

Chairpersons	Session titles	Presentation titles <i>submitted titles/according sessions to be determined</i>	Speaker
Monday 3rd August 2009/Morning			
Lecture	An overview on the chemistry of oxidative stress in amino acid and protein damage		Sies, H.
Lecture		GABAA receptors: structure, pharmacology, and function	Sieghart, W.
Lecture	Biofunctional Collagen-Like Materials: Self-Assembling Peptides and Peptide-Decorated Nanoparticles		Maryanoff, B.
Lecture		Chemical evolution and the origin of life	Rode, B.
Lecture	The synchrotron (SFTIRM) as an advanced research tool for protein image, protein structure, and protein nutrition research in plant tissues within subcellular dimension		Yu, P.
Monday 3rd August 2009/Afternoon Sessions			
Auray-Blais, C.	Urea cycle and amino acid transport disorders		
		Newborn mass urine screening for urea cycle and transport amino acid disorders	Auray-Blais, C.
		Treatment of urea cycle disorders: Are we making progress?	Mitchell, J.
		Triple H syndrome: More questions than answers	Clark, J.
		Hypercitrullinemia type I and II: New insights and management strategies	Maranda, B.
		Transport disorders of amino acids: The Quebec experience	Laframboise, R.
		The application of Ultraperformance LC to the analysis of amino acids	Graham, K.
Krnjevic, K., Bowie, D.	Structure & function of excitatory amino acid receptors		
		Gating properties of glycine receptors	Sivilotti, L.
		Voltage clamp fluoremetry and GABAA receptors	Weiss, D.
		Ion-dependent gating of kainate receptors	Bowie, D.
		AMPA Receptors & TARPs	Howe, J.
		Structural basis of NMDA receptor modulation	Paoletti, P.
Krnjevic, K., McKinney, A.	Neurophysiology of inhibitory & excitatory amino acid receptors		
		Ionotropic glutamate receptors & development	Cossart, R.
		Glial cells and excitatory neurotransmission	Oilet, S.
		Morphological plasticity of glutamate receptor synapses	McKinney, A.
		GABAA receptors & CNS disorders	Fritschy, J.
		Kainate receptors & epilepsy	Mulle, C.
Hengstschläger, M. Vosseller, K.	From genes to proteins to understand human genetic diseases Post-translational O-GlcNAc modification of proteins: proteomics to function		
		Crosstalk Between GlcNAcylation and Phosphorylation is Extensive: O-GlcNAc Regulation of Kinases, Transcription Factors and Signaling	Hart, G.
		Protein O-GlcNAcylation: A mediator of cardiomyocyte function and survival	Chatham, J.

Metabolism and O-GlcNAc modification: Mechanisms and regulation McClain, D.
Regulation of insulin sensitivity via O-GlcNAc Modification of Proteins Wells, L.
Investigating O-GlcNAc processing in vivo using chemical biology Vocadlo, D.
Synaptic O-GlcNAc proteomics and function in normal vs. Alzheimer's disease states Vosseller, K.
O-GlcNAc, a new player involved in Alzheimer's disease Gong, C.
The *Xenopus laevis* O-GlcNAcome: O-GlcNAc transferase is needed for the G2/M transition Lefebvre, T.
The Sweet Nature of the Cellular Stress Response Zachara, N.

Saito, K., Hesse, H.

Plant amino acid

High-lysine maize lines expressing a new protein in the endosperm Azevedo, R.
Glutamine biosynthesis in conifers Cánovas, F.
Bioinformatic dissection of gene modules controlling the operation of plant amino acid metabolic networks Galili, G.

[to be determined] Hell, R.

[to be determined] Hesse, H.

Amino acid metabolism as an entrance into secondary metabolism Hirai, M.
Glutamate: glyoxylate aminotransferase (GGAT) functions as a regulator of amino acid content in *Igarashi*, D.
Arabidopsis

Transporters for amino acids and peptides in plants Rentsch, D.

Sulfur assimilation into cysteine Saito, K.

Function of glutamine synthetase and glutamate synthase in rice plants Yamaya, T.

Lominadze, D., de Maat, M. Role of fibrinogen in microcirculation

Fibrinogen variants and association with risk of cardiovascular disease de Maat, M.

Effects of fibrinogen on endothelial response to bradykinin Kojda, G.

Intracellular and circulating fibrinogen Callea, F.

Direct effects of fibrinogen on human smooth muscle cell phenotype Rauch, B.

Fibrinogen-induced endothelial cell layer permeability, role of MMP Lominadze, D.

Tuesday 4th August 2009/Morning Sessions

Galli, F.

Oxidative stress of amino acids and proteins: the "redoxomics" era

Protein damage and the proteasome Grune, T.

Redoxomics in signal transduction Spickett, C.

Analysis and chemistry of thiols Rossi, R.

When redoxomics techniques get in "solution": mass spectrometry techniques for the next generation of Pucci, P.
redoxomics studies

Amino acid and protein damage in food: is this a relevant issue to human health? Buetler, T.

Advanced glycation end-products (AGEs): sources, receptors and biological roles Ames, J.

		Exact identification of nitrated proteins in human plasma Galli, F. Cyclo(His-Pro): an antioxidant peptide for several uses Minelli, A.
Singewald, N., Wegener, G.	NMDA/nitric oxide pathways as targets in psychiatric disorders	
		Mg ²⁺ and Zn ²⁺ deficiency models for depression and their relationship to NMDA/NO pathways Singewald, N. Involvement of NMDA/NO pathway in antidepressant activity of zinc Nowak, G. Stress associated changes in the nitric oxide signaling cascade: relevance for affective psychopathology Wegener, G.
		Mechanisms mediating the psychotropic properties of NO synthase inhibitors Harkin, A. Nitric oxide, L-lysine and cognitive dysfunction in schizophrenia: A translational approach Klamer, D.
Froestl, W., Sunyer, B.	Cognitive enhancement and GABA(B)-receptors	
		GABA-C antagonists as memory enhancers Chebib, M. GABAB receptor: a complex allosteric machine to tune up synaptic transmission Pin, J. The GABA B receptors and action of antidepressant drugs Pilc, A.
Reshetnyak, Y. Sewald, N.	Peptide use for drug delivery and imaging Peptides - Chemistry and Biology	
		Synthesis of cyclic peptides with antitumoral activity Albericio, F. New orthogonally photocleavable thiol protecting groups in peptide synthesis Beyermann, M. Nucleo-peptides with predictable 3D-architectures Formaggio, F. A protein chimera with a beta/gamma-motif mimicking alpha-helical turns Kokschi, B. Glycated and glycosylated amino acids for solid-phase glycopeptide synthesis: a challenge to microwave-assisted strategies Papini, A.
Fadiel, A.	The human proteome project and its implications	
		The brain proteome Horvath, T. Proteomics and minority women's Montgomery Rice, V. The human proteome and clinical translational research Al-Hendy, A. The human metabolome project: Moving the proteome project forward Veenstra, T. The pathogenesis of metabolic disorders Diano, S. The human proteinpedia and the human proteome reference database Pandey, A.
Altmann, F. Agostinelli, E.	Glycoproteomics Polyamines	
Tuesday 4th August 2009/Afternoon Sessions		
Batinic-Haberle, I., Salvemini, D.	Oxidative stress, reactive species and antioxidants	
		Repair of protein radicals Koppenol, W.

Oxidative protein modifications in aging and disease: proteomic and functional studies, and development of new analytical methodology Schöneich, C.

Why do proteins use selenocysteine instead of cysteine? Nauser, T.

Manganese superoxide dismutase: Beyond life and death St. Clair, D.

Free radical control of signal transduction pathways during cancer therapy Li, C.

Targeting nitrooxidative stress in acute and chronic pain Salvemini, D.

Mn porphyrins suppress oxidative stress injuries through redox-based pathways Batinic-Haberle, I.

**Novelli, A., Tasker, A.,
Herrera-Marschitz, M.**

Acute, Repetitive and Chronic Neurotoxicity: models for understanding long term-deficits affecting the CNS

Enhancement of domoic acid toxicity by polyether compounds Novelli, A.

p53 involvement in Alzheimer's disease: how fibroblasts may link neurons with lymphocytes Memo, M.

Basic helix loop helix B2: A new candidate for targeting the brain against ischemia? Marini, A.

Behavioural and electrographic evidence of seizure reduction after pharmacological preconditioning with domoic acid Kerr, S.

Acute and long-term neuronal loss induced by perinatal asphyxia: activation of pro-apoptotic, anti-apoptotic and sentinel proteins Herrera-Marschitz, M.

Protecting against seizure-induced neuropathology with GluR5KR antagonists Braga, M.

Long-term consequences of altered glutamatergic signalling during neonatal brain development Tasker, A.

Gebicke-Haerter, P., Tretter, F.

F.

Lin, S.

Barnouin, K.

Systems biology I

Protein phosphorylation and quantitation by mass spectrometry

Analysis of bidirectional signaling networks by quantitative mass spectrometry and RNAi Jorgenson, C.

Quantifying phosphorylation and oncogenic signalling by mass spectrometry Cutillas, P.

Quantifying phosphorylation in mitosis Stehen, J.

Phosphorylation stoichiometry - the missing dimension in quantitative phosphoproteomics Stehen, H.

Characterisation and quantitation of neuronal membrane rafts after kinase inhibition and toxic insults in alzheimer's disease Thompson, A.

Organization and dynamics of the bacterial Ser/Thr/Tyr phosphoproteome Macek, B.

Studying histone methylation dynamics by Heavy Methyl SILAC approach Bonaldi, T.

Gegelashvili, G.

Amino acid neurotransmitters in health and disease: Molecular regulation and signaling

Transcriptional regulation of glutamate transporters Ortega, A.

Regulation of amino acid neurotransmitters by ubiquitin Zafra, F.

Glutamate transporter signalling: molecular and cellular mechanisms Gegelashvili, G.

Neuroinflammation and glutamate transport Hermans, E.

Hormonal regulation of glutamine- and glutamate transporters Engele, J.

Kunji, E.

Mitochondrial carriers involved in amino acid transport

Aspartate/glutamate mitochondrial carriers: Ca²⁺ activation and interplay with the Calcium Uniporter- Contreras, L.
mitochondrial dehydrogenases pathway

Mitochondrial transporters for aspartate and glutamate and related diseases Palmieri, F.

The transport mechanism of mitochondrial carriers based on analysis of symmetry Kunji, E.

Wednesday 5th August 2009/Whole Day Sessions

Chen, X.

Peptide probes for molecular imaging

Seeing is believing: Imaging VEGFR expression in the top 3 killer diseases Cai, W.

Peptide heterodimers for molecular imaging Chen, X.

Molecular imaging of malignant melanoma with novel PET probes Cheng, Z.

Phage display-derived ErbB-2-targeting peptides for cancer imaging Deutscher, S.

Synthetic approaches towards PET-labeled peptides Elsinga, P.

Ga-68 labeled RGD-peptides for imaging avb3 expression Haubner, R.

Target enzyme-specific nanoprobe for molecular imaging Kim, K.

Direct 18F-labeling of peptides for imaging gastrin releasing peptide receptor expression Stellfeld, T.

Tissue-specific homing peptides for molecular imaging of apoptosis Lee, B.

PET imaging of cancer with pH (low) insertion peptide (pHLIP) Lewis, J.

Novel cyclic RGD peptide dimers for integrin avb3-targeted radiotracers Liu, S.

Targeting of G-protein coupled receptors in cancer using radiolabeled peptides Maecke, H.

Landscape phage probes for human cancer cells Petrenko, V.

Molecular imaging of the receptor for advanced glycation endproducts (RAGE) Pietzsch, J.

Self-assembled targeting nanoprobe for cancer molecular imaging Shieh, D.

Novel molecular imaging agents based upon bombesin peptide Smith, C.

Novel GLP-1 peptides for molecular imaging Sun, X.

Targeted radiotherapy of Y-90-labeled RGD peptide for integrin avb3-positive tumors Wang, F.

Duramycin as a high-affinity, low-molecular weight probe for detecting phosphatidylethanolamine Zhao, M.

Peptide-based molecular beacons for cancer imaging and therapy Zheng, G.

Wróbel, M.

Sulfur- and seleno-containing amino acids

Remembering Toshihiko Ubuka Ubuka, T., Wróbel, M.

Effects of garlic (*allium sativum*) and its chief compound, allicin, on lead poisoning Aslani, M.

Sulphur amino acid metabolism as an antiparasite drug target Coombs, G.

Metabolism of electrophiles through the mercapturate- and cysteine S-conjugate β -lyase pathways Cooper, A.

Searching for a functional role of the *Azotobacter vinelandii* sulfurtransferase RhdA: from sulfur delivery Forlani, F.
protein to "antioxidant" protein

On contributions of sulfate-reducing bacteria to chronic disorders of the human colon Gaskins, R.

Sulfur transferases: extremophile adaptation and physiological roles Giudici, M.

Hydrogen sulfide as a signal molecule as well as a neuroprotectant in the brain Kimura, H.
 Novel cardioprotective effects of hydrogen sulfide Lefer, D.
 Sulfurtransferase and apoptosis induction by natural ally sulfane sulfur compounds: effects on the Melino, S.
 intracellular detoxification and redox systems
 A novel thioredoxin-dependent redox-sensing switch in mercaptopyruvate sulfurtransferase Nagahara, N.
 Reduced sulfur in the plant cell - enzymatic formation and functional roles Papenbrock, J.
 Cysteine dioxygenase - from molecular to mouse Stipanuk, M.
 Can the level of sulfane sulfur be a marker of the cancerous transformation of cells? Wróbel, M.

Wednesday 5th August 2009/Morning Sessions

Had-Aissouni, L.

Glutamate, its transporters and antioxidant defenses

Opening remarks Had-Aissouni, L.
 Crucial Role of EAAC1, a member of glutamate transporter family, in cysteine uptake and glutathione Aoyama, K.
 level in the brain
 Regulation of neuronal glutathione level by GTRAP3-18 via EAAC1 in vitro and in vivo in neurons Nakaki, T.
 Glial versus neuronal glutamate transporters in maintenance of antioxidant defences Had-Aissouni, L.
 Microglial self defence mediated through GLT-1 and glutathione Rönnbäck, L.
 EAAT expression by activated macrophages and microglia: a neuroprotective face of macrophage activation? Gras, G.
 The glutamate/cystine antiporter system xc⁻: more than a mere supplier of cysteine for glutathione and Conrad, M.
 protein synthesis
 Effects of gliotoxic amino acids on antioxidant mechanisms in astrocytes McBean, G.
 Cooperative action of EAATs and system xc⁻ in maintenance of antioxidant defenses Lewerenz, J.
 Conclusions Gras, G.

Tyagi, N.

Homocysteine verses hydrogen sulfide

Homocysteine to hydrogen sulfide Tyagi, S.
 Protective actions of endogenous and exogenous H₂S in myocardial ischemia-reperfusion Baxter, G.
 A production of hydrogen sulfide and its release in the brain Kimura, H.
 Emerging Role of Hydrogen Sulfide as a Cardioprotective Factor in Cardiovascular Disease Lefer, D.
 Homocystine causes mitophagy; protection by hydrogen sulfide Tyagi, N.
 Interaction of homocysteine and hydrogen sulfide in regulating hepatic microcirculation Fiorucci, S.

Marcello, A.

Protein interactions in the virus-host relationship

[to be determined] Asquith, B.
 Sharing of amino acid sequences between viruses and Homo sapiens Kusalik, A.
 Caught in the act: optical tools for the visualization of proteins and replicating viral genomes in single Marcello, A.
 living cells in real time
 Detecting virus-host protein-protein interaction by FRET (Fluorescence Resonance Energy Transfer) Arosio, D.

Molecular modelling of protein-protein interactions required for viral replication Pantano, S.

Komarnitsky, S.

Plant protease inhibitors and human health

Wednesday 5th August 2009/Afternoon Sessions

Niu, L.

Regulation of AMPA/kainate receptors

Investigations of the mechanisms of glutamate receptors in the microsecond time domain Hess, G.

Structure, function and dynamics of GluR2 and GluR3 Oswald, R.

Targeting AMPA and kainate receptor function with marine natural products Swanson, G.

Mechanisms regulating kainate receptor trafficking, surface expression and synaptic function Henley, J.

Glutamate-Receptor Domain Architecture: Understanding Channel Activation in 3D Madden Dean R.,

AMPA receptor aptamers Niu, L.

Bodamer, O.

Phenylketonuria - 40 years of newborn screening

Phenylketonuria and Tyrosinaemia: a review of 12 years experience of investigations in our laboratory Yargui, L.
practice

Schalk, I.

Metalloproteins

Structural bases for FeFe-hydrogenase maturation Fontecilla, J.

Transition metal homeostasis in bacteria as a flow equilibrium of uptake and efflux processes Nies, D.

FbpA, a periplasmic iron transport protein related to transferrin Crumbliss, A.

Heme fishing by hemophore HasA and transport by the outer membrane receptor, HasR Izadi-Pruneyre, N.

Membrane ferrisiderophore trafficking in bacteria: metal and ligand specificities Schalk, I.

Meffre, P., Ohfuné, Y.

Synthesis and medicinal chemistry

Chemical synthesis of [¹⁴C][³H][D][¹⁵N] natural and unnatural amino acids carried out at CEA-SMM Pichat, L.
(1949-1989)

Thursday 6th August 2009/Morning Sessions

Engelmann, M.

Neuroscience I

Commissural GABA release during vestibular compensation in the rat Bergquist, F.

Proteomic analysis of the mouse olfactory bulb: effects of congenital absence of neuronal NO synthase Jüch, M.

Role vasopressin plays in the mammalian olfactory bulb Ludwig, M.

Neuropeptides in stress-related disorders Zelena, D.

In search for ketamine-induced antidepressant-like effects Popik, P.

Involvement of glutamate and nitric oxide in odour aversion learning Roldan-Roldan, G.

Vivien, D.

Neuroscience II

LTP and LTD of NMDAR-mediated transmission Anwyl, R.

The contribution of NMDA receptor subtypes to hippocampal function Seeburg, P.
Neuronal viability is controlled by a functional relation between synaptic and extrasynaptic NMDA receptors Buisson, A., Nicole, O.
Extrasynaptic NR2D-containing NMDARs mediate tPA-promoted neurotoxicity Vivien, D.
Transcriptional control of antioxidant and anti-apoptotic pathways in neurons Hardingham, G.

Suzuki, Y.
Golubnitschaja, O.

Protein oxidation and modifications
Clinical proteomics in early and predictive diagnosis

Predictive diagnostics, targeted preventive measures & personalised treatment: New philosophy in health care Golubnitschaja, O.

Risk factors and prediction in glaucoma Yeghiazaryan, K.
Cancer predisposition in diabetes mellitus: Predictive proteome profiling and personalised therapy Cebioglu, M.
planning

Predictive diagnostics of long-term outcomes in perinatal asphyxia Peeva, V.

Newsholme, P., Hewage, C. Amino acids, peptides, proteins and diabetes

Pancreatic beta cell amino acid metabolism in the regulation of insulin secretion Newsholme, P.
Structural studies of glucagon family peptides Hewage, C.
Insulin releasing properties of bio-active peptides from frog skin Conlon, M.

Komarnitsky, S.
Jungblut, P.
Conigrave, A.
Kim, S.

Production of therapeutic antibodies in plants
Quantative proteomics
Amino acid sensing mechanisms
tRNA synthetases in signaling and disease

Overall proteome quality sensing and maintenance is governed by the ER de Poupulana, L.
Role of aminoacyl-tRNA synthetases in the peripheral nervous system - lessons from Drosophila Jordanova, A.
Mechanism of tRNA-dependent incorporation of free radical damaged amino acids into proteins Safro, M.
Genetic code expansion by non-canonical tRNA synthetases Nureki, O.
Human aminoacyl-tRNA synthetases as multiplayers in signaling and diseases Kim, S.

Thursday 6th August 2009/Afternoon Sessions

Lipsky, R.

Epigenetic-mediated effects on gene expression and behavior

Dynamic chromatin remodeling events in hippocampal neurons associated with NMDA receptor activation Lipsky, R.
of Bdnf gene promoter 1

Epigenetic regulation of gene expression on memory and response to stress: impact of p300/CBP associated factor (PCAF) histone acetylase Tanguy, M.

Novel roles for NF-kappaB signaling in regulating neuronal function Meffert, M.

Structure and regulation of BDNF expression in rodents and human: similarities and differences Timmusk, T.

Epigenetic and signaling mechanisms underlying stress-induced neuroplasticity and learning Reul, H.

Parker, S.	Heptahelical G-protein-coupled receptors Agonists affect internalization much more with the Y4 than with the Y1 receptor Internalization of the neuropeptide Y (NPY) Y1 receptor can be promoted by a non-peptidic antagonist and is decreased by high levels of NPY Neuropeptide Y (NPY) supports interactions of the Y1 receptor with G-protein α subunits Oligomerization of the heptahelical G protein coupling receptors: A case for association using transmembrane helices
Puccetti, P., Fallarino, F. Pietzsch, J.	Tryptophan catabolism and immune regulation S100 proteins in health and disease Part I: Structure and biology Insights into the function of S100B from structural and spectroscopic studies Fritz, G. Posttranslational modifications of S100A4 Mælandsmo, G. Does S100A6 (calcylin) influence the function of CacyBP/SIP and Sgt1? Filipek, A. S100A11 Huh, N. Interactome of S100 proteins Bronstein, I. Part II: Pathophysiology How oxidative post-translational modifications alter S100A8 functions Geczy, C. S100B: A pluripotent regulator of cardiac remodeling in disease Parker, T. S100A7 and S100A15 - almost identical but distinct Wolf, R. Circulating S100A12 – a novel player in atherosclerosis? Pietzsch, J. S100P regulation and function in cancer Gibadulinova, A.
Wu, G.	Amino acid nutrition and fetal growth Impacts of the arginine-NO pathway on fetal growth Wu, G. Fetal alcohol syndrome and amino acid nutrition Cudd, T. Heat stress, amino acid metabolism, and IUGR Limesand, S. Amino acid nutrition and fetal brown fat development Satterfield, C.
Molnar-Perl, I.	Amino acid analysis Amino acid analysis yesterday, today and tomorrow Molnar-Perl, I. D-amino acids as markers of various phenomena Brückner, H. Amino acid identification and quantification without derivatization applying different detection methods Elfakir, C. Gas chromatography of amino acids Hušek, P.
Harris, R.	Sport and exercise Regulation of glucose by amino acids Ivy, J.

Friday 7th August 2009/Morning Sessions

Bolshakov, V.	Basic mechanisms of glutamatergic synaptic transmission and plasticity
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Regulation of glutamate release during hippocampal synaptic plasticity Siegelbaum, S.

Activity-dependent plasticity expressed by NMDA receptors Castillo, P.

Fear learning and synaptic plasticity Rumpel, S.

Coincidence detections at glutamatergic synapses in the amygdala Bolshakov, V.

G-protein coupled receptors signal selectively to NR2A versus NR2B containing NMDA receptors and MacDonald, J.
thereby differentially control bidirectional synaptic plasticity of CA3-CA1 synapses

Gout, I.
Friedman, L.

Regulation of cellular biosynthetic events

Protective role of calcium and glutamate receptors

[to be determined] Seeburg, P.

Protective effects of early-life seizures in vivo and early exposure of excitatory amino acids in vitro Friedman, L.

Role of the endoplasmic reticulum in calcium-dependent preconditioning mechanisms Clark, J.P., Bickler, P.

Long term changes in network activity affect viability of neurons Segal, M.

Moss, S.

The trafficking of amino acid activated Ligand gated ion channels and the control of neuronal activity

The trafficking of ionotropic glutamate receptors and synaptic plasticity Haganir, R.

Measuring the membrane dynamics of inhibitory neurotransmitter receptors Triller, A.

The role of the DISC-1 signalling complex in regulating neurotransmission Brandon, N.

The modulation of glutamate receptor trafficking and synaptic plasticity by Glia Haydon, P.

Dynamic modulation of GABAA receptor phosphorylation regulates spatial memory Moss, S.

Blachier, F.
Morris, C.

Amino acids and nutrition

Role of arginine dysregulation and elevated arginase activity in pulmonary disorders

Asthma and role of arginase in animal model Meurs, H.

Asthma/PH and arginase/arginine Khatri, S.

Arginine/Arginase in Cystic fibrosis Grasemann, H.

Hemolysis and Arginine dysregulation Morris, C.

Arginine/arginase in PPHN Nelin, L.

Arginase activity in blood plasma of children with diabetes mellitus Bjelakovic, G.

Friday 7th August 2009/Afternoon Sessions

Sharma, H.

Neurobiology I - Nanoneuroscience and neural, glial and axonal protein expression in CNS injury and repair

Introduction Sharma, H.

Carbon nanotubes affect intracellular Ca²⁺ load and stimulated endocytosis in neurons Parpura, V.

Nanoparticles influence spinal cord injury induced glial protein expression Lafuente, L.

Nanodrug delivery in spinal cord injury alters neuronal and axonal proteins expression and enhances Lundstedt, T.
neurorepair

Nanodrug delivery alters heat shock protein expression in drug dependence and induce neuroprotection Syed, A.

Nanoparticles induce oxidative stress and alter heme oxygenase expression in hypertemia induced by Muresanu, D.
heat stress. Neuroprotective effects of antioxidant compound H-290/51

Engineered nanoparticles from metals alter excitatory and inhibitory amino acid neurotransmitter Sharma, H.
concentrations and induce neuronal, glial and axonal proteins expression and brain pathology

**Dakshinamurti, K.
Parpura, V.**

**Biochemistry and molecular biology of Vitamin B6 and PQQ-dependent proteins
Exocytotic release of amino acids from astrocytes**

Astrocytic glutamate and LTP Perea, G.
Storage and trafficking of exocytotic D-serine in astrocytes Mothet, J.
Exocytotic release of glutamate from astrocytes Parpura, V.
Trafficking of VGLUTs in astrocytes Zorec, R.

Joseph, J.

Nutritional neuroscience in aging

submitted titles/according sessions to be determined

Helical structures of N-alkylated poly(p-benzamide)s Kobayashi, N.

Structural elucidation of amino acid amides and their derivatives Kolev, T.

Polarized IR- spectroscopic and structural elucidation of small peptides Koleva, B.

Protein family classification by support vector machines with amino acid composition Açıcı, K.

Antifungal protein expression in some medicinal plants under induced condition Anjum, S.

Research on hydrolysis technology and reaction kinetics for amino acids production from fish waste in Zhu, X.
sub-critical water

Maternal polymorphisms in folate metabolizing genes and the risk of Down syndrome offspring Meguid, N.

The environmental impact of defective alpha-1 antitrypsin on human populations worldwide with high de Serres, F.
prevalences of the PI S or PI Z deficiency alleles

Amino acids and obesity He, K.

Biomarker development for personalized medicine Kondo, T.

Role of unsaturated fatty acids in the management of children with special needs Meguid, N.

Thrombophilia and abdominal vessel thrombosis Starakis, I.

Study of metabolic modifications observed in cellular model "Paramecium sp", treated with two fungicides: Berrebbah, H.
fenazaquin and chlorfenapyr

Neutrophil redox state, cysteine-glutathiolation and the respiratory burst Griffiths, H.

Beta-glucosidase metabolism in oenococcus oeni and its uses in oenology Capaldo, A.

Behavioral and metabolic adaptation to amino acid limitation as mediated by the GCN2 eIF2 alpha kinase Cavener, D.

Metabolomic profiling of prostate cancer progression Sreekumar, A.

Poster

- Poster *Hyperhomocysteinemia, low folate and the C677T variant of the methylenetetrahydrofolate reductase (MTHFR) gene associated with splenic thrombosis* Starakis, I.
- Biosynthesis of folded cyclotides inside living bacterial cells. A convenient route for generation of genetically-encoded cyclotide-based libraries* Camarero, J.
- Reverse engineering of a corynebacterium arginine/citrulline producer* Ikeda, M.
- Discovery of AMG327: a novel bradykinin B1 receptor antagonist for the treatment of pain and inflammation* Chen, J.
- Interaction of toxin ligands with voltage-gated sodium channels* Gurevitz, M.
- Identification and characterisation of serotonin receptors by gel-based proteomics* Heo, S.
- Metabotropic glutamate receptors and calcium waves orchestrate generation of respiratory motor activity* Mironov, S.
- Identification and molecular characterization of novel vesicular neurotransmitter transporters* Moriyama, Y.
- Molecular differences between hippocampal signaling proteins in laboratory and wild-caught mice* Patil, S.
- Contribution of glycine receptors to hypnosis* Ye, J.
- The insight of the prion protein PrPc to PrPsc conversion* Zhou, G.
- Poster *Effects of peripheral glutamate receptors on tumor cell growth – liaisons of neurotransmitters and body functions* Haas, H.
- Poster *Dietary γ -aminobutyric acid affects the brain protein synthesis rate in ovariectomized female rats* Hayase, K.
- Poster *The growth hormone affects the brain protein synthesis rate in hypophysectomized aged rats* Tujioka, K.
- Fortification of human milk in preterm infant feeding: proposed methods to solve the ongoing protein undernutrition* Arslanoglu, S.
- Underutilized novel source of a protein* Ekanayake, S.
- Influence of food derived bioactive peptides on blood pressure and lipid metabolism* Gilani, S.
- pH and thermoresponsive hydrogels of a novel class of N-acyl peptides. Characterization, drug encapsulation and release study* Dey, J.
- Bioactive peptide sequences from food/milk proteins* Fitzgerald, D.
- Hemorphin-7 peptides metabolism in diabetes* Fruitier-Arnaudin, I.
- Poster *Characterization, biodisponibility and biological effects of polypeptide fragments from the pericellular matrix in tumour progression* Fruitier-Arnaudin, I.
- Peptide-peptide interactions between viral and human proteins* Kanduc, D.
- Hepatoprotective effect of melanocortin peptides* Turcic, P.
- A gene engineering method for preparing bioactive peptides* Wang, C.
- A possible de novo biosynthetic route for the brain opioid tetrapeptide endomorphins* Ronai, A.

Salvianolic Acid B protects human endothelial cells from oxidative stress-induced cellular damage by up-regulating GRP78 expression Li, X., Yu, S.

Epinephrine increases phosphorylation of MAP-2c in PC12 cells and its possible mechanism Li, X., Yu, S.

Poster
Poster

Differential Expression of Salt Tolerance Proteins in Sunflower Anjum, S.

Producing high-lysine cereal crops by manipulating storage proteins Azevedo, R.

Amino acids metabolism in maize endosperm mutants Azevedo, R.

Bio-available amino acids in soil and their release / uptake by plant roots: observations based on research conducted on the mountain meadows Formánek, P.

Does polyamine oxidase activity influences the oxidative metabolism of children who suffer of diabetes mellitus Bjelakovic, G.

From MALDI high energy CID for structure elucidation of biomolecules to MALDI imaging/profiling of biological surfaces Allmaier, G.

Post-translational tyrosine nitration: protein targets and functional consequences Aslan, M.

E. coli outer membrane proteins Barigye, R.

Understanding protein folding and misfolding Dubey, V.

A new mechanism of hexamer assembly in protein/RNA interactions revealed by single molecule imaging Guo, P.

Analysis of hCG and hCGβcf glycosylation in normal and aberrant pregnancy by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry Iles, R.

Proteomic identification of receptors in the brain Kang, S.

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