aviles ***B3-001*** Structural and functional relationships between serine-and metallo.carboxy-peptidases and their protein inhibitors [+]

G

Ganna Panasyuk ***E1-005*** Casein kinase 2 interacts with and regulates subcellular localization of S6K1 [+]
Garry C Whitelam ***J3-004*** The circadian clock gates shade avoidance responses in Arabidopsis [+]
Gary Walsh ***N7-004*** Maintaining subject interest through judicious choice of practicals [+]
George K Radda ***H4-004*** Metabolic control through gene expression in the failing and diabetic heart [+]
Gerhard Müller ***M1-003*** Structure-based lead optimisation of kinase inhibitors: facts or fantasy? [+]
Gul Guner ***N7-006P*** A model of biochemistry dry practical for learning liver functions and bilirubin metabolism in medical school; student feed back [+]
Gunter Reuter ***D2-004*** Histone methylation and the control of gene silencing in Drosophila [+]
Gustavo Henrique Martins Ferreira Souza ***L1-005*** Rapid screening of Bothrops snake venoms for peptides using high performance liquid chromatography coupled to tandem nano-electrospray mass spectrometry [+]
Gyorgy Szabadkai ***C7-006*** Regulation of mitochondrial function by membrane fusion, fission and biogenesis [+]

H

Hanne B. Rasmussen ***B1-001*** DPP-IV structure and inhibitor design [+]
Harry Ischiropoulos ***H3-003*** Functional consequences of protein tyrosine nitration and oxidation [+]
Helmut E. Meyer ***L1-004*** The HUPO Brain Proteome Project [+]
Hiroyuki Sorimachi ***B4-001*** Calpain and connectin/titin in health and

disease of skeletal muscle.
Howard C. Berg *F3-003* Control of the bacterial flagellar motor [+]

I

Iain Donald Campbell *C6-003* Atomic resolution definition of protein-protein interactions [+]
Ian A. Graham *J4-002* Metabolite sensing in plants: a role for trehalose metabolism in seed development and embryo development [+]
Ian J Reynolds *H3-002* Modulation of mitochondrial oxidant signals [+]
Indronil Chaudhuri *A2-005* Trapping the building blocks of β-propeller proteins [+]
Ineke Braakman *G1-004* Disulfide bond formation during protein folding in the endoplasmic reticulum
Ingrid Dupiereux *M3-006* Prion peptide interactions with neuroblastoma cells and liposomes: a potential cytotoxicity mechanism [+]
Israel Pecht *C3-004* Cross-talk among membrane receptors: Regulation of mast cells' secretory response.
István Palugyai *N2-006* Challenges of covering science in Europe' 25 [+]
Ivana Marova *N7-007P* Teaching biochemistry at Technical University of Brno [+]

J

Jack Preiss *J4-005* Crystal structure of potato tuber ADP-glucose pyrophosphorylase catalytic subunit and conversion of the regulatory subunit into a catalytic subunit
James A. Huntington *B3-004* Shape shifting serpins [+]
James E Rothman *C7-004* SNAREs Can Promote Complete Fusion and Hemifusion as Alternative Outcomes [+]
Jana Hendrychová *J2-006* Kinase activity of cyclin-dependent kinase complexes in the cell cycle of chlorococcal algae [+]
Jean-Marie Ruysschaert *C4-006* Requirement of phosphatidylethanolamine for the normal structure and activity of the multidrug transporter LmrP [+]
Johanna Myllyharju *H2-005* Prolyl 4-hydroxylases, key enzymes in the synthesis of collagens and the response of cells to hypoxia [+]
John Schwabe *K3-006* Recruitment and assembly of the nuclear receptor repression complex [+]
John Edward Baenziger *C4-012P* Fine-tuning nicotinic receptor function through the lipid bilayer [+]
John L. Markley *C6-004* Automation in NMR investigations of protein

structure and interactions [+]
Jordi Villà-Freixa ***A3-004*** Per residue characterization of protein-protein interfaces: a relationship between stability and functionality? [+]
Joseph Merregaert ***D1-005*** The extracellular matrix 1 gene (ECM1) is essential for early mouse development [+]
Jozsef Szeberenyi ***N7-003*** Taking an Experimental Approach in Basic Science Education [+]
Judit Oláh ***A4-006*** Triosephosphate isomerase deficiency: relationship between enzyme mutation and neurodegeneration [+]
Judit Maria Nagy ***L3-006*** Characterization of antigens for an optimal TB vaccine [+]
Judith Frydman ***G1-003*** The substrate spectrum of the eucaryotic chaperonin TRIC/CCT revealed by genomic approaches [+]
Judith S Bond ***B4-003*** Meprin metalloproteases in inflammation and cancer [+]
Junichi Sakai ***M1-005*** Structure-based discovery of non-peptidic small molecule inhibitors of Caspase-3 [+]
Jurg Tschopp ***N3-001*** The PIDDosome, a protein complex implicated in activation of caspase-2 in response to genotoxic stress [+]
János Szöllösi ***C3-006*** Effect of lipid environment on signaling of ErbB2 receptor tyrosine kinase in Herceptin resistant and sensitive cell lines [+]

K

Karel W.A. Wirtz ***H2-006*** Detection of protein and lipid oxidation in living cells using fluorescent probes [+]
Keiichi Namba ***P6-001*** Molecular mechanisms of bacterial swimming and tumbling [+]
Keith R. Yamamoto ***K3-003*** Deciphering the specificity of response element-specific transcriptional regulatory complexes
Krasimir Kolev ***G4-005*** Fibrinolysis in phospholipid environment: modulation through release of fatty acids [+]
Krishna M Bhat ***D2-001*** A neurodegenerative disease in Drosophila mutant for the tumor suppressor protein Patched
Kurt Drickamer ***D3-001*** Carbohydrate-binding receptors in innate immunity [+]

L

Lauren K Ely ***C6-014P*** A new mode of recognition: an entropically favoured T-cell receptor
Laurent Fagni ***C7-003*** The scaffolding protein Shank and associated glutamate receptors induce formation and maturation of dendritic spines [+]

Lawrence Rajendran ***C3-005*** Role of rafts and rabs in Alzheimer's disease [+]
Lone Frank ***N2-001*** The media - between science and fiction? [+]
Louis-Marie Houdebine ***N2-002*** The role of media in GMO debate in France [+]
Luisa Mariconti ***J2-002*** Integration of cell cycle and epigenetic regulation during Arabidopsis development [+]
Luke A O'Neill ***D3-002*** Toll-like receptor signal transduction [+]
László Fésüs ***H1-005*** Transglutaminase 2 in the balance of cell survival and death [+]
László Gráf ***C6-005*** Protease inhibitors of the grasshopper family: structure, molecular flexibility, specificity and mechanism of action [+]
László Szilágyi ***B3-006*** Trypsinogen 4 with a 28 amino acid leader peptide on its N-terminus is the predominant form of the enzyme in human brain [+]

M

Malcolm Parker ***K3-005*** Role of the RIP140 corepressor in adipose biology and ovarian function [+]
Manuela Baccarini ***E1-004*** Biological functions of the Raf-1 'kinase' [+]
Maria Carmo-Fonseca ***P7-001*** Dynamics of spliceosome components in the living cell nucleus [+]
Maria Sasvari-Szekely ***O1-178*** Endophenotypes Related to the Dopamine D4 Receptor Polymorphisms [+]
Martin L. Privalsky ***K3-001*** Isoforms of nuclear receptors and of their coregulators diversify the transcriptional response. [+]
Mathias Uhlen ***G3-004*** A human protein atlas for proteome profiling in normal and disease tissue [+]
Mats Paulsson ***D1-003*** The matrilins - adaptor proteins in the extracellular matrix [+]
Michael Teufel ***B1-004*** Identification of human carnosinase- a brain-specific metalloprotease [+]
Michael H Glickman ***B2-003*** Non-proteasomal RPN10 raises the threshold for association of a ubiquitin-binding protein with the proteasome [+]
Michael H Patrick ***N6-003*** From cyberspace to real space: enhancing molecular visualization with physcial models of proteins and other biomolecules [+]
Michel B. Toledano ***H3-004*** H2O2 signaling through cysteine modifcations [+]
Mikhail A. Panteleev ***G4-006*** Factor VIIIa regulates substrate delivery to intrinsic tenase [+]
Miklós Szekeres ***D2-006*** How brassinosteroid-biosynthetic enzymes

control plant morphogenesis? [+]
Miklós Csala *H2-003* Endoplasmic reticulum lumen: a Janus-faced compartment [+]
Mitchell A. Lazar *K3-004* Repression by nuclear hormone receptors [+]

N

Natalie Catherine Jane Strynadka *P4-001* Structure-based antibiotic design on the bacterial membrane [+]
Nektarios Tavernarakis *B4-004* Biochemical pathways mediating necrotic cell death and neurodegeneration in Caenorhabditis elegans [+]

O

Oliver Hantschel *E1-006* Structure-function analysis on the mechanism of BCR-ABL/C-ABL localization [+]

P

Pascal Genschik *J2-001* CULLIN-based ubiquitin ligases in plants: phytohormones signalling but not much about cell cycle yet [+]
Paul Anthony Millner *N7-001* Development of a protein purification practical: providing an integrated set of biochemistry laboratory skills. [+]
Paul G.M. Luiten *M3-003* Amyloid-beta: neurotoxic mechanisms and neuroprotective approaches [+]
Peter Deckers *J4-006* Plant responses to cadmium stress: a proteomic approach [+]
Peter Parham *D3-003* Killer-Cell Immunoglobulin-like Receptors [+]
Peter Tompa *B4-002* Inhibition and activation of calpain by its disordered endogenous inhibitor, calpastatin [+]
Peter John Ratcliffe *H2-004* Cellular oxygen sensing and the regulation of HIF by protein hydroxylation [+]
Petra Kiss *O1-186* Zn^{2+}-induced reversible dissociation of subunit Rpn10/p54 of the Drosophila 26S proteasome [+]
Piotr Zielenkiewicz *A3-003* Evolutionary history of the eukaryotic interactome [+]

R

Rachel Levy *D3-005* Expression of Fc gamma RIIA in PLB cells during differentiation by $1,25(OH)_2D_3$ depends on Cytosolic $PLA_2$and is regulated via activation of CREB by PGE_2
Rainer Rudolph *L3-002* Creating novel proteins for therapeutic

applications [+]
Reinhard Fässler *D1-002* The role of chondrocyte-matrix attachment complexes in skeletal development [+]
Renu Wadhwa *A1-004* Cellular phenotypes with increased and reduced levels of mortalin protein [+]
Richard I. Morimoto *G1-001* Stress and misfolded proteins: modulators of neurodegenerative diseases and longevity [+]
Robert Huber *B3-003* Proteases and their regulation- from structures to mechanisms and new concepts for intervention
Robert A. Lazarus *B3-005* Structural lessons of serine proteases: Function and mechanism of the serine protease-like HGF as a growth factor in Met signaling [+]
Roberto Sitia *H2-002* Redox control in the endoplasmic reticulum. [+]
Roger Lijnen *G4-001* Interactions between the fibrinolytic and matrix metalloproteinase systems and atherothrombosis [+]
Ron Kopito *G3-003* The role of autophagy in degradation of intracellular protein aggregates [+]
Ruedi Aebersold *H4-001* Quantitative proteomics and systems biology [+]

S

S E Antonarakis *A4-002* The mystery of conserved non-genic (CNG) sequences [+]
Sergio Papa *N5-004* The cAMP cascade regulates mitochondrial respiration in mammalian cells. The role of complex I [+]
Seth Jon Davis *J3-001* Detecting the boundaries of one day [+]
Sjef Smeekens *J4-003* A conserved uORF mediates sucrose-induced repression of translation. [+]
Sten Orrenius *N5-002* Mitochondrial regulation of caspase activation [+]
Suresh I. S. Rattan *A1-003* Ageing intervention, prevention and maintenance of proteomic integrity. [+]
Sándor Pongor *O1-183* Multiple weak hits confuse transcriptional regulatory networks [+]
Sónia Troeira Henriques *C4-005* Uptake of beta-galactosidase mediated by the cell penetrating peptide pep-1 into large unilamellar vesicles and HeLa cells is driven by membrane potential [+]

T

Tairo Oshima *L3-003* Revival of a classical resource for thermophiles and thermophilic enzymes [+]
Tamas Fulop *A1-005* T-lymphocytes activation, lipid rafts and aging:

links for immuno-senescense [+]
Tamás Vicsek ***H4-006*** Uncovering the overlapping modular structure of protein interaction networks [+]
Theo Klein ***L1-026P*** Activity-based profiling of membrane-bound metalloproteinases [+]
Thomas Jenuwein ***P5-001*** The epigenome in the context of the post-genomic era [+]
Thomas M Jovin ***C3-002*** Retrograde filopodial transport of activated EGF receptors
Tibor Harkany ***M3-001*** Nonfibrillar beta-amyloid arrests spike-timing-dependent LTP induction at excitatory synapses in layer 2/3 of the neocortex: involvement of AMPA receptors [+]
Timea Gerczei ***G1-006*** Ribonucleic acid chaperones and their significance during ribosome biogenesis [+]
Trevor Ryan Anderson ***N6-001*** The importance of visual literacy and its assessment in biochemistry [+]

U

Uwe Kobold ***L1-003*** IFCC reference method for HbA1c in human blood: a new concept for protein standardization by HPLC-MS [+]

V

Valeria Mapelli ***E4-006*** Structure-based hypothesis on active role of RasGEF αG-helix [+]
Victor J Hruby ***C7-001*** New insights into the role of lipid rafts in GPCR signal transduction using Plasmon Waveguide Resonance (PWR) spectroscopy [+]
Vilmos Fülöp ***B4-006*** β-propellers in enzyme catalysis and regulation [+]

W

Walid A Houry ***G1-005*** Navigating the chaperone network: an integrative map of physical, genetic, and chemical-genetic interactions mediated by the yeast Hsp90 chaperone system [+]
Weihong Pan ***M3-004*** Regulated access of peripheral cytokines to the injured CNS [+]
William J Whelan ***N1-005*** 50 Years of IUB(MB) [+]
Wolfgang Baumeister ***B2-001*** The 20S proteasome: Mechanisms of assembly and substrate translocation [+]

Y

Yasuyuki Igarashi ***C5-002*** Ceramide kinase is required for degranulation pathway in mast cell and regulated by Calmodulin/Ca^{2+} and PIP2 through specific interaction with their recognition domains
Yury O. Chernoff ***G3-005*** Modulation of prion formation, aggregation and toxicity by cytoskeletal proteins of the vesicle assembly complex in yeast [+]

Z

Zoltan N. Oltvai ***A3-002*** Functional organization of transcriptional-regulatory networks [+]
Zsuzsa Szondy ***N3-004*** Nur77 an orphan transcription factor is induced in several apoptotic pathways of T cells [+]
Zsuzsanna Fekete ***N5-005*** The iron-sulphur protein Rli1p and mitochondria play an essential role in the biogenesis of cytosolic ribosomes [+]

By Title

1

- 14-3-3s as signalling integrators in plant and human cells ***Carol MacKintosh*** J4-004 [+]

5

- 50 Years of IUB(MB) ***William J Whelan*** N1-005 [+]
- 50 Years 'Making Metabolism Meaningful, Wonder-full - and FUN' ***Donald Nicholson*** N6-005 [+]

A

- α_v integrins interacting peptides are neuroprotective after an excitotoxic lesion to the immature brain ***Anna Aris*** M3-005 [+]
- A conserved uORF mediates sucrose-induced repression of translation. ***Sjef Smeekens*** J4-003 [+]
- A human protein atlas for proteome profiling in normal and disease tissue ***Mathias Uhlen*** G3-004 [+]
- A model of biochemistry dry practical for learning liver functions and bilirubin metabolism in medical school; student feed back ***Gul Guner*** N7-006P [+]
- A neurodegenerative disease in Drosophila mutant for the tumor suppressor protein Patched ***Krishna M Bhat*** D2-001
- A new mode of recognition: an entropically favoured T-cell receptor ***Lauren K Ely*** C6-014P
- Ab initio simulations of protein folding pathways by molecular dynamics with the united-residue (UNRES) model of polypeptide chains ***Adam Liwo*** G2-002 [+]
- Accumulation of long chain fatty acids decreases the cardioprotective effect of KATP channel openers ***Dalia Marija Kopustinskiene*** N5-013P [+]
- Activity-based profiling of membrane-bound metalloproteinases ***Theo Klein*** L1-026P [+]
- Ageing intervention, prevention and maintenance of proteomic integrity. ***Suresh I. S. Rattan*** A1-003 [+]
- Amyloid-beta: neurotoxic mechanisms and neuroprotective approaches ***Paul G.M. Luiten*** M3-003 [+]
- Atomic resolution definition of protein-protein interactions ***Iain Donald Campbell*** C6-003 [+]

- Automation in NMR investigations of protein structure and interactions ***John L. Markley*** C6-004 [+]

B

- Biochemical pathways mediating necrotic cell death and neurodegeneration in Caenorhabditis elegans ***Nektarios Tavernarakis*** B4-004 [+]
- Biological functions of the Raf-1 'kinase' ***Manuela Baccarini*** E1-004 [+]
- β-propellers in enzyme catalysis and regulation ***Vilmos Fülöp*** B4-006 [+]

C

- CULLIN-based ubiquitin ligases in plants: phytohormones signalling but not much about cell cycle yet ***Pascal Genschik*** J2-001 [+]
- Calcium release mediated by redox activation of ryanodine receptors induces CREB and ERK phosphorylation in N2a cells and hippocampal neurons. ***Cecilia Hidalgo*** H3-005
- Calpain and connectin/titin in health and disease of skeletal muscle. ***Hiroyuki Sorimachi*** B4-001
- Carbohydrate-binding receptors in innate immunity ***Kurt Drickamer*** D3-001 [+]
- Casein kinase 2 interacts with and regulates subcellular localization of S6K1 ***Ganna Panasyuk*** E1-005 [+]
- Cellular oxygen sensing and the regulation of HIF by protein hydroxylation ***Peter John Ratcliffe*** H2-004 [+]
- Cellular phenotypes with increased and reduced levels of mortalin protein ***Renu Wadhwa*** A1-004 [+]
- Ceramide kinase is required for degranulation pathway in mast cell and regulated by Calmodulin/Ca^{2+} and PIP2 through specific interaction with their recognition domains ***Yasuyuki Igarashi*** C5-002
- Challenges of covering science in Europe' 25 ***István Palugyai*** N2-006 [+]
- Chaperone machines of the cytosol ***Bernd Bukau*** G1-002 [+]
- Characterization of antigens for an optimal TB vaccine ***Judit Maria Nagy*** L3-006 [+]
- Chemistry & Biology of Human Transglutaminase 2: Its Role in Celiac Sprue and Other Diseases ***Chaitan Khosla*** H1-003 [+]

- Circadian regulation of signalling in plant cells ***Alex Webb*** J3-003 [+]
- Clot busting drugs studied using fluorescent protein fusions. ***Colin Longstaff*** G4-002 [+]
- Connecting signalling pathways regulated by exercise with cancer ***Dario Alessi*** N3-002 [+]
- Control of the bacterial flagellar motor ***Howard C. Berg*** F3-003 [+]
- Creating novel proteins for therapeutic applications ***Rainer Rudolph*** L3-002 [+]
- Cross-talk among membrane receptors: Regulation of mast cells' secretory response. ***Israel Pecht*** C3-004
- Crystal structure of potato tuber ADP-glucose pyrophosphorylase catalytic subunit and conversion of the regulatory subunit into a catalytic subunit ***Jack Preiss*** J4-005
- Cysteine cathepsins as apoptosis mediators ***Boris Turk*** N3-006 [+]

D

- DPP-IV structure and inhibitor design ***Hanne B. Rasmussen*** B1-001 [+]
- Data-driven docking for the study of biomolecular complexes. ***Alexandre M.J.J. Bonvin*** C6-001 [+]
- Deciphering the specificity of response element-specific transcriptional regulatory complexes ***Keith R. Yamamoto*** K3-003
- Designing visual literacy assessments in biochemistry: Finding out what students know, and do not know, as a prelude to effective instruction. ***Duane W Sears*** N6-004 [+]
- Detecting the boundaries of one day ***Seth Jon Davis*** J3-001 [+]
- Detection of protein and lipid oxidation in living cells using fluorescent probes ***Karel W.A. Wirtz*** H2-006 [+]
- Development of a protein purification practical: providing an integrated set of biochemistry laboratory skills. ***Paul Anthony Millner*** N7-001 [+]
- Digital-like signal transduction? Investigations by single-molecule observations ***Akihiro Kusumi*** C3-003 [+]
- Dipeptidyl peptidase IV activity and/or structure homologues (DASH) in brain tumors ***Aleksi Sedo*** B4-017P
- Disulfide bond formation during protein folding in the endoplasmic reticulum ***Ineke Braakman*** G1-004
- Dynamics of spliceosome components in the living cell nucleus ***Maria Carmo-Fonseca*** P7-001 [+]

E

- Effect of lipid environment on signaling of ErbB2 receptor tyrosine kinase in Herceptin resistant and sensitive cell lines ***János Szöllösi*** C3-006 [+]
- Efficient NMR methods for identifying inhibitors of protein-protein interactions ***Claudio Dalvit*** C6-002 [+]
- Endophenotypes Related to the Dopamine D4 Receptor Polymorphisms ***Maria Sasvari-Szekely*** O1-178 [+]
- Endoplasmic reticulum lumen: a Janus-faced compartment ***Miklós Csala*** H2-003 [+]
- Evolutionary history of the eukaryotic interactome ***Piotr Zielenkiewicz*** A3-003 [+]
- Expression of Fc gamma RIIA in PLB cells during differentiation by $1,25(OH)_2D_3$ depends on Cytosolic $PLA_2$and is regulated via activation of CREB by PGE_2 ***Rachel Levy*** D3-005
- Expression of Secreted Frizzled Related Protein and associated Wnt signalling in breast cancer ***Arun Dharmarajan*** N3-005 [+]

F

- Factor VIIIa regulates substrate delivery to intrinsic tenase ***Mikhail A. Panteleev*** G4-006 [+]
- Fibrinolysis in phospholipid environment: modulation through release of fatty acids ***Krasimir Kolev*** G4-005 [+]
- Fine-tuning nicotinic receptor function through the lipid bilayer ***John Edward Baenziger*** C4-012P [+]
- From cyberspace to real space: enhancing molecular visualization with physcial models of proteins and other biomolecules ***Michael H Patrick*** N6-003 [+]
- Functional consequences of protein tyrosine nitration and oxidation ***Harry Ischiropoulos*** H3-003 [+]
- Functional consequences of the dynamic folding of the glucocorticoid receptor N-terminal transcription activating domain (AF1) ***E. Brad Thompson*** K3-002 [+]
- Functional organization of transcriptional-regulatory networks ***Zoltan N. Oltvai*** A3-002 [+]

G

- Genetic manipulations of hormonal signaling in the hippocampus. ***Daniela Kaufer*** N4-002 [+]

- Glycoprofiling of N-linked serum protein: an aging biomarker? ***Chitty Chen*** A1-006 [+]

H

- H2O2 signaling through cysteine modifcations ***Michel B. Toledano*** H3-004 [+]
- Histone methylation and the control of gene silencing in Drosophila ***Gunter Reuter*** D2-004 [+]
- How brassinosteroid-biosynthetic enzymes control plant morphogenesis? ***Miklós Szekeres*** D2-006 [+]

I

- IFCC reference method for HbA1c in human blood: a new concept for protein standardization by HPLC-MS ***Uwe Kobold*** L1-003 [+]
- Identification of human carnosinase- a brain-specific metalloprotease ***Michael Teufel*** B1-004 [+]
- Improving specificity of DNA hybridization-based methods. ***Anton Buzdin*** A4-005 [+]
- Inhibition and activation of calpain by its disordered endogenous inhibitor, calpastatin ***Peter Tompa*** B4-002 [+]
- Integration of cell cycle and epigenetic regulation during Arabidopsis development ***Luisa Mariconti*** J2-002 [+]
- Interaction between enolase isozymes and cytoskeleton: a control mechanism of glycolytic energy utilisation. ***Angelica Keller*** G3-015P [+]
- Interactions between small GTPase signalling pathways in tumour cell biology ***Christopher John Marshall*** N3-003 [+]
- Interactions between the fibrinolytic and matrix metalloproteinase systems and atherothrombosis ***Roger Lijnen*** G4-001 [+]
- Isoforms of nuclear receptors and of their coregulators diversify the transcriptional response. ***Martin L. Privalsky*** K3-001 [+]

K

- Killer-Cell Immunoglobulin-like Receptors ***Peter Parham*** D3-003 [+]
- Kinase activity of cyclin-dependent kinase complexes in the cell cycle of chlorococcal algae ***Jana Hendrychová*** J2-006 [+]

L

- Longevity and survival factors implicated in human ageing and longevity ***Efstathios Gonos*** A1-002 [+]

M

- Maintaining subject interest through judicious choice of practicals ***Gary Walsh*** N7-004 [+]
- Meprin metalloproteases in inflammation and cancer ***Judith S Bond*** B4-003 [+]
- Metabolic control through gene expression in the failing and diabetic heart ***George K Radda*** H4-004 [+]
- Metabolite sensing in plants: a role for trehalose metabolism in seed development and embryo development ***Ian A. Graham*** J4-002 [+]
- Metabolomics, modelling and machine learning in systems biology; understanding complex systems using genetic programming to produce simple interpretable rules. The Theodor Bücher Lecture and Medal. ***Douglas B Kell*** P3-001 [+]
- Mitochondrial regulation of caspase activation ***Sten Orrenius*** N5-002 [+]
- Mitofusins: from mitochondrial architecture to oxidative metabolism ***Antonio Zorzano*** N5-003 [+]
- Modulation of mitochondrial oxidant signals ***Ian J Reynolds*** H3-002 [+]
- Modulation of prion formation, aggregation and toxicity by cytoskeletal proteins of the vesicle assembly complex in yeast ***Yury O. Chernoff*** G3-005 [+]
- Molecular mechanisms of bacterial swimming and tumbling ***Keiichi Namba*** P6-001 [+]
- Multiple weak hits confuse transcriptional regulatory networks ***Sándor Pongor*** O1-183 [+]

N

- Navigating the chaperone network: an integrative map of physical, genetic, and chemical-genetic interactions mediated by the yeast Hsp90 chaperone system ***Walid A Houry*** G1-005 [+]
- Network biology: from the metabolism to protein interactions. ***Albert Laszlo Barabasi*** H4-002 [+]
- New insights into the role of lipid rafts in GPCR signal transduction using Plasmon Waveguide Resonance (PWR) spectroscopy ***Victor J Hruby*** C7-001 [+]

- Non-proteasomal RPN10 raises the threshold for association of a ubiquitin-binding protein with the proteasome ***Michael H Glickman*** B2-003 [+]
- Nonfibrillar beta-amyloid arrests spike-timing-dependent LTP induction at excitatory synapses in layer 2/3 of the neocortex: involvement of AMPA receptors ***Tibor Harkany*** M3-001 [+]
- Nur77 an orphan transcription factor is induced in several apoptotic pathways of T cells ***Zsuzsa Szondy*** N3-004 [+]

O

- Oxidation of proteins: an overview ***Angelo Benedetti*** H2-001 [+]

P

- Pathways regulating the internalization of activated immune receptors ***Frances M. Brodsky*** C3-001 [+]
- Peptide bond formation, cotranslational folding and antibiotics synergism ***Ada Yonath*** P1-001 [+]
- Per residue characterization of protein-protein interfaces: a relationship between stability and functionality? ***Jordi Villà-Freixa*** A3-004 [+]
- Plant responses to cadmium stress: a proteomic approach ***Peter Deckers*** J4-006 [+]
- Post-transcriptional control in the Arabidopsis circadian system ***Dorothee Staiger*** J3-002 [+]
- Prediction of protein-protein and protein-ligand interactions from protein structures ***David Jones*** G3-001
- Prion peptide interactions with neuroblastoma cells and liposomes: a potential cytotoxicity mechanism ***Ingrid Dupiereux*** M3-006 [+]
- Prolyl 4-hydroxylases, key enzymes in the synthesis of collagens and the response of cells to hypoxia ***Johanna Myllyharju*** H2-005 [+]
- Protease inhibitors of the grasshopper family: structure, molecular flexibility, specificity and mechanism of action ***László Gráf*** C6-005 [+]
- Proteases and their regulation- from structures to mechanisms and new concepts for intervention ***Robert Huber*** B3-003
- Protein misfolding and human disease: what we have learned from 50 years of protein science ***Christopher M Dobson*** P2-001 [+]

Q

- Quantitative proteomics and systems biology ***Ruedi Aebersold*** H4-001 [+]

R

- ROS and PKC delta: a bidirectional intracellular talk able to decide cellular fate. ***Cinzia Domenicotti*** H3-006 [+]
- Rapid screening of Bothrops snake venoms for peptides using high performance liquid chromatography coupled to tandem nano-electrospray mass spectrometry ***Gustavo Henrique Martins Ferreira Souza*** L1-005 [+]
- Reactive Oxygen Species Signaling in the Hippocampus ***Eric Klann*** H3-001 [+]
- Recombinant antibodies for analytics ***Bertold Hock*** L3-001 [+]
- Recruitment and assembly of the nuclear receptor repression complex ***John Schwabe*** K3-006 [+]
- Redox control in the endoplasmic reticulum. ***Roberto Sitia*** H2-002 [+]
- Regulated access of peripheral cytokines to the injured CNS ***Weihong Pan*** M3-004 [+]
- Regulating the activity of herpes virus proteases ***Charles S Craik*** B3-002 [+]
- Regulation of Rho family GTPases by physico-chemical parameters ***Andras Kapus*** E4-003 [+]
- Regulation of mitochondrial function by membrane fusion, fission and biogenesis ***Gyorgy Szabadkai*** C7-006 [+]
- Regulation of small GTPase function during macrophage phagocytosis ***Emmanuelle Caron*** E4-004 [+]
- Regulation of thrombin ***David A Lane*** G4-003 [+]
- Repression by nuclear hormone receptors ***Mitchell A. Lazar*** K3-004 [+]
- Requirement of phosphatidylethanolamine for the normal structure and activity of the multidrug transporter LmrP ***Jean-Marie Ruysschaert*** C4-006 [+]
- Retrograde filopodial transport of activated EGF receptors ***Thomas M Jovin*** C3-002
- Revival of a classical resource for thermophiles and thermophilic enzymes ***Tairo Oshima*** L3-003 [+]
- Ribonucleic acid chaperones and their significance during ribosome biogenesis ***Timea Gerczei*** G1-006 [+]
- Role of rafts and rabs in Alzheimer's disease ***Lawrence Rajendran*** C3-005 [+]

- Role of the RIP140 corepressor in adipose biology and ovarian function ***Malcolm Parker*** K3-005 [+]

S

- SC35 promotes prolonged stress- induced 3 alternative splicing of acetylcholinesterase ***Eran Meshorer*** N4-003
- SNAREs Can Promote Complete Fusion and Hemifusion as Alternative Outcomes ***James E Rothman*** C7-004 [+]
- Science and the media- a poor fit? ***Becky Morelle*** N2-003
- Shape shifting serpins ***James A. Huntington*** B3-004 [+]
- Signaling via GTP-binding proteins of the Ras superfamily ***Alfred Wittinghofer*** N1-004 [+]
- Sox9 controls both chondrocyte differentiation and proliferation ***Benoit de Crombrugghe*** D1-001 [+]
- Stress and misfolded proteins: modulators of neurodegenerative diseases and longevity ***Richard I. Morimoto*** G1-001 [+]
- Structural and functional relationships between serine-and metallo.carboxy-peptidases and their protein inhibitors ***Francesc X. Aviles*** B3-001 [+]
- Structural basis of glycolytic compartmentation: a cytoarchitect s guide to metabolism ***Christopher D Hardin*** G3-002 [+]
- Structural basis of the processivity of an exopolyphosphatase with a novel regulatory GTPase fold ***David Avram Sanders*** E4-005 [+]
- Structural lessons of serine proteases: Function and mechanism of the serine protease-like HGF as a growth factor in Met signaling ***Robert A. Lazarus*** B3-005 [+]
- Structural studies of amyloid ***David Eisenberg*** A2-002 [+]
- Structure-based antibiotic design on the bacterial membrane ***Natalie Catherine Jane Strynadka*** P4-001 [+]
- Structure-based discovery of non-peptidic small molecule inhibitors of Caspase-3 ***Junichi Sakai*** M1-005 [+]
- Structure-based hypothesis on active role of RasGEF αG-helix ***Valeria Mapelli*** E4-006 [+]
- Structure-based lead optimisation of kinase inhibitors: facts or fantasy? ***Gerhard Müller*** M1-003 [+]
- Structure-function analysis on the mechanism of BCR-ABL/C-ABL localization ***Oliver Hantschel*** E1-006 [+]

T

- T-lymphocytes activation, lipid rafts and aging: links for immuno-senescense ***Tamas Fulop*** A1-005 [+]

- Taking an Experimental Approach in Basic Science Education ***Jozsef Szeberenyi*** N7-003 [+]
- Teaching biochemistry at Technical University of Brno ***Ivana Marova*** N7-007P [+]
- The β subunit of the type I Fcε receptor is a target for complement-derived peptides inhibiting IgE-mediated secretory response of mast cells ***Anna Erdei*** D3-004 [+]
- The 20S proteasome: Mechanisms of assembly and substrate translocation ***Wolfgang Baumeister*** B2-001 [+]
- The Education Committee of the International Union of Biochemistry and Molecular Biology ***Cecilia Hidalgo*** N6-002 [+]
- The HUPO Brain Proteome Project ***Helmut E. Meyer*** L1-004 [+]
- The Impact of Recombinant Proteins on the Pharmaceutical Sector ***Christian R Noe*** L3-004 [+]
- The PIDDosome, a protein complex implicated in activation of caspase-2 in response to genotoxic stress ***Jurg Tschopp*** N3-001 [+]
- The anticoagulant protein C pathway ***Björn Dahlbäck*** G4-004 [+]
- The cAMP cascade regulates mitochondrial respiration in mammalian cells. The role of complex I ***Sergio Papa*** N5-004 [+]
- The central role of integrin-mediated adhesion in controlling epithelial cell survival and differentiation ***Charles Streuli*** D1-004 [+]
- The circadian clock gates shade avoidance responses in Arabidopsis ***Garry C Whitelam*** J3-004 [+]
- The control of endoreduplication in Arabidopsis ***Dirk Inze*** J2-003 [+]
- The epigenome in the context of the post-genomic era ***Thomas Jenuwein*** P5-001 [+]
- The extracellular matrix 1 gene (ECM1) is essential for early mouse development ***Joseph Merregaert*** D1-005 [+]
- The genetics of human longevity ***Claudio Franceschi*** A1-001 [+]
- The importance of visual literacy and its assessment in biochemistry ***Trevor Ryan Anderson*** N6-001 [+]
- The iron-sulphur protein Rli1p and mitochondria play an essential role in the biogenesis of cytosolic ribosomes ***Zsuzsanna Fekete*** N5-005 [+]
- The matrilins - adaptor proteins in the extracellular matrix ***Mats Paulsson*** D1-003 [+]
- The media - between science and fiction? ***Lone Frank*** N2-001 [+]
- The mystery of conserved non-genic (CNG) sequences ***S E Antonarakis*** A4-002 [+]
- The role of CDC20 isoforms in A. thaliana cell cycle regulation and development ***Alexandra Kroll*** J2-005 [+]

- The role of autophagy in degradation of intracellular protein aggregates ***Ron Kopito*** G3-003 [+]
- The role of chondrocyte-matrix attachment complexes in skeletal development ***Reinhard Fässler*** D1-002 [+]
- The role of media in GMO debate in France ***Louis-Marie Houdebine*** N2-002 [+]
- The scaffolding protein Shank and associated glutamate receptors induce formation and maturation of dendritic spines ***Laurent Fagni*** C7-003 [+]
- The substrate spectrum of the eucaryotic chaperonin TRIC/CCT revealed by genomic approaches ***Judith Frydman*** G1-003 [+]
- The substructure of large metabolic networks ***David A Fell*** H4-003 [+]
- The use of molecular visualisation freeware in an internet-based structural biology course ***Clare Sansom*** N6-009 [+]
- The ways peptide antibiotics can kill bacteria by interacting with specific lipids ***Ben de Kruijff*** C4-001 [+]
- Toll-like receptor signal transduction ***Luke A O'Neill*** D3-002 [+]
- Transferring substrates to the 26S proteasome in the fission yeast Schizosaccharomyces pombe ***Colin Gordon*** B2-002 [+]
- Transglutaminase 2 in the balance of cell survival and death ***László Fésüs*** H1-005 [+]
- Transport, assembly and turnover of wild-type and mutant connexins linked to human disease ***Dale Laird*** C7-002 [+]
- Trapping the building blocks of β-propeller proteins ***Indronil Chaudhuri*** A2-005 [+]
- Triosephosphate isomerase deficiency: relationship between enzyme mutation and neurodegeneration ***Judit Oláh*** A4-006 [+]
- Trypsinogen 4 with a 28 amino acid leader peptide on its N-terminus is the predominant form of the enzyme in human brain ***László Szilágyi*** B3-006 [+]

U

- Uncovering the overlapping modular structure of protein interaction networks ***Tamás Vicsek*** H4-006 [+]
- Uptake of beta-galactosidase mediated by the cell penetrating peptide pep-1 into large unilamellar vesicles and HeLa cells is driven by membrane potential ***Sónia Troeira Henriques*** C4-005 [+]

W

- Who is manipulating whom? ***Balázs Ervin*** N2-005 [+]

- Why does nature form a two-dimensional membrane protein crystal? ***Dieter Oesterhelt*** C4-003 [+]

Z

- Zn^{2+}-induced reversible dissociation of subunit Rpn10/p54 of the Drosophila 26S proteasome ***Petra Kiss*** O1-186 [+]