

Subscribing organizations are encouraged to copy and distribute this table of contents for non-commercial purposes

Biochemical Society Focused Meetings

Third Intracellular Proteolysis Meeting

Auditorio de Tenerife, Santa Cruz de Tenerife, Canary Islands, Spain, 5–7 March 2008

Edited by Rosa Farràs (Centro de Investigación Príncipe Felipe, Valencia, Spain), Gemma Marfany (Barcelona, Spain), Manuel Rodríguez (CICbioGUNE, Derio, Spain), Eduardo Salido (La Laguna, Tenerife, Spain) and Dimitris Xirodimas (Dundee, U.K.).

Much to know about proteolysis: intricate proteolytic machineries compromise essential cellular functions

Gemma Marfany, Rosa Farràs, Eduardo Salido, Dimitris Xirodimas and Manuel S. Rodríguez 781–785

Life, death and burial: multifaceted impact of autophagy

Lorenzo Galluzzi, Eugenia Morselli, José Miguel Vicencio, Oliver Kepp, Nicholas Joza, Nicolas Tajeddine and Guido Kroemer 786–790

Versatile role of the yeast ubiquitin ligase Rsp5p in intracellular trafficking

Naima Belgareh-Touzé, Sébastien Léon, Zoi Erpapazoglou, Marta Stawiecka-Mirota, Danièle Urban-Grimal and Rosine Haguenaue-Tsapis 791–796

Ubiquitin ligase E6-AP and its role in human disease

Konstantin Matentzoglou and Martin Scheffner 797–801

Novel substrates and functions for the ubiquitin-like molecule NEDD8

Dimitris P. Xirodimas 802–806

Chaperone-driven proteasome assembly

Rina Rosenzweig and Michael H. Glickman 807–812

Selected oral communications

How autophagy is related to programmed cell death during the development of the nervous system

Patricia Boya, María Angeles Mellén and Enrique J. de la Rosa 813–817

Regulation of ER-associated degradation via p97/VCP-interacting motif

Petek Ballar and Shengyun Fang 818–822

Efficient approaches for characterizing ubiquitinated proteins

Roland Hjerpe and Manuel S. Rodríguez 823–827

Strategies for the identification of novel inhibitors of deubiquitinating enzymes

Seth J. Goldenberg, Jeffrey L. McDermott, Tauseef R. Butt, Michael R. Mattern and Benjamin Nicholson 828–832

To ubiquitinate or to deubiquitinate: it all depends on the partners

Gemma Marfany and Amanda Denuc 833–838

Is there an alternative to the proteasome in cytosolic protein degradation?

Luis C. Antón and Eugenia M. Villasevil 839–842

Do F-box proteins with a C-terminal domain homologous with the tobacco lectin play a role in protein degradation in plants?

Nausicaä Lannoo, Willy J. Peumans and Els J.M. Van Damme 843–847

S-adenosylmethionine and proliferation: new pathways, new targets Nuria Martínez-López, Marta Varela-Rey, Usue Ariz, Nieves Embade, Mercedes Vazquez-Chantada, David Fernandez-Ramos, Laura Gomez-Santos, Shelly C. Lu, Jose M. Mato and Maria L. Martinez-Chantar	848–852
Innate link between NF- κ B activity and ubiquitin-like modifiers Valérie Lang and Manuel S. Rodríguez	853–857
Fos family protein degradation by the proteasome Tiphonie Gomard, Isabelle Jariel-Encontre, Jihane Basbous, Guillaume Bossis, Gabriel Mocquet-Torcy and Marc Piechaczyk	858–863
Regulation and function of JunB in cell proliferation Marc Piechaczyk and Rosa Farràs	864–867
Functional analysis of the SUMOylation pathway in <i>Drosophila</i> Ana Talamillo, Jonatan Sánchez and Rosa Barrio	868–873
SUMO under stress Denis Tempé, Marc Piechaczyk and Guillaume Bossis	874–878
Remodelling of the ubiquitin–proteasome system in response to interferons Ulrike Seifert and Elke Krüger	879–884

Molecular Mechanisms of Glucolipototoxicity in Diabetes

University College Dublin, Ireland, 25–26 March 2008

Edited by Tony Corfield (Bristol, U.K.), Mark Holness (Barts and the London School of Medicine and Dentistry, U.K.) and Philip Newsholme (University College Dublin, Ireland).

Lipases in the pancreatic β -cell: implications for insulin secretion Malin Fex and Hindrik Mulder	885–890
Role of nuclear receptors in the modulation of insulin secretion in lipid-induced insulin resistance Mary C. Sugden and Mark J. Holness	891–900
Glucolipototoxicity of the pancreatic β -cell: myth or reality? Vincent Poitout	901–904
The cytoprotective actions of long-chain mono-unsaturated fatty acids in pancreatic β -cells Noel G. Morgan, Shalinee Dhayal, Eleftheria Diakogiannaki and Hannah J. Welters	905–908
An update on lipotoxic endoplasmic reticulum stress in pancreatic β -cells Miriam Cnop, Mariana Igoillo-Esteve, Daniel A. Cunha, Laurence Ladrière and Décio L. Eizirik	909–915
The diverse roles of protein kinase C in pancreatic β -cell function Trevor J. Biden, Carsten Schmitz-Peiffer, James G. Burchfield, Ebru Gurisik, James Cantley, Christopher J. Mitchell and Lee Carpenter	916–919
NOX family NADPH oxidases in liver and in pancreatic islets: a role in the metabolic syndrome and diabetes? Cécile Guichard, Richard Moreau, Dominique Pessayre, Terry Kay Epperson and Karl-Heinz Krause	920–929

The sensitivity of pancreatic β -cells to mitochondrial injuries triggered by lipotoxicity and oxidative stress
Ning Li, Francesca Frigerio and Pierre Maechler 930-934

Adipose tissue expandability: the metabolic problems of obesity may arise from the inability to become more obese
Chong Yew Tan and Antonio Vidal-Puig 935-940

Regulation and consequences of differential gene expression in diabetic kidney disease
Madeline Murphy, John Crean, Derek P. Brazil, Denise Sadlier, Finian Martin and Catherine Godson 941-945

Molecular mechanisms of proteinuria in diabetes
Luigi Gnudi 946-949

The long-chain fatty acid receptor, GPR40, and glucolipotoxicity: investigations using GPR40-knockout mice
Ruth Brownlie, Rachel M. Mayers, Jackie A. Pierce, Anna E. Marley and David M. Smith 950-954

Selected oral communications

Saturated and unsaturated (including arachidonic acid) non-esterified fatty acid modulation of insulin secretion from pancreatic β -cells
Deirdre Keane and Philip Newsholme 955-958

Differential regulation of the ER stress response by long-chain fatty acids in the pancreatic β -cell
Eleftheria Diakogiannaki and Noel G. Morgan 959-962

Lack of TXNIP protects β -cells against glucotoxicity
Anath Shalev 963-965

Integration of Structures, Spectroscopies and Mechanisms

University of Edinburgh, U.K., 2-4 April 2008

Organized by Ulrich Brandt (Frankfurt, Germany), Steve Chapman (Edinburgh, U.K.), Peter Heathcoate (Queen Mary, University of London, U.K.), John Ingledeu (St Andrews, U.K.), Mike Jones (Bristol, U.K.), Bernd Ludwig (Frankfurt, Germany), Fraser MacMillan (University of East Anglia, Norwich, U.K.), Hartmut Michel (Max-Planck-Institute for Biophysics, Frankfurt am Main, Germany), Peter Rich (University College London, U.K.) and John Walker (MRC Dunn Human Nutrition Unit, Cambridge, U.K.). Edited by Ulrich Brandt and Peter Rich.

Significance of protein crowding, order and mobility for photosynthetic membrane functions
Helmut Kirchhoff 967-970

Nucleotide-induced conformational changes in the *Escherichia coli* NADH:ubiquinone oxidoreductase (complex I)
Thomas Pohl, Daniel Schneider, Ruth Hielscher, Stefan Stolpe, Katerina Dörner, Markus Kohlstädt, Bettina Böttcher, Petra Hellwig and Thorsten Friedrich 971-975

The production of reactive oxygen species by complex I
Judy Hirst, Martin S. King and Kenneth R. Pryde 976-980

A structural analysis of the transient interaction between the cytochrome <i>bc</i> ₁ complex and its substrate cytochrome <i>c</i> Ajeeta Nyola and Carola Hunte	981–985
Bioenergetics at the gold surface: SEIRAS probes photosynthetic and respiratory reactions at the monolayer level Kenichi Ataka and Joachim Heberle	986–991
<i>Rhodobacter sphaeroides</i> haem protein: a novel cytochrome with nitric oxide dioxygenase activity Bor-Ran Li, J.L. Ross Anderson, Christopher G. Mowat, Caroline S. Miles, Graeme A. Reid and Stephen K. Chapman	992–995
Electroneutral and electrogenic catalysis by dihaem-containing succinate:quinone oxidoreductases C. Roy D. Lancaster, Elena Herzog, Hanno D. Juhnke, M. Gregor Madej, Florian G. Müller, Rajsekhar Paul and Philipp G. Schleidt	996–1000
⁵⁵ Mn-ENDOR of the S ₂ -state multiline signal of Photosystem II from <i>Thermosynechococcus elongatus</i> Susanne Pudollek, Friedhelm Lenzian and Robert Bittl	1001–1004
The role of multihæm cytochromes in the respiration of nitrite in <i>Escherichia coli</i> and Fe(III) in <i>Shewanella oneidensis</i> Thomas A. Clarke, Tracey Holley, Robert S. Hartshorne, Jim K. Fredrickson, John M. Zachara, Liang Shi and David J. Richardson	1005–1010
Quinone-reactive proteins devoid of hæm <i>b</i> form widespread membrane-bound electron transport modules in bacterial respiration Jörg Simon and Melanie Kern	1011–1016
Quantum dots for single-pair fluorescence resonance energy transfer in membrane-integrated EF ₀ F ₁ Eva Galvez, Monika Düser, Michael Börsch, Jörg Wrachtrup and Peter Gräber	1017–1021
Further insights into the structure of the alternative oxidase: from plants to parasites Anthony L. Moore and Mary S. Albury	1022–1026
Structural organization of the V-ATPase and its implications for regulatory assembly and disassembly Meikel Diepholz, Michael Börsch and Bettina Böttcher	1027–1031
Selected oral communication	
Are <i>Escherichia coli</i> OXPHOS complexes concentrated in specialized zones within the plasma membrane? Tchern Lenn, Mark C. Leake and Conrad W. Mullineaux	1032–1036

Bioanalysis in Oxidative Stress

University of Exeter, U.K., 2–3 April 2008

Edited by John Moody (Plymouth, U.K.) and Paul Winyard (Peninsula Medical School, Exeter, U.K.).

High-resolution mass spectrometry analysis of protein oxidations and resultant loss of function

Stephen Barnes, Erin M. Shonsey, Shannon M. Eliuk, David Stella, Kerri Barrett, Om P. Srivastava, Helen Kim and Matthew B. Renfrow

1037–1044

Dicarbonyls linked to damage in the powerhouse: glycation of mitochondrial proteins and oxidative stress Naila Rabbani and Paul J. Thornalley	1045–1050
Mass spectrometry to detect the site specificity of advanced glycation/lipoxidation end-product formation on protein: some challenges and solutions Jennifer M. Ames	1051–1054
Analysis of eicosanoids and related lipid mediators using mass spectrometry Benjamin H. Maskrey and Valerie B. O'Donnell	1055–1059
Key issues in F ₂ -isoprostane analysis Jaffar Nourooz-Zadeh	1060–1065
Mass spectrometry approaches for vitamin E research John K. Lodge	1066–1070
Biomarkers of oxidative damage to DNA and repair Steffen Loft, Pernille Høgh Danielsen, Lone Mikkelsen, Lotte Risom, Lykke Forchhammer and Peter Møller	1071–1076
Mass spectrometric analysis of HOCl- and free-radical-induced damage to lipids and proteins Andrew R. Pitt and Corinne M. Spickett	1077–1082

Independent Meeting

British Yeast Group Meeting 2008

National University of Ireland Maynooth, Maynooth, Co. Kildare, Ireland, 18–20 March 2008

Edited by Gary Jones (National University of Ireland Maynooth, Ireland).

Cellular factors important for the <i>de novo</i> formation of yeast prions Mick Tuite, Klement Stojanovski, Frederique Ness, Gloria Merritt and Nadejda Koloteva-Levine	1083–1087
Post-transcriptional regulation of gene expression in response to iron deficiency: co-ordinated metabolic reprogramming by yeast mRNA-binding proteins Sandra V. Vergara and Dennis J. Thiele	1088–1090
Next-generation sequencing: applications beyond genomes Samuel Marguerat, Brian T. Wilhelm and Jürg Bähler	1091–1096
The spindle pole body plays a key role in controlling mitotic commitment in the fission yeast <i>Schizosaccharomyces pombe</i> Iain M. Hagan	1097–1101