KRIT1 and Reactive Oxigen Species: a novel molecular pathway involved in Cerebral Cavernous Malformations.

SATELLITE MEETINGS
WEDNESDAY, 5 SEPTEMBER 2012

HNE Club Satellite Meeting
Registration: Sherfield Building Concourse Level 1
Meeting Room: Huxley 308

From 07:00	**Registration for HNE Club Satellite Meeting**
08:30 – 08:45	**Opening Address -** Prof. Peter Eckl (HNE Club Chairman), University of Salzburg, Austria and Dr Corinne M. Spickett, Aston University, UK
08:45 – 09:15	**Session One - Advanced Analytical Strategies for Lipid Oxidation Products** Chairs – Dr Corinne M. Spickett, Aston University, UK and Prof. Tilman Grune, University of Jena, Germany
	Keynote Lecture One - Post-translational Modifications in Disease - Harry Ischiropoulos, SFRBM President, University of Pennsylvania, USA
09:15 – 09:30	**HNE 1 - Novel approach to identify reactive carbonyls derived from proteins and lipids –** Maria Fedorova, University of Leipzig, Germany
09:30 – 09:45	**HNE 2 - Isoprostanes and Neuroprostanes, Metabolites of omega-6 and omega-3 PUFAs: Not only Biomarkers of Lipid Peroxidation –**Thierry Durand, UMR CNRS 5247 (IBMM), France
09:45 – 10:00	**HNE 3 - Molecular characterization of HDL lipid peroxidation in metabolic syndrome –** John Oates, Vanderbilt University, USA
10:00 – 10:30	Refreshment Break – Huxley 344
10:30 – 11:00	**Session Two - Free Radicals and Aldehydes** Chairs - Prof. Henry Forman, University of Southern California, USA, and Prof. Giuseppe Poli, University of Torino, Italy
	Keynote Lecture Two - Modification of Proteins by Lipid Peroxidation Products - Dennis Petersen, University of Colorado, USA
11:00 – 11:15	**HNE 4 - The effect of HNE modification on the structure and function of the neuronal protein UCH-L: links to neurodegenerative disease –** Sophie Jackson, Cambridge University, UK
11:15 – 11:30	**HNE 5 - Doxorubicin-induced HNE adduction to ApoA1 in plasma leads to elevated brain-resident TNF-alpha with consequent oxidative stress, mitochondrial dysfunction, and neuronal death: Prevention by MESNA and implications for chemotherapeutic induced cognitive dysfunction ("chemobrain") –** D. Allan Butterfield (TBC), University of Kentucky, USA
11:30 – 11:45	**HNE 6 - A high fructose diet induces protein glycoxidation and HNE protein modifications in rats –** Luca Cannizzaro, University of Milan, Italy
11:45 – 13:15	**HNE Delegates Lunch and Poster Session – Huxley 344**

Genetics and Epigenetics of Frailty and Ageing Satellite Meeting
10:30 – 13:00
Registration: Sherfield Building Concourse Level 1
Meeting Room: Huxley 311

10:00 – 10:30	Registration for Genetics and Epigenetics of Frailty and Ageing Satellite Meeting
10:30 – 10:45	**Introduction** Chairs – Prof. Leocadio Rodríguez Mañas, Hospital Universitario de Getafe, Madrid, Spain and Prof. Howard Bergman, McGill University, Quebec, Canada
10:45 – 11:15	**The prevalence of frailty syndrome in an older population from Spain: the Toledo study for healthy ageing -** Leocadio Rodríguez Mañas, Hospital Universitario de Getafe, Spain
11:15 – 11:45	**Searching for a Relevant Clinical and Research Concept -** Howard Bergman, McGill University, Canada
11:45 – 12:15	**The biological basis of frailty and late-life vulnerability** – Jeremy D Walston, John Hopkins University School of Medicine, USA
12:15 – 12:45	**A transgenic approach to understanding age-related loss of muscle mass and function** - Anne McArdle, University of Liverpool
12:45 – 13:00	Closing Remarks – Lunch is **not** provided

13:15 – 13:45	**Session Three - Lipid Peroxidation Products as Second Messengers in Signal Transduction** Chairs - Prof. Koji Uchida, Nagoya University, Japan and Prof. Neven Zarkovic, Rudjer Boskovic Institute, Croatia				
	Keynote Lecture Three - Lipid Peroxidation Products and Redox Signaling - Henry Forman, University of Southern California, USA	12:00 – 14:00	**FRR Editorial Board Meeting (Invitation only)** **Room: SALC 1**		
13:45 – 14:00	**HNE 7 - Nrf2/ARE signaling pathway could be a key factor in mediating cell death resistance in pre-neoplastic Apc-mutated colonocytes upon 4-hydroxynonenal (HNE) exposure –** Sabine Dalleau, INRA Toulouse, France				
14:00 – 14:15	**HNE 8 -Modification of phosphatidylethanolamines mediates pro-inflammatory effects of lipid aldehydes –** S.S. Davies, Vanderbilt University, USA	**EU COST CM1001 ACTION Satellite Meeting** **14:30 – 17:30** **Registration: Sherfield Building Concourse Level 1** Room: Huxley 311		**Writer's Satellite Meeting - How to Publish Research: Easy tips for writing great papers in high impact journals** **14:30 – 16:30** Room: RSMG01	
14:15 – 14:45	**Refreshment Break**	14:00 – 14:30	**Registration for EU COST CM1001 ACTION Satellite Meeting**	14:00 – 14:30	**Registration for Writer's Satellite Meeting**
14:45 – 15:15	**Keynote Lecture Four- Signalling Properties of 4-Hydroxyalkenals formed by Lipid Peroxidation in Diabetes** - Shlomo Sasson, Hebrew University of Jerusalem, Israel	14:30 – 14:45	**Introduction** **Protein Oxidation and Modification** Chairs – Prof. Tilman Grune, University of Jena, Germany and Prof. Caroline Baron, Technical University of Denmark	14:30 – 16:30 This useful workshop is led by **Anthony Newman (Elsevier) and Pernille Hammelsoe (Wiley- Blackwell)** Getting publishing in a high impact journal is a tough job for junior researchers. This workshop will give you an unparallel insight into the publication process, giving you valuable tips in how to write research papers, understanding the peer review process and how academic publishing works. Aimed at researchers looking to find out more about getting published or to discover tips on writing better papers.	
15:15 – 15:30	**HNE 9 -Interaction between oxidized lipids and amyloid-β in amplifying neuronal damage in Alzheimer disease –** Paola Gamba, University of Torino, Italy	14:45 – 15:15	**Molecular aspects on the selectivity and consequences of protein tyrosine nitration -** Rafael Radi, Universidad de la República, Uruguay		
15:30 – 16:00	**Session Four – Hermann Esterbauer Award Lecture** Chair - Prof. Peter Eckl, University of Salzburg, Austria **Puzzles, patterns and LDL: a mass spectrometrist's view –** Ana Reis, Aston University, UK	15:15 – 15:45	**N-linked oligosaccharides of glycoproteins are altered during aging and are possible regulators of the somatotropic axis-** Valerie Van Hooren, University of Gent, Belgium	16:30 – 17:30	Elsevier Publishing Forum (invitation only)
16:00 – 17:00	**HNE Delegates Drinks, Poster Presentations and Awards**	15:45 – 16:15	**Protein oxidation and proteomics – challenges and pitfalls -** Adelina Rogowska-Wrzesinska, University of Southern Denmark		
		16:15 – 16:45	**Protein modification and MS-detection -** Pedro Domingues, Universidade de Aveiro Santiago, Portugal		
		16:45 – 17:15	**Evaluation of selected antioxidants on protein oxidation -** Caroline Baron, Technical University of Denmark		
		17:15 – 17:30	**Closing Remarks**		

SFRRI MEETING THURSDAY, 6 – SUNDAY, 9 SEPTEMBER 2012		
Thursday, 6 September 2012		
07:00	**SFRRI Conference Registration Opens**	
08:30 – 08:55	**Welcome Address (Great Hall)** Prof. Giovanni Mann, Secretary General SFRR International, Meeting Chairman, King's College London, UK	
08:55 – 09:00	**Introduction to SFRRI Trevor Slater Lecture (Great Hall)** Prof. Malcolm Jackson, President, SFRR International, University of Liverpool, UK	
09:00– 09:30	**SFRRI Trevor Slater Lecture (Great Hall)** **Oxidants and Antioxidants in Biology: A Historical Perspective** Prof. Lester Packer, University of Southern California, USA	
09:40 – 12:05	**Symposium 1 - Translating the Powerhouse: Mitochondrial Redox Signaling – sponsored by:** Biochemical Society Advancing Molecular Bioscience	**Symposium 2 - Phytochemicals (Micronutrients) in Redox Signaling– sponsored by:** **Mars Incorporated**
	Room: Great Hall	**Rooms: Huxley 308 and via video link to Huxley 311**
09:40 – 09:45	**Introduction** Chairs – Dr. Michael Murphy, MRC Mitochondrial Biology Unit, UK and Prof. Victor Darley-Usmar, University of Alabama, USA	**Introduction** Chairs – Prof. Cesar Fraga, University of Buenos Aires, Argentina and Prof. Helmut Sies, Düsseldorf, Germany
09:45 – 10:10	**Beyond Retrograde and Anterograde Signaling: Mitochondrial – Nuclear Interactions as a means for Evolutionary Adaptation and Contemporary Disease** - Scott Ballinger, University of Alabama, USA	**Redox modulation of pro-inflammatory and anti-inflammatory signaling by chemopreventive phytochemicals** – Young-Joon Surh, Seoul National University, Republic of Korea
10:10 – 10:35	**Mitochondrial reactive oxygen species increase platelet activation in Sickle Cell disease** - Sruti Shiva, University of Pittsburgh, USA	**Dietary flavonoids: Role of (-)-epicatechin and related procyanidins in cell signaling** - Patricia Oteiza, University of California, Davis, USA
10:35 – 11:05	Refreshment Break	
11:05 – 11:30	**Mitochondrial energy metabolism in brain aging and neurodegeneration** - Enrique Cadenas, University of Southern California, Los Angeles, USA	**Nitric oxide regulation by polyphenols: from calcium homeostasis to diabetes and heart failure** - Franciso Villarreal, UCSD School of Medicine, USA
11:30 – 11:55	**Neuroprotection by targeting antioxidant □-glutamylcysteine to mitochondria** - Juan P Bolaños, Universidad de Salamanca, Spain	**The impact of fruit flavonoids on memory and cognition** - Jeremy Spencer, University of Reading, UK
11:55 – 12:05	Closing comments for Symposium 1	Closing comments for Symposium 2
12:05 – 13:05	**Lunch with Poster Presentations**	**SFRR-Europe Committee Meeting (SALC 1)**
	Room: Great Hall	**Rooms: Huxley 308 and via video link to Huxley 311**
13:05 – 15:00	**Symposium 3 - Translating the Powerhouse: Mitochondrial Therapeutics – sponsored by:** Seahorse Bioscience	**Symposium 4 - Insulin Resistance and Redox-Modulated Signaling – sponsored by:** QIAGEN
13:05 – 13:10	**Introduction** Chairs – Sruti Shiva, University of Pittsburgh, USA and Prof. Juan P Bolaños, Universidad de Salamanca, Spain	**Introduction** Chairs – Prof. Giuseppe Poli, University of Torino, Italy and Prof. Juan Sastre, University of Valencia, Spain
13:10 – 13:35	**Mitochondrially targeted antioxidants: a therapeutic strategy** - Michael Murphy, MRC Mitochondrial Biology Unit, UK	**Obesity and low-grade inflammation** - Brigitte Winklhofer-Roob, Karl-Franzens Universität, Austria
13:35 – 14:00	**Mitochondrial therapeutics in alcohol dependent hepatoxicity** - Victor Darley-Usmar, University of Alabama, USA	**Lipokines and oxysterols: Novel adipose-derived lipid hormones linking adipose dysfunction and insulin resistance** – Giuseppe Murdolo, University of Perugia, Italy
14:00 – 14:25	**Mitochondrial targets for cardioprotective therapeutics** Paul S. Brookes, University of Rochester Medical Center, USA	**Importance of insulin resistance to vascular repair and regeneration** – Mark Kearney, University of Leeds, UK
14:25 – 14:50	**Modulating the mitochondrial F0F1-ATPASE as a therapeutic strategy for systematic autoimmunity** - Gary S. Glick, University of Michigan, USA	**The role of oxidative stress in insulin signaling and muscle damage induced by exercise** - Wataru Aoi, Kyoto Prefectural University, Japan
14:50 – 15:00	Closing comments for Symposium 3	Closing comments for Symposium 4
15:00 – 15:30	Refreshment Break	

15:30 – 17:30	**Signal Transduction Oral Presentations** Co-Chairs: Nesrin Kartal-Ozer (Turkey) Helen Griffiths (UK)	**Oxidative Stress in Animals and Plants Oral Presentations** Co-Chairs: Grezgorz Bartosz (Poland) Richard Siow (UK)	**Antioxidants, Nutrition and Novel Therapies Oral Presentations** Co-Chairs: Leopold Flohe (Germany) Roland Stocker (Australia)
	Room: Great Hall	**Room: Clore Theatre**	**Room: Huxley 308**
15:30 – 15:45	**O1 Oxidative inactivation of the thioredoxin peroxidase activity of a peroxiredoxin is important for thioredoxin-mediated repair of oxidised proteins and cell survival** A.M. Day*, J.D. Brown, S.R. Taylor, J.D. Rand, B.A. Morgan, E.A. Veal, *Newcastle University, UK*	**O2 Disulfide stress as a novel type of oxidative stress in acute inflammation** M.L. Moreno*[1], J. Escobar[1], A. Gil[1], A. Izquierdo-Álvarez[2], A. Martínez-Ruíz[2], J. Sastre[1], *[1]University of Valencia, Spain, [2]Hospital de la Princesa, Spain*	**O3 Acetylsalicylic acid induced oxidative modification of ZO-1 reduces the tightness of small intestinal epithelial cell** O. Handa*, Y. Naito, A. Fukui, Y. Qin, T. Takagi, T. Yoshikawa, *Kyoto Prefectural University of Medicine, Japan*
15:45 – 16:00	**O4 Hyperoxia regulates the degradation of the circadian protein Rev-Erba: implications for cytoprotection** M.D. Hinson[2], C. Biswas[1], P. La[2], G. Yang[2], P.A. Dennery*[1,2], *[1]University of Pennsylvania, USA, [2]Children's Hospital of Philadelphia, USA*	**O5 Monitoring dynamic compartment-specific changes of glutathione redox state using redox-sensitive YFP sensors** A. Banach-Latapy*[1,2], M. Dardalhon[1,2], T. He[1,2], L. Vernis[1,2], R. Chanet[1,2], M.E. Huang[1,2], *[1]CNRS, France, [2]Centre Universitaire, France*	**O6 The endogenous radical scavenger A1M binds to Complex I and protects mitochondrial structure and function; an novel cellular protective mechanism** M.G. Olsson*[1], L.W. Rosenlöf[1], H. Kotarsky[1], M. Mörgelin[1], V. Fellman[1,2], B. Åkerström[1], *[1]Lund University, Sweden, [2]University of Helsinki, Finland*
16:00 – 16:15	**O7 Understanding the role of Nrf2 signalling in the cellular defence against iron toxicity: Nrf2 protects against dietary iron-induced liver injury** S. Silva-Gomes, A.G. Santos, C. Caldas, J.V. Neves, P.N. Rodrigues, T.L. Duarte*, *Institute for Molecular and Cell Biology, Portugal*	**08 Redox regulation in the daily acclimation of chloroplasts to light** H. Peled-Zehavi*, I. Dangoor, A. Danon, *The Weizmann Institute of Science, Israel*	**O9 Characterising the effect of novel slow-release H2S donors on pro-inflammatory enzyme activity in human cartilage cells** B. Fox*, T. Holland, A. Perry, M.E. Wood, M. Whiteman, *University of Exeter, UK*
16:15 – 16:30	**O10 Nrf2 activation remarkably improves exercise endurance capacity in mice** O. Sechang*[1], E.W. Warabi[1], M.Y. Yamamoto[2], K.T. Tanaka[1], J.S. Shoda[1], *[1]University of Tsukuba, Japan, [2]University of Tohoku, Japan*	**O11 Peroxisome Proliferator - Activated receptor-α a Key Modulator in Oxidative Stress and Impaired Mitochondrial Function in a Mouse Model of DDC Induced Hepatotoxicity** A.P. Nikam*, J. Patankar, E. Schöck, K. Kashofer, K. Zatloukal, P.M. Abuja, *Medical University of Graz, Austria*	**O12 Quercetin Attenuates Aluminum-Induced Apoptosis In Rat Hippocampus, By Preventing Cytochrome c Translocation, Bcl-2 Decrease, Bax Elevation, Caspase-3 And p53 Activation** D.R. Sharma*[1], A. Sunkaria[1], D. Verma[1], K.D. Gill[1], *[1]Post Graduate Institute of Medical Education and Research, India, [2]Post Graduate Institute of Medical Education and Research, India*
16:30 – 16:45	**O13 Control of ARE-linked gene expression by cytoplasm-nucleus translocational oscillations of Nrf2** M. Xue, H. Momiji, N. Rabbani, G. Barker, D.A. Rand, P.J. Thornalley*, *University of Warwick, UK*	**O14 Higher oxidative stress in human dental pulp stem cells cultured at 21% O2 compared to 5% O2** M. El Alami*[1], J.A. Viña[1], K.M. Abdelaziz[1], V. Bonet-Costa[1], R. López Grueso[1], G. Olaso[1], M. Inglés[1], M. Dromant[1], R. Edo[1], C. Borras[1], J. Gambini[1], R.C. Siow[2], S.J. Chapple[2], G.E. Mann[2], M. Peñarrocha[1], J. Viña[1], *[1]Universidad de Valencia, Spain, [2]King's College London, UK*	**O15 (-)-Epicatechin increases systemic Nrf2-dependent response and vascular function in mice** M.M. Cortese-Krott*[1], T. Krenz[1], A. Rodriguez-Mateos[2], F. Oberle[1], S. Sivarajah[1], M. Kelm[1], *[1]Heinrich Heine University, Germany, [2]University of Reading, UK*
16:45 – 17:00	**O16 A conserved prokaryotic region of GCN5L1 is required for mitochondrial acetyltransferase function.** I. Scott*, B.R. Webster, M.N. Sack, *National Heart, Lung and Blood Institute, USA*	**O17 Metal ions can hitch a ride with flavonones on glucose transporters** E. Vlachodimitropoulou*, P.A. Sharp, G.E. Mann, S. Pardalaki, R.J. Naftalin, *King's College London, UK*	**O18 Quantification of the antioxidant depletion capacity of air** pollutants I.N. Katsaiti*, H. Walton, F.J. Kelly, *King's College London, UK*
17:00 – 17:15	**O19 A Role for Nox4 in the Regulation of Cardiomyocyte Proliferation in vivo** A.C. Brewer*, T.V. Murray, I. Smyrnias, B. Yu, A.M. Shah, *King's College London British Heart Foundation Centre of Research Excellence, Cardiovascular Division, London, UK*	**O20 Impact of ferredoxin:NADP(H) oxidoreductase on redox poise of the glutathione pool and Fenton reaction capacity of thylakoid membranes: a connection to pre-acquired acclimation in Arabidopsis** T. Goss, M. Twachtmann, A. Mulkidjanian, H.J. Steinhoff, J.P. Klare*, G.T. Hanke, *University of Osnabrueck, Germany*	**O21 Oxidative stress impaired HIF1a activation: a novel mechanism for increased vulnerability of steatotic hepatocytes to hypoxic stress** S. Anavi, N. Budick Harmelin, Z. Madar, O. Tirosh*, *The Hebrew University of Jerusalem, Israel*

17:15 – 17:30	**O22 Reactive oxygen species-mediated regulation of mitochondrial biogenesis in the yeast Saccharomyces cerevisiae.** E.D. Yoboue, C. Chevtzoff, M. Rigoulet, A. Devin*, *Université Bordeaux Segalen, France*	**O23 Cholestasis is associated with hepatic microvascular dysfunction and aberrant energy metabolism before and during ischemia-reperfusion** M. Heger*[1,2], J.J. Kloek[1], X. Marechal[3], J. Roelofsen[1], R.H. Houtkooper[1], A.B. van Kuilenburg[1], *[1]University of Amsterdam, The Netherlands, [2]University of Utrecht, The Netherlands, [3]Lille University Hospital, France*	**O24 Ionizing radiation induces mitochondrial reactive oxygen species production accompanied by upregulation of mitochondrial electron transport chain function and mitochondrial content under control of the cell cycle checkpoint** T. Yamamori*, H. Yasui, M. Yamazumi, Y. Wada, H. Nakamura, O. Inanami, *Hokkaido University, Japan*
17.00-18.00			**FRBM Editors Meeting (Invitation only) (SALC 1)**
17:30 – 19:00	**Drinks with Poster Presentations (Queens Tower Room & Huxley Building 344)**		
19:00 – 20:00	**Welcome Reception (Queens Tower Room & Huxley Building 344)**		

Friday, 7 September 2012			
07:30	Conference Registration Open		
08:30 – 10:30	**Symposium 5 - Caught in a Trap: Neutrophil Extracellular Traps, Reactive Oxygen Species and Inflammation**	**Symposium 6 - Reactive Oxygen Species Revisited: Promoting Lifespan by Low-dose Reactive Oxygen Species**	
	Room: Huxley 308 and via video link to Huxley 311	**Rooms: Great Hall**	
08:30 – 08:35	**Introduction** Chairs - Dr. Paul Cooper, University of Birmingham, UK Dr. Shida Yousefi, University of Bern, Switzerland	**Introduction** Chairs – Prof. Michael Ristow, University of Jena, Germany and Prof. Toren Finkel, NIH, Baltimore, USA	
08:35 – 09:00	**Neutrophil extracellular traps: a novel ROS-dependent innate immune defence -** Arturo Zychlinsky, Max Planck Institute for Infection Biology, Germany	**Antioxidant supplements in primary or secondary prevention increase mortality in humans** - Christian Gluud, University of Copenhagen, Denmark	
09:00 – 09:25	**The mitochondrial angle: viable granulocyte extracellular trap production -** Shida Yousefi, University of Bern, Switzerland	**Beyond the oxidative damage theory: Does hyperfunction cause ageing in C. elegans? -** David Gems, University College London, UK	
09:25 – 09:50	**A Novel Rapid NET Release Mechanism without Neutrophil Death** - Paul Kubes, University of Calgary, Canada	**Mitohormesis: non-linear signaling responses to metabolic ROS formation -** Michael Ristow, University of Jena, Germany	
09:50 - 10:15	**Neutrophil extracellular traps in the pathogenesis of autoimmune disease -** Dagmar Scheel-Toellner, University of Birmingham, UK	**Oxidants, metabolism and stem cell function -** Toren Finkel, National Institutes of Health, USA	
10:15 – 10:30	Closing comments for Symposium 5	Closing comments for Symposium 6	
10:30 – 11:00	Refreshment Break - **Queens Tower Room & Huxley Building 344**		
11:00 – 13:00	**Symposium 7 – Peroxiredoxins, Thioredoxins and Glutathione Peroxidases**	**Symposium 8 - Redox Regulation of RNA and microRNA in Health and Disease**	
	Room: Great Hall	**Rooms: Huxley 308 and via video link to Huxley 311**	
11:00 – 11:05	**Introduction** Chairs - Prof. Christine Winterbourn, University of Otago,New Zealand and Prof. Junji Yodoi, Kyoto University, Japan	**Introduction** Chairs – Dr Richard Siow, King's College London, UK and Prof. Henrik Poulsen, University of Copenhagen, Denmark	
11:05 – 11:30	**The still mysterious speed of thiol-dependent peroxidases-** Leopold Flohe, Otto-von-Guericke-Universität Magdeburg, Germany	**RNA oxidation in disease -** Henrik Poulsen, University of Copenhagen, Denmark	
11:30 – 11:55	**Regulation of steroidogenesis via H2O2-dependent, reversible inactivation of peroxiredoxin III in mitochondria -** Sue Goo Rhee, Ewha Womans University, Republic of Korea	**MicroRNAs regulating oxidative stress and inflammation in obesity and atherosclerosis -** Paul Holvoet, University of Leuven, Belgium	
11:55 – 12:20	**Thiol-redox compartmentation in the eukaryotic cell –** Michel Toledano, Gif-sur-Vette, France	**MicroRNA Control of Wound Angiogenesis** – Sashwati Roy, Ohio State University, USA	
12:20 – 12:45	**Thioredoxin binding protein-2 (TBP-2)/ Txnip/ VDUP with multifunctional biostress signal regulatory activities –** Hiroshi Masutani, Kyoto University, Japan	**Circulating microRNAs: cellular origin and biomarker potential -** Manuel Mayr, King's College London, UK	
12:45 – 13:00	Closing comments for Symposium 7	Closing comments for Symposium 8	
13:00 – 14:00	**Lunch with Poster Presentations - Queens Tower Room & Huxley Building 344**	**SFRRI Committee Meeting (Salc 1)**	
14:00 – 14:50	**SFRR Europe Lecture** (Introduced by Giovanni Mann, King's College London, UK) **Proteasome and Lon: A Saga of Sex, Drugs, Stress and Ageing** Prof. Kelvin J. A. Davies, University of Southern California, USA **Room: Great Hall**		
15:00 – 17:00	**Inflammation and Immunity Oral Presentations** Co-Chairs: Yuji Naito (Japan) Phyllis Dennery (USA)	**Cancer and Ageing Oral Presentations** Co-Chairs: Daniela Caporossi (Italy) Holly van Remmen (USA)	**Cardiovascular, Metabolic & Environmental Disorders I Oral Presentations** Co-Chairs: Frank Kelly (UK) Niki Chondrogianni (Greece)
	Room: Clore	**Room: Great Hall**	**Room: Huxley 308**
15:00 – 15:15	**O25 Oxidative stress as a cause for autoimmune hemolytic anemia; supporting evidences from genetically modified mice** T. Konno, N. Ohtsuki, N. Kibe, S. Tsunoda, Y. Iuchi, J. Fujii*, *Yamagata University, Japan*	**O26 The effect of redox microenvironment and antioxidant interference on the telomerase activity of normal liver cells and hepatoma cells** D.Y. Shi*[1,2], Y.L. Sui[1], J. Wang[1], P.Y. I[1], F.Z. Xie[2], S.L. LIU[2], [1]*Shanghai Medical College of Fudan University, China,* [2]*Fudan University, China*	**O27 Heme oxygenase 1 induction in the peri-infarct region after cerebral ischemia-reperfusion injury in rats is associated with reduced blood-brain barrier breakdown** A. Alfieri[1], S. Srivastava[1], R.C.M. Siow[1], M.R. Duchen[2], P.A. Fraser[1], G.E. Mann[1] [1]*Kings College London, UK,* [2] *University College London, UK*
15:15 – 15:30	**O28 Modulation of Th1/Th17 equilibrium in vitro by Indicaxanthin from Opuntia Ficus Indica (L. Mill)** M. Allegra*[1], L. Rattazzi[2], A. Attanzio[1], L. Tesoriere[1], M.A. Livrea[1], F. D'Acquisto[2], [1]*Università di Palermo, Italy,* [2]*Queen Mary University of London,*	**O29 Tumor microenvironment and oxidative stress: involvement in metabolic reprogramming and chemo-resistance of prostate cancer cells** M.L. Taddei, T. Fiaschi, A. Marini, V. Farini, S. Stinziani, P. Chiarugi*, *University of Florence, Italy*	**O30 Kriti1 and reactive oxygen species: a novel molecular pathway involved in cerebral cavernous malformations** L. Goitre, M. Villoria-Recio, V. Cutano, R. Canzoneri, E. Trapani, A. Morina, F. Retta*, *University of Turin, Italy*

	UK		
15:30 – 15:45	**O31 ROS as signalling molecule in TNF-α mediated Nrf2 activation in macrophages** A. Fragoulis*, A. Greiber, C. Rosen, T. Pufe, C.J. Wruck, *Department of Anatomy and Cell Biology, Germany*	**O32 Asbestos surface provides a niche for oxidative modification: A novel role of free radicals in carcinogenesis** H. Nagai, Y. Okazaki, L. Jiang, S. Akatsuka, Y. Yamashita, S. Toyokuni*, *Nagoya University, Japan*	**O33 A dithiol/disulfide redox switch in the dehydrogenase region on Nox2 regulates the assembly of the superoxide-generating NADPH oxidase of phagocytes** E. Pick, *Tel Aviv University, Israel*
15:45 – 16:00	**O34 The role of phosphatidylserine externalisation and oxidation in C1q-dependent apoptotic cell clearance** M.J. Smallwood*[1], S.A. Jewell[2], P.G. Petrov[2], C.P. Winlove[2], P. Eggleton[1], P.G. Winyard[1], *[1]Peninsula Medical School, Exeter University, UK, [2]School of Physics, University of Exeter, UK*	**O35 Compromised antioxidant enzyme adaptation to cigarette smoke in patients with chronic obstructive pulmonary disease (COPD)** R.E. Dove*[1], E. Roos-Engstrand[2], A. Blomberg[2], A. Behndig[2], I.S. Mudway[1], *[1]King's College London, UK, [2]Umeå University, Sweden*	**O36 The role of NOX isoforms in ischemia/reperfusion injury of different organs** K. Wingler[1], K. Radermacher[1], P.W.M. Kleikers*[1], S. Altenhoefer[1], N. Weissmann[2], H.H.H.S. Schmidt[1], *[1]Maastricht University, The Netherlands, [2]University Giessen Lung Centre, The Netherlands*
16:00 – 16:15	**O37 Sulforaphane decreases neutrophil hyperactivity by reducing intracellular oxidative stress** H.K.I. Dias[1], M. Milward[2], M. Grant[2], I.L.C. Chapple[2], H.R. Griffiths*[1], *[1]Aston University, UK, [2]The University of Birmingham, UK*	**O38 Eccentric exercise as an oxidant stimulus for studying redox homeostasis: an aging study** M.G. Nikolaidis*[1], A. Kyparos[1], C. Spanou[1], V. Paschalis[2], A.A. Theodorou[3], G.V. Grivas[1], *[1]Aristotle University of Thessaloniki, Greece, [2]University of Thessaly, Greece, [3]European University of Cyprus, Cyprus*	**O39** **Nox4-dependent regulation of endoplasmic reticulum stress in cardiac cells** C.X. Santos*, A.C. Brewer, M. Zhang, N. Anilkumar, A.M. Ajay, *King's College London British Heart Foundation Centre, Cardiovascular Division, UK*
16:15 – 16:30	**O40 Peroxiredoxin-6 plays the protective role against intestinal inflammation** T.T. Takagi*, Y.N. Naito, T.T. Tsuji, O.H. Handa, H.I. Ichikawa, T.Y. Yoshikawa, *Kyoto Prefectural University of Medicine, Japan*	**O41 Mitochondrial architecture, oxidant production, and redox signaling in malignant mesothelioma cells** B.S. Cunniff*[1], K. Newick[1], J. Stumpff[1], J.A. Melendez[2], B. Kalyanaraman[3], N. Heintz[1], *[1]University of Vermont, USA, [2]Albany Medical College, USA, [3]Medical College of Wisconsin, USA*	**O42 Cardiac mitochondrial bioenergetics in endotoxemia** V. Vanasco, N. Magnani, M.C. Cimolai, L.B. Valdez, P. Evelson, S. Alvarez*, *University of Buenos Aires, Argentina*
16:30 – 16:45	**O43 Mycoredoxin-1 is one of the missing links in the oxidative stress defense mechanism of *Mycobacterium tuberculosis*** K. Van Laer[1,2], L. Buts[1], N. Foloppe[3], D. Vertommen[4], N.A.J. Van Nuland[1,2], J. Messens*[1,2], *[1]VIB-Vrije Universiteit Brussel, Belgium, [2]Brussels Center for Redox Biology, Belgium, [3]Karolinska Institutet, Sweden, [4]de Duve Instituut, Belgium*	**O44 Investigating the intracellular changes in ROS production and adaptive responses in muscle specific SOD1 knockout mice** G.K. Sakellariou*[1], A. Kayani[1], A. Vasilaki[1], A. Scott[1], H. Van Remmen[2], S. Brooks[3], A. McArdle[1], M.J. Jackson[1], *[1]University of Liverpool, Liverpool, UK, [2]University of Texas Health Center at San Antonio and the Barshop Institute for Longevity and Aging Studies, San Antonio, USA, [3]University of Michigan, USA*	**O45 Epigenetic alterations in skeletal muscle metabolism are associated with weight loss resistance** B. Beauchamp*[1], S. Ghosh[2], A. Chu[1], A. Blais[1], K. Rajamanickam[3], E. Tsai[3], M.E. Patti[4], M.E. Harper[1], *[1]University of Ottawa, Canada, [2]North Carolina Central University, USA, [3]Ottawa Hospital Research Institute, Canada, [4]Harvard Medical School, USA*
16:45 – 17:00	**O46 Distribution of Fe(III) in carotid atherosclerotic plaques and its relation to vulnerability for rupture** H. Gustafsson*, M. Norell, M. Hallbäck, M. Lindgren, M. Engström, H. Zachrisson, *Linkoping University, Sweden*	**O47 Role of Nrf2 in neuroblastoma sensitivity to Bortezomib** A.L. Furfaro*[1], S. Piras[1], M. Passalacqua[1], C. Domenicotti[1], M.A. Pronzato[1], U.M. Marinari[1], L. Moretta[2], N. Traverso[1], M. Nitti[1], *[1]University of Genoa, Italy, [2]Giannina Gaslini Institute, Italy*	**O48 Histone methylation is regulated by nitric oxide** J.R. Hickok, D. Vasudevan, D.D. Thomas*, *University of Illinois at Chicago, USA*
17:00 – 18:30	**Drinks with Poster Presentations (Queens Tower Room & Huxley Building 344)**		**SFRR-Europe AGM (17:00 – 18:00) Great Hall**
18:30 – 19:30	**IUBMB Jubilee Lecture** (Introduced by Jose Vina, Universidad de Valencia, Spain) **Nutrient Sensing Pathways and Ageing** Prof. Dame Linda Partridge, FRS, University College London, UK and Max Planck Institut, Köln, Germany **Room: Great Hall**		

Saturday, 8 September 2012			
07:30	Conference Registration Open		
08:30 – 10:30	**Symposium 9 - Selenium, Selenoproteins and Type 2 Diabetes: An Unexpected Link**	**Symposium 10 - Reactive Nitrogen Species and Reactive Oxygen Species in Cardiac Myocyte Signal Transduction**	
	Room: Great Hall `	**Room: Clore**	
08:30 – 08:35	**Introduction** Chairs – Prof. Regina Brigelius-Flohe, German Institute of Human Nutrition, Germany and Dr. Holger Steinbrenner, Universität- Düsseldorf, Germany	**Introduction** Chairs – Prof. Thomas Michel, Harvard Medical Hospital, Boston, USA and Prof. Ajay Shah, King's College London, UK	
08:35 – 09:00	**Epidemiology of selenium and type 2 diabetes -** Margaret Rayman, University of Surrey, UK	**Hydrogen peroxide and differential activation of nitric oxide synthases in cardiac myocytes -** Thomas Michel, Harvard Medical Hospital, USA	
09:00 – 09:25	**Selenium and diabetes - evidence from animal studies -** Xingen Lei, Cornell University, USA	**In vivo dissection of redox-regulated protein kinase activation in the heart -** Philip Eaton, St Thomas' Hospital London, UK	
09:25 – 09:50	**Interference of selenium with the carbohydrate metabolism -** Holger Steinbrenner, University of Düsseldorf, Germany	**Stretch-induced Nox2-dependent signal transduction in muscle** – Chris Ward, University of Maryland, Baltimore, USA	
09:50 - 10:15	**Endoplasmic reticulum-localized selenoproteins in insulin resistance -** Vadim Gladyshev, Brigham & Women's Hospital, USA	**NADPH oxidase-dependent regulation of cardiac stress responses -** Ajay Shah, King's College London, UK	
10:15 – 10:30	Closing comments for Symposium 9	Closing comments for Symposium 10	
10:30 – 11:00	Refreshment Break - **Queens Tower Room & Huxley Building 344**		
11:00 – 13:00	**Symposium 11 - Protein Oxidation, Proteolysis, and Ageing**	**Symposium 12 – The conversion of Redox Signals into Highly Specific Zinc Ion Signals**	
	Room: Great Hall `	**Room: Clore**	
11:00 – 11:05	**Introduction** Chairs – Prof. Kelvin J. A. Davies, University of Southern California, Los Angeles, USA and Prof. Michael Davies, The Heart Research Institute, Australia	**Introduction** Chairs – Prof. Wolfgang Maret, King's College London, UK and Prof. Christer Hogstrand, King's College London, UK	
11:05 – 11:30	**Protein Oxidation and Proteolytic Susceptibility -** Michael Davies, The Heart Research Institute, Australia	**Redox/zinc signal transduction in ischemic preconditioning and neuronal cell death -** Elias Aizenman, University of Pittsburgh, USA	
11:30 – 11:55	**Proteasomal regulation in oxidative stress and ageing -** Tilman Grune, University of Jena, Germany	**Nitric oxide and zinc-mediated protein assembly in opioid receptor signaling -** Javier N. Garzon, Instituto Cajal, Spain	
11:55 – 12:20	**Impairment of proteasome function as a biomarker of cellular and tissular ageing –** Bertrand Friguet, Université Pierre et Marie Curie, France	**Zinc ions as effectors of environmental oxidative lung damage** - James M. Samet, University of North Carolina, USA	
12:20 – 12:45	**Ageing and immunoproteasome: More than just antigen presentation -** Deborah Ferrington, University of Minnesota, USA	**Redox biochemistry of metallothioneins and protein tyrosine phosphatases in growth factor signalling -** Wolfgang Maret, King's College London, UK	
12:45 – 13:00	Closing comments for Symposium 11	Closing comments for Symposium 12	
13:00 – 14:00	**Lunch with Poster Presentations - Queens Tower Room & Huxley Building 344**	**13:00 – 14:00**	**SFRR Asia Business Meeting Salc 1**
14:00 – 14:50	**Informa Award Lecture** (Introduced by Helen Griffiths, University of Aston, UK) **NADPH Oxidases as Mediators of Vascular Physiology** Prof. Kathy Griendling, Emory University School of Medicine, Atlanta, USA **Room: Great Hall**		
15:00 – 17:00	**Neuroscience and Nitric Oxide Oral Presentations** Co-Chairs: Shinya Toyokuni (Japan) Aldini Giancarlo (Italy)	**Oxidation of Macromolecules Oral Presentations** Co-Chairs: Maria Fedorova (Germany) Lin Mantell (USA)	**Cardiovascular, Metabolic & Environmental Disorders II Oral Presentations** Co-Chairs: Alison Brewer (UK) Mariapaola Nitti (Italy)
	Room: Great Hall	**Room: Clore**	**Room: Huxley 308**
15:00 – 15:15	**O49 Tyrosine modification of b2-tubulin and its potential nitric oxide signaling in cardiomyogenesis** Y.S. Park[1], S.K. Kang[1], Y.G. Kwon[4], K.P. Kim[2], I. Komuro[3], S.I. Park*[1], *[1]Korea National Institute of Health, Republic of Korea, [2]Konkuk University, Republic of Korea, [3]Chiba University, Japan, [4]Yonsei University, Republic of Korea*	**O50 Generation and Accumulation of Cellular 5-Hydroxymethylcytosine by redox-active quinones** B-Z. Zhu, *Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China*	**O51 Transforming growth factor-β1 modulates nrf2 redox signalling and enhances migration of human aortic adventitial fibroblasts** T. Mughal*, M. Parsons, R.C. Siow, *King's College London, UK*
15:15 – 15:30	**O52 Nitric oxide metabolism plays a crucial role in visual pattern memory in Drosophila** C. CHEN*[1], L. LIU[2], Y. LIU[2], Q.L. HOU[1], H.Q. JIANG[2], X. ZHANG[1], *[1]National Laboratory of Biomacromolecules, China, [2]Chinese Academy of Sciences, China*	**O53 Yeast 20S proteasome redox forms generate diverse peptide sets from same protein substrates** M. Demasi*[1], V. Simoes[1], G.M. Silva[1,2], F.C. Gozzo[3], L.E.S. Netto[2], *[1]Instituto Butantan, Brazil, [2]USP, Brazil, [3]UNICAMP, Brazil*	**O54 Heme oxygenase-1 regulates mitochondrial coenzyme Q and reactive oxygen species formation – possible implications for the metabolic reprogramming in response to hypoxia** E.J. Collinson[1], K.H. Chan[2], G.J. Maghzal[1], J. Cantley[3], C. Suarna[1], L. Dunn[2], J. Ni[1], R.G. Midwinter[1], H.A. Hamid[1], D.L. Newington[1], Y.T. Lam[2], D.E. James[3],

			C.F. Clarke[4], M.K.C. Ng[2], R. Stocker*[1], *[1]University of Sydney, Australia, [2]The Heart Research Institute, Australia, [3]Garvan Institute of Medical Research, Australia, [4]University of California, USA*
15:30 – 15:45	**O55 Antioxidant defense systems in the human parasite *Giardia intestinalis*** D. Mastronicola*[1], F. Testa[2], E. Forte[2], M. Falabella[2], P. Sarti[1,2], A. Giuffrè[1], *[1]CNR Institute of Molecular Biology and Pathology, Italy, [2]Sapienza University of Rome, Italy*	**O56 Decreased expression and increased carbonylation of Haptoglobin in plasma from MCI and AD subjects: role of extracellular chaperones in Alzheimer disease** A. Cocciolo[1], P. Mecocci[2], D.A. Butterfield[3], M. Perluigi*[1], *[1]Sapienza University of Rome, Italy, [2]University of Perugia, Italy, [3]University of Kentucky, USA*	**O57 Mechanical stretch-mediated HO-1 upregulation in human mesangial cells: a role for Nrf2 in redox regulation?** L. Gnudi*, A. Hayward, S. Duggan, K. Price, J. Pan, C. Dessapt, R.C.M. Siow, G.E. Mann, *King's College London, UK*
15:45 – 16:00	**O58 Pepsin is nitrated in the stomach acquiring anti-ulcerogenic activity: a novel nitrating pathway involving dietary nitrite, gut microbiota and gastric proteins** B.S. Rocha*[1], B. Gago[1], R.M. Barbosa[1], J.O. Lundberg[2], R. Radi[3], J. Laranjinha[1], *[1]University of Coimbra, Portugal, [2]Karolinska Institute, Sweden, [3]Universidad de la Republica, Uruguay*	**O59 Fluorescence Detection Method for Lipid-derived Radical** K. Yamada*, F. Mito, Y. Matsuoka, T. Yamasaki, K. Kitagawa, M. Yamato, *Kyushu University, Japan*	**060 Diabetes can diminish benefits of free radical scavenging potential of polyphenols in blood** J.B. Xiao*[1], Y.X. Xie[2], H. Cao[2], X.Q. Chen[2], *[1]Shanghai Normal University, China, [2]Central South University, China*
16:00 – 16:15	**O61 A carbon monoxide-sensitive hydrogen sulfide cascade mediates acute hypoxic regulation of the cerebral microcirculation and metabolism** M. Kajimura*[1,2], T. Morikawa[1], Y. Yukutake[1], M. Suematsu[1,2], *[1]Keio University, Japan, [2]JST, Japan*	**O62 Capturing and quantifying reversibly oxidised cysteines in the myocardium by thiol-disulfide exchange** J. Paulech*, N. Solis, K.A. Liddy, M. Puckeridge, M.Y. White, S.J. Cordwell, *The University of Sydney, Australia*	**O63 A novel role of myeloperoxidase in the induction of endoplasmic reticulum (ER) stress** A. Forsman Quigley[1], F.A. Summers[1], T.J. Barrett[1,2], C.A. Bursill[1,2], C.L. Hawkins*[1,2], *[1]Heart Research Institute, Australia, [2]University of Sydney, Australia*
16:15 – 16:30	**O64 Biliverdin Reductase-A: a novel drug target for atorvastatin in a dog preclinical model of Alzheimer disease** E. Barone*[1,2], E. Head[2], D.A. Butterfield[2], *[1]Swiss Federal Institute of Technology, Switzerland, [2]University of Kentucky, USA*	**O65 Measurement of serum autoantibodies against oxidatively modified autoantigens in human autoimmune diseases** P.G. Winyard*[1], A. Nissim[2], B. Ryan[3], M. Whiteman[1], P. Eggleton[1], *[1]University of Exeter, UK, [2]Queen Mary University of London, UK, [3]University of Oxford, UK*	**O66 Myeloperoxidase levels and cellular stress response after explosive-type of moderate resistance training in the elderly** R.M. Beltran Valls[1], I. Dimauro[1], A. Brunelli[1], P. Caserotti[2], A. Parisi[1], D. Caporossi*[1], *[1]University of Rome "Foro Italico", Italy, [2]University of Southern Denmark, Denmark*
16:30 – 16:45	**O67 Dynamic and complex redox-dependent modifications of DJ-1 in cardiac cells and tissue during oxidative stress** M. Fernandez-Caggiano*[1], E. Schroder[2], P. Eaton[2], *[1]INIBIC. CHU A Coruña, Spain, [2]King's College London, [2]Cardiovascular Division. St Thomas' Hospital, UK*	**O68 Effect of annatto-tocotrienols supplementation on the Development of Mammary Tumors in HER-2/neu Transgenic Mice** E. Pierpaoli, V. Viola, A. Barucca, F. Orlando, F. Galli, M. Provinciali, S. Legnaioli*, *University of Perugia, Italy*	**O69 Increased organ levels of angiotensin II in ren2 rats leads to the formation of reactive oxygen species and DNA damage** G. Fazeli*, H. Stopper, S. Weissenberger, C. Makiol, A. Heidland, N. Schupp, *University of Würzburg, Germany*
16:45 – 17:00	**O70 Nitric oxide dynamics and dependent neurovascular coupling in a triple-transgenic mouse model of Alzheimer disease** C.F. Lourenço*[1], R.M. Barbosa[1,2], E. Cadenas[3], R. Radi[4], J. Laranjinha[1,2], *[1]Center for Neuroscience and Cell Biology, Portugal, [2]University of Coimbra, Portugal, [3]University of Southern California, Los Angeles, USA, [4]Universidad de la Republica, Uruguay*	**071 Soluble mediators from activated leukocytes cause oxidative DNA damage in adjacent cells** N. Schupp*[1], Z. Schmidt[1], N. Queisser[1], S. Sela[2], *[1]University of Würzburg, Germany, [2]Western Galilee Hospital, Israel*	**072 Dietary quercetin improves endothelial function and protects against atherosclerosis in ApoE knockout mice fed a high-fat diet** Y. Shen[1,3], N.C. Ward[1], J.M. Hodgson[1], Y. Wang[2], R. Stocker[2], K.D. Croft*[1], *[1]University of Western Australia, Australia, [2]University of Sydney, Australia, [3]Nanjing University, Australia*
17:00 – 18:30	**Drinks with Poster Presentations (Queens Tower Room & Huxley Building 344)**		**SFRRI AGM Meeting (17:00 – 18:00) Great Hall**
19:30 – 23:00	**Gala Dinner(Optional event – entry by ticket found in delegate badge)** The Grand Connaught Rooms, 61-65 Great Queen Street, London, WC2B 5DA *Delegates should make their own travel arrangements – nearest Underground station is Covent Garden / Holborn*		

Sunday, 9 September 2012			
07:30	Conference Registration Open		
08:15 – 08:25	**Introduction to Catherine Pasquier Awards (Great Hall)** Prof Nesrin Kartal-Ozer (President Elect SFRR Europe) Marmara University, Turkey Great Hall		
08:25 – 08:50	**Catherine Pasquier Award Winners Lecture (Great Hall)** **Role of reactive oxygen species in degeneration in ageing muscle** Dr Aphrodite Vasilaki, University of Liverpool, UK		
08:50 – 09:15	**Catherine Pasquier Award Winners Lecture (Great Hall)** **Free Radical biology for medicine: learning from liver disease** Dr Gaetano Serviddio, Università di Foggia, Italy		
09:25 – 11:25	**Symposium 13 - Free Radicals and Exercise: Where Next After Antioxidants**	**Symposium 14 - Inflammation and Neurodegeneration. Sponsored by:** 	
	Room: Great Hall	**Room: Huxley 308 and via video link to Huxley 311**	
09:25 – 09:30	**Introduction** Chairs - Prof. Malcolm Jackson, University of Liverpool, UK and Prof. Michael Reid, University of Kentucky, USA	**Introduction** Chairs – Prof. Catarina Oliveira, University of Coimbra, Portugal and Prof. Guy Brown, University of Cambridge, UK	
09:30 – 09:55	**The roles of reactive oxygen and nitrogen species in muscle fatigue -** Hakan Westerblad, Karolinska Institut, Sweden	**Prognostic biomarkers of oxidative stress in Alzheimer's Disease -** Allan Butterfield, University of Kentucky, USA	
09:55 – 10:20	**Adaptations in mitochondria to exercsie training; the role of free radicals -** Jose Viña, Universidad de Valencia, Spain	**Neurovascular and metabolic coupling: diffusible bridging supported by nitric oxide -** João Laranjinha, University of Coimbra, Portugal	
10:20 – 10:45	**Inflamation and muscle dysfunction: Role of redox signaling -** Michael Reid, University of Kentucky, Lexingtonn, USA	**S-nitrosothiols in neurodegeneration -** Stuart Lipton, Sanford-Burnham Medical Research Institute, USA	
10:45 – 11:10	**Nitrate/nitrite supplementation, mitochondrial efficiency and exercise capacity -** Eddie Weitzberg, Karolinska Institut, Sweden	**Reactive oxygen and nitrogen species in inflammatory neurodegeneration –** Guy C. Brown, University of Cambridge, UK	
11:10 – 11:25	Closing comments for Symposium 13	Closing comments for Symposium 14	
11:25 – 11:55	Refreshment Break – Queens Tower Room & Huxley 344		
11:55 – 13:55	**Symposium 15 - Autophagy and Oxidative Stress in Health and Disease**	**Symposium 16 - Glutathione: A Role in Redox Signaling, Ageing and Disease– sponsored by:** 	
	Room: Great Hall	**Room: Huxley 308 and via video link to Huxley 311**	
11:55 – 12:00	**Introduction** Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US	**Introduction** Chairs – Prof. Federico Pallardo, Universidad de Valencia, Spain and Prof. Brian Day, Denver, USA	
12:00 – 12:25	**Autophagic response to bioenergetic and oxidative stress -** Jianhua Zhang, University of Alabama, USA	12:00 – 12:20	**Epigenetics and role of glutathione in redox regulation** Federico V. Pallardó, Universidad de Valencia, Spain
12:25 – 12:50	**Autophagy - a guardian against neurodegeneration -** David Rubinsztein, University of Cambridge, UK	12:20 – 12:40	**Glutathione in ageing** Brian Day, University of Colorado, USA
12:50 – 13:15	**Implications of autophagy for the smooth muscle cell -** Bradford Hill, University of Louisville, USA	12:40 – 13:00	**Nuclear glutathione and the cell cycle in plants** Christien Foyer, University of Leeds, UK
13:15 – 13:40	**Roles of Sequestosome1/p62 in prevention of obesity, hypertension and atherosclerosis -** Tetsuro Ishii, University of Tsukuba, Japan	13:00 – 13:20	**Glutathione in plant biotic interactions** Alain Puppo, Université Nice, France
		13:20 – 13:40	**Compensatory gene expression in gluthathione deficient mice: implications for ageing and disease susceptibility** Terrance J. Kavanagh, University of Washington, USA
13:40 – 13:55	Closing comments for Symposium 15	Closing comments for Symposium 16	