

## Society for Free Radical Research International

16TH BIENNIAL MEETING ● Imperial College London ● 6-9 September 2012 ● United Kingdom

Discuss the impact of the latest research, concepts and applications of free radicals and antioxidants.

## SATELLITE MEETINGS WEDNESDAY, 5 SEPTEMBER 2012

	WEDNESDAY, 5 S	SEPTEIVIBER 20	012
	HNE Club Satellite Meeting stration: 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		d Epigenetics of Fraility and Ageing Satellite Meeting 10:30 – 13:00 stration: Sherfield Building Concourse Level 1 Meeting Room: Huxley 311
10:00 – 10:30	Refreshment Break – Huxley 344	10:00 – 10:30	Registration for Genetics and Epigenetics of Fraility and Ageing Satellite Meeting
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	10:30 – 10:45	Introduction Chairs – Prof. Leocadio Rodríguez Mañas, Hospital Universitario de Getafe, Madrid, Spain and Prof. Howard Bergman, McGill University, Quebec, Canada
	Keynote Lecture Two - Modification of Proteins by Lipid Peroxidation Products - Dennis Petersen, University of Colorado, USA	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
11:00 – 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 – 11:45	Searching for a Relevant Clinical and Research Concept - Howard Bergman, McGill University, Canada
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	11:45 – 12:15	The biological basis of frailty and late-life vulnerability – Jeremy D Walston, John Hopkins University School of Medicine, 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	12:15 – 12:45	A transgenic approach to understanding age-related loss of muscle mass and function - Anne McArdle, University of Liverpool
11:45 - 13:15	HNE Delegates Lunch and Poster Session – Huxley 344	12:45 – 13:00	Closing Remarks – Lunch is <b>not</b> provided

13:15 – 13:45 13:45 – 14:00	Session Three - Lipid Peroxida Messengers in Signal Transdu Chairs - Prof. Koji Uchida, Nagand Prof. Neven Zarkovic, Rud Croatia Keynote Lecture Three - Lipid and Redox Signaling - Henry F Southern California, USA HNE 7 - Nrf2/ARE signaling pa factor in mediating cell death neoplastic Apc-mutated color hydroxynonenal (HNE) exposs INRA Toulouse, France	ction  oya University, Ja jer Boskovic Insti  Peroxidation Pro forman, Universit  othway could be resistance in pro nocytes upon 4- ure – Sabine Dall	apan itute,  oducts y of  a key e- eau,	12:00 – 14:00	Room: SALO	21	g (Invitation only)
14:00 – 14:15	HNE 8 -Modification of phosphatidylethanolamines mediates pro-inflammatory effects of lipid aldehydes – S.S. Davies, Vanderbilt University, USA		14:3 Sherfield	CTION Satellite N 0 – 17:30 Building Concou Huxley 311		Publish Resear great papers in 1	te Meeting - How to ch: Easy tips for writing high impact journals 14:30 - 16:30 hom: RSMG01
14:15 – 14:45	Refreshment Break	14:00 – 14:30	_	tion for EU COST Satellite Meeting		14:00 – 14:30	Registration for Writer's Satellite Meeting
14:45 – 15:15 15:15 – 15:30	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 14:45 – 15:15	Protein Chairs – Universi Prof. Cal Universi		odification ne, ny and nnical	Newman (Elser Hammelsoe (W Getting publish journal is a tou researchers. Th	kshop is led by Anthony vier) and Pernille Viley- Blackwell) ing in a high impact gh job for junior his workshop will give you his ght into the publication
15.15 – 15.30	oxidized lipids and amyloid- β in amplifying neuronal damage in Alzheimer disease – Paola Gamba, University of Torino, Italy	14.45 – 15.15	and con tyrosine	ar aspects on the sequences of pro nitration - Rafae dad de la Repúbli	<b>tein</b> I Radi,	process, giving to write research the peer review academic publi Aimed at resea more about ge	you valuable tips in how ch papers, understanding v process and how
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	glycopro aging an the som	l oligosaccharides oteins are altered od are possible re atotropic axis- Va University of Gen	during gulators of alerie Van		
16:00 – 17:00	HNE Delegates Drinks, Poster Presentations and Awards	15:45 – 16:15	<b>challeng</b> Rogowsl	<b>oxidation and pro</b> g <b>es and pitfalls -</b> A ka-Wrzesinska, Ur n Denmark	delina		
		16:15 – 16:45	Protein detectio Universi Portugal	modification and n - Pedro Doming dade de Aveiro Sa	gues, antiago,		
		16:45 – 17:15	on prote Baron, T Denmar		roline		
		17:15 – 17:30	Closing	Remarks			

		SFRRI MEETING	G	
	THURSDAY,	6 – SUNDAY, 9 SE		
Thursday, 6 Sep				
07:00 08:30 – 08:55	SFRRI Conference Registration Opens Welcome Address (Great Hall)			
00.55 00.00	Prof. Giovanni Mann, Secretary General SFR		ting Chairman, King's (	College London, UK
08:55 – 09:00	Introduction to SFRRI Trevor Slater Lecture Prof. Malcolm Jackson, President, SFRR Intel		of Liverpool, UK	
09:00-09:30	SFRRI Trevor Slater Lecture (Great Hall)	·		
	Oxidants and Antioxidants in Biology: A His Prof. Lester Packer, University of Southern C			
09:40 - 12:05	Symposium 1 - Translating the Powerhouse			ochemicals (Micronutrients) in Redox
	Redox Signaling – sponsored by:		Signaling-sponsore	d by:
	Biochemical Society  Advancing Molecular Bioscience		5	
	Room: Great Hall		Rooms: Huxley 308	and via video link to Huxley 311
09:40 - 09:45	Introduction		Introduction	
	Chairs – Dr. Michael Murphy, MRC Mitochol UK and Prof. Victor Darley-Usmar, University			Fraga, University of Buenos Aires, Helmut Sies, Düsseldorf, Germany
09:45 - 10:10	Beyond Retrograde and Anterograde Signa	ling: Mitochondrial	Redox modulation of	f pro-inflammatory and anti-
	<ul> <li>Nuclear Interactions as a means for Evolu</li> <li>and Contemporary Disease - Scott Ballinger</li> </ul>			ing by chemopreventive phytochemicals – oul National University, Republic of Korea
	Alabama, USA	· 		
10:10 – 10:35	Mitochondrial reactive oxygen species incre activation in Sickle Cell disease - Sruti Shiva	-		Role of (-)-epicatechin and related signaling - Patricia Oteiza, University of
	Pittsburgh, USA	, oniversity of	California, Davis, US	
10:35 – 11:05 11:05 – 11:30	Refreshment Break Mitochondrial energy metabolism in brain	aging and	Nitric oxide regulati	on by polyphenols: from calcium
11.05 – 11.50	neurodegeneration - Enrique Cadenas, Univ			etes and heart failure - Franciso Villarreal,
11:30 – 11:55	California, Los Angeles, USA  Neuroprotection by targeting antioxidant [	Triutamyleystoino	UCSD School of Med	licine, USA lavonoids on memory and cognition -
11.50 - 11.55	to mitochondria - Juan P Bolaños, Universid		-	versity of Reading, UK
11.55 12.05	Spain		Clasing comments for	ar Summarium 2
11:55 – 12:05 12:05 – 13:05	Closing comments for Symposium 1  Lunch with Poster Presentations		Closing comments for Symposium 2  SFRR-Europe Committee Meeting (SALC 1)	
	5 Lunch with Poster Presentations Room: Great Hall		Doomer Huylov 200	and via vida a link to Humber 244
42.05 45.00				and via video link to Huxley 311
13:05 – 15:00	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by:	e: Mitochondrial		in Resistance and Redox-Modulated
13:05 – 15:00	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by:	e: Mitochondrial	Symposium 4 - Insul	in Resistance and Redox-Modulated
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13:05 - 13:10 13:10 - 13:35 13:35 - 14:00 14:00 - 14:25 14:25 - 14:50 14:50 - 15:00 15:00 - 15:30 15:30 - 17:30	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by: Seahorse Bioscience  Introduction Chairs – Sruti Shiva, University of Pittsburgh Juan P Bolaños, Universidad de Salamanca, Shitochondrially targeted antioxidants: a the Michael Murphy, MRC Mitochondrial Biologo Mitochondrial therapeutics in alcohol depee – Victor Darley-Usmar, University of Alabaman Mitochondrial targets for cardioprotective Paul S. Brookes, University of Rochester Memoral Strategy for systematic autoimmunity – Gar University of Michigan, USA Closing comments for Symposium 3 Refreshment Break Signal Transduction Oral Presentations Co-Chairs: Nesrin Kartal-Ozer (Turkey) Helen Griffiths (UK)	, USA and Prof. Spain Derapeutic strategy Derapeutic strategy Description of the strat	Symposium 4 - Insul Signaling - sponsore ClaGEN Introduction Chairs - Prof. Giusep Prof. Juan Sastre, Ur Lipokines and oxyste hormones linking ac Giuseppe Murdolo, Umportance of insuli regeneration - Mark The role of oxidative damage induced by University, Japan  Closing comments for Classification and Plants Bartosz (Poland)  e as a novel type of cute inflammation	in Resistance and Redox-Modulated ed by:  ope Poli, University of Torino, Italy and diversity of Valencia, Spain erols: Novel adipose-derived lipid dipose dysfunction and insulin resistance — University of Perugia, Italy in resistance to vascular repair and its Kearney, University of Leeds, UK  e stress in insulin signaling and muscle exercise - Wataru Aoi, Kyoto Prefectural  or Symposium 4  Antioxidants, Nutrition and Novel Therapies Oral Presentations Co-Chairs: Leopold Flohe (Germany) Roland Stocker (Australia)  Room: Huxley 308  O3 Acetylsalicylic acid induced oxidative modification of ZO-1 reduces the
13:05 - 13:10 13:10 - 13:35 13:35 - 14:00 14:00 - 14:25 14:25 - 14:50 14:50 - 15:00 15:00 - 15:30 15:30 - 17:30	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by: Seahorse Bioscience  Introduction Chairs – Sruti Shiva, University of Pittsburgh Juan P Bolaños, Universidad de Salamanca, Signal Transduction Mitochondrial therapeutics in alcohol depee - Victor Darley-Usmar, University of Alabama Mitochondrial targets for cardioprotective Paul S. Brookes, University of Rochester Mediology of Michigan, USA Closing comments for Symposium 3 Refreshment Break Signal Transduction Oral Presentations Co-Chairs: Nesrin Kartal-Ozer (Turkey) Helen Griffiths (UK)  Room: Great Hall O1 Oxidative inactivation of the thioredoxin peroxidase activity of a peroxiredoxin is important for thioredoxin-mediated repair of oxidised	, USA and Prof. Spain Berapeutic strategy By Unit, UK Endent hepatoxicity a, USA  therapeutics dical Center, USA  E as a therapeutic by S. Glick,  Oxidative Stress in A Oral Presentations Co-Chairs: Grezgorz Richard Siow (UK) Room: Clore Theatre O2 Disulfide stress a oxidative stress in a M.L. Moreno*¹, J. Es A. Izquierdo-Álvarez	Symposium 4 - Insul Signaling - sponsore QIAGEN Introduction Chairs - Prof. Giusep Prof. Juan Sastre, Ur Lipokines and oxyst hormones linking ac Giuseppe Murdolo, Importance of insuli regeneration - Mark The role of oxidative damage induced by University, Japan  Closing comments for Closing comments for Closing comments for Cute inflammation cobar <sup>1</sup> , A. Gil <sup>1</sup> , A. Martínez-Ruíz <sup>2</sup> , A. Martínez-Ruíz <sup>2</sup> , A. Martínez-Ruíz <sup>2</sup> ,	in Resistance and Redox-Modulated ed by:  ope Poli, University of Torino, Italy and diversity of Valencia, Spain erols: Novel adipose-derived lipid lipose dysfunction and insulin resistance — University of Perugia, Italy in resistance to vascular repair and continuous Kearney, University of Leeds, UK  estress in insulin signaling and muscle exercise - Wataru Aoi, Kyoto Prefectural  or Symposium 4  Antioxidants, Nutrition and Novel Therapies Oral Presentations Co-Chairs: Leopold Flohe (Germany) Roland Stocker (Australia)  Room: Huxley 308  O3 Acetylsalicylic acid induced oxidative modification of ZO-1 reduces the tightness of small intestinal epithelial cell
13:05 - 13:10 13:10 - 13:35 13:35 - 14:00 14:00 - 14:25 14:25 - 14:50 14:50 - 15:00 15:00 - 15:30 15:30 - 17:30	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by: Seahorse Bioscience  Introduction Chairs – Sruti Shiva, University of Pittsburgh Juan P Bolaños, Universidad de Salamanca, Shitochondrially targeted antioxidants: a the Michael Murphy, MRC Mitochondrial Biological Mitochondrial therapeutics in alcohol dependent of Victor Darley-Usmar, University of Alabama Mitochondrial targets for cardioprotective Paul S. Brookes, University of Rochester Medical Modulating the mitochondrial FOF1-ATPASI strategy for systematic autoimmunity – Gard University of Michigan, USA Closing comments for Symposium 3 Refreshment Break Signal Transduction Oral Presentations Co-Chairs: Nesrin Kartal-Ozer (Turkey) Helen Griffiths (UK)  Room: Great Hall O1 Oxidative inactivation of the thioredoxin peroxidase activity of a peroxiredoxin is important for thioredoxin-mediated repair of oxidised proteins and cell survival	, USA and Prof. Spain Berapeutic strategy By Unit, UK Endent hepatoxicity a, USA  therapeutics dical Center, USA  E as a therapeutic by S. Glick,  Oxidative Stress in A Oral Presentations Co-Chairs: Grezgorz Richard Siow (UK) Room: Clore Theatre O2 Disulfide stress a oxidative stress in a M.L. Moreno*¹, J. Es A. Izquierdo-Álvarez J. Sastre¹, ¹Universit	Symposium 4 - Insul Signaling - sponsore QIAGEN Introduction Chairs - Prof. Giusep Prof. Juan Sastre, Ur Lipokines and oxyst hormones linking ac Giuseppe Murdolo, Importance of insuli regeneration - Mark The role of oxidative damage induced by University, Japan  Closing comments for Cute inflammation cobar <sup>1</sup> , A. Gil <sup>1</sup> , A. Martínez-Ruíz <sup>2</sup> , y of Valencia, Spain,	in Resistance and Redox-Modulated ed by:  ope Poli, University of Torino, Italy and hiversity of Valencia, Spain erols: Novel adipose-derived lipid lipose dysfunction and insulin resistance — University of Perugia, Italy in resistance to vascular repair and k Kearney, University of Leeds, UK  e stress in insulin signaling and muscle exercise - Wataru Aoi, Kyoto Prefectural  or Symposium 4  Antioxidants, Nutrition and Novel Therapies Oral Presentations Co-Chairs: Leopold Flohe (Germany) Roland Stocker (Australia)  Room: Huxley 308  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.
13:05 - 13:10 13:10 - 13:35 13:35 - 14:00 14:00 - 14:25 14:25 - 14:50 14:50 - 15:00 15:00 - 15:30 15:30 - 17:30	Symposium 3 - Translating the Powerhouse Therapeutics – sponsored by: Seahorse Bioscience  Introduction Chairs – Sruti Shiva, University of Pittsburgh Juan P Bolaños, Universidad de Salamanca, Signal Transduction Mitochondrial therapeutics in alcohol depee - Victor Darley-Usmar, University of Alabama Mitochondrial targets for cardioprotective Paul S. Brookes, University of Rochester Mediology of Michigan, USA Closing comments for Symposium 3 Refreshment Break Signal Transduction Oral Presentations Co-Chairs: Nesrin Kartal-Ozer (Turkey) Helen Griffiths (UK)  Room: Great Hall O1 Oxidative inactivation of the thioredoxin peroxidase activity of a peroxiredoxin is important for thioredoxin-mediated repair of oxidised	, USA and Prof. Spain Berapeutic strategy By Unit, UK Endent hepatoxicity a, USA  therapeutics dical Center, USA  E as a therapeutic by S. Glick,  Oxidative Stress in A Oral Presentations Co-Chairs: Grezgorz Richard Siow (UK) Room: Clore Theatre O2 Disulfide stress a oxidative stress in a M.L. Moreno*¹, J. Es A. Izquierdo-Álvarez	Symposium 4 - Insul Signaling - sponsore QIAGEN Introduction Chairs - Prof. Giusep Prof. Juan Sastre, Ur Lipokines and oxyst hormones linking ac Giuseppe Murdolo, Importance of insuli regeneration - Mark The role of oxidative damage induced by University, Japan  Closing comments for Cute inflammation cobar <sup>1</sup> , A. Gil <sup>1</sup> , A. Martínez-Ruíz <sup>2</sup> , y of Valencia, Spain,	in Resistance and Redox-Modulated ed by:  ope Poli, University of Torino, Italy and diversity of Valencia, Spain erols: Novel adipose-derived lipid lipose dysfunction and insulin resistance — University of Perugia, Italy in resistance to vascular repair and continuous Kearney, University of Leeds, UK  estress in insulin signaling and muscle exercise - Wataru Aoi, Kyoto Prefectural  or Symposium 4  Antioxidants, Nutrition and Novel Therapies Oral Presentations Co-Chairs: Leopold Flohe (Germany) Roland Stocker (Australia)  Room: Huxley 308  O3 Acetylsalicylic acid induced oxidative modification of ZO-1 reduces the tightness of small intestinal epithelial cell

15:45 – 16:00	O4 Hyperoxia regulates the degradation of the circadian protein Rev-Erba: implications for cytoprotection M.D. Hinson <sup>2</sup> , C. Biswas <sup>1</sup> , P. La <sup>2</sup> , G. Yang <sup>2</sup> , P.A. Dennery* <sup>1,2</sup> , <sup>1</sup> University of Pennsylvania, USA, <sup>2</sup> Children's Hospital of Philadelphia, USA	O5 Monitoring dynamic compartment- specific changes of glutathione redox state using redox-sensitive YFP sensors A. Banach-Latapy* <sup>1,2</sup> , M. Dardalhon <sup>1,2</sup> , T. He <sup>1,2</sup> , L. Vernis <sup>1,2</sup> , R. Chanet <sup>1,2</sup> , M.E. Huang <sup>1,2</sup> , <sup>1</sup> CNRS, France, <sup>2</sup> 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* <sup>1</sup> , L.W. Rosenlöf <sup>1</sup> ,  H. Kotarsky <sup>1</sup> , M. Mörgelin <sup>1</sup> , V. Fellman <sup>1</sup>
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* <sup>1</sup> , E.W. Warabi <sup>1</sup> , M.Y. Yamamoto <sup>2</sup> , K.T. Tanaka <sup>1</sup> , J.S. Shoda <sup>1</sup> , <sup>1</sup> University of Tsukuba, Japan, <sup>2</sup> 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* <sup>1</sup> , A. Sunkaria <sup>1</sup> , D. Verma <sup>1</sup> , K.D. Gill <sup>1</sup> , <sup>1</sup> Post Graduate Institute of Medical Education and Research, India, <sup>2</sup> 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* <sup>1</sup> , J.A. Viña <sup>1</sup> , K.M. Abdelaziz <sup>1</sup> , V. Bonet-Costa <sup>1</sup> , R. López Grueso <sup>1</sup> , G. Olaso <sup>1</sup> , M. Inglés <sup>1</sup> , M. Dromant <sup>1</sup> , R. Edo <sup>1</sup> , C. Borras <sup>1</sup> , J. Gambini <sup>1</sup> , R.C. Siow <sup>2</sup> , S.J. Chapple <sup>2</sup> , G.E. Mann <sup>2</sup> , M. Peñarrocha <sup>1</sup> , J. Viña <sup>1</sup> , <sup>1</sup> Universidad de Valencia, Spain, <sup>2</sup> King's College London, UK	O15 (-)-Epicatechin increases systemic Nrf2-dependent response and vascular function in mice M.M. Cortese-Krott* <sup>1</sup> , T. Krenz <sup>1</sup> , A. Rodriguez-Mateos <sup>2</sup> , F. Oberle <sup>1</sup> , S. Sivarajah <sup>1</sup> , M. Kelm <sup>1</sup> , <sup>1</sup> Heinrich Heine University, Germany, <sup>2</sup> 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* <sup>1,2</sup> , J.J. Kloek <sup>1</sup> , X. Marechal <sup>3</sup> , J. Roelofsen <sup>1</sup> , R.H. Houtkooper <sup>1</sup> , A.B. van Kuilenburg <sup>1</sup> , <sup>1</sup> University of Amsterdam, The Netherlands, <sup>2</sup> University of Utrecht, The Netherlands, <sup>3</sup> 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)
17:30 – 19:00	Drinks with Poster Presentations (Queens	Tower Room & Huxley Building 344)	(SALC 1)
19:00 – 20:00	Welcome Reception (Queens Tower Room		
<u> </u>			

07.20	Conformed Bosistantian Const			
07:30 08:30 – 10:30	Conference Registration Open	hil Evtragallular	Symposium C. D.	tivo Ovugon Chasias Pavisitasi Burnati
08:30 - 10:30	Symposium 5 - Caught in a Trap: Neutrop Traps, Reactive Oxygen Species and Inflan			tive Oxygen Species Revisited: Promoting se Reactive Oxygen Species
	Room: Huxley 308 and via video link to Hu		Rooms: Great Hall	Se Redelive Oxygen Species
08:30 - 08:35	Introduction	inicy 511	Introduction	
	Chairs - Dr. Paul Cooper, University of Birm	ningham, UK		el Ristow, University of Jena, Germany and
	Dr. Shida Yousefi, University of Bern, Switz	-	Prof. Toren Finkel, N	
08:35 - 09:00	Neutrophil extracellular traps: a novel RO	S-dependent innate	Antioxidant suppler	nents in primary or secondary prevention
	immune defence - Arturo Zychlinsky, Max	Planck Institute for	increase mortality in	h humans - Christian Gluud, University of
	Infection Biology, Germany		Copenhagen, Denma	
09:00 – 09:25	The mitochondrial angle: viable granulocy	-	II = = = = = = = = = = = = = = = = = =	re damage theory: Does hyperfunction
	<b>production</b> - Shida Yousefi, University of B	ern, Switzerland		legans? - David Gems, University College
09:25 – 09:50	A Novel Rapid NET Release Mechanism w	ithout Noutrophil	London, UK	linear signaling responses to metabolic
09.23 – 09.30	<b>Death</b> - Paul Kubes, University of Calgary, (			chael Ristow, University of Jena, Germany
09:50 - 10:15	Neutrophil extracellular traps in the patho			m and stem cell function - Toren Finkel,
	autoimmune disease - Dagmar Scheel-Toe	-	National Institutes o	,
	Birmingham, UK			
10:15 - 10:30	Closing comments for Symposium 5		Closing comments for	or Symposium 6
10:30 - 11:00	Refreshment Break - Queens Tower Room		4	
11:00 - 13:00	Symposium 7 – Peroxiredoxins, Thioredox	ins and Glutathione		ox Regulation of RNA and microRNA in
	Peroxidases		Health and Disease.	
			EXIQ	
			Seek Find Verify	
	Room: Great Hall		Rooms: Huxley 308	and via video link to Huxley 311
11:00 - 11:05	Introduction		Introduction	•
	Chairs - Prof. Christine Winterbourn, Unive	ersity of Otago, New		Siow, King's College London, UK and Prof.
	Zealand and Prof. Junji Yodoi, Kyoto Unive			versity of Copenhagen, Denmark
11:05 – 11:30	The still mysterious speed of thiol-depend	•		sease - Henrik Poulsen, University of
	Leopold Flohe, Otto-von-Guericke-Univers	ität Magdeburg,	Copenhagen, Denma	ark
11 20 11 55	Germany		24' 22'4	
11:30 – 11:55	Regulation of steroidogenesis via H2O2-de		_	ng oxidative stress and inflammation in
	inactivation of peroxiredoxin III in mitoch Rhee, Ewha Womans University, Republic of		Leuven, Belgium	clerosis - Paul Holvoet, University of
11:55 – 12:20	Thiol-redox compartmentation in the euk		_	of Wound Angiogenesis – Sashwati Roy,
11.55 12.20	Toledano, Gif-sur-Vette, France	ur your cen wherei	Ohio State Universit	
12:20 – 12:45	Thioredoxin binding protein-2 (TBP-2)/ Tx	nip/ VDUP with		As: cellular origin and biomarker potentia
	multifunctional biostress signal regulatory		_	's College London, UK
	Masutani, Kyoto University, Japan	•	,,,	
12:45 – 13:00	Closing comments for Symposium 7		Closing comments for	or Symposium 8
13:00 – 14:00	Lunch with Poster Presentations - Queens	Tower Room &	SFRRI Committee M	eeting (Salc 1)
	Huxley Building 344			
14:00 – 14:50	SFRR Europe Lecture (Introduced by Giova		ge London, UK)	
	Proteasome and Lon: A Saga of Sex, Drugs Prof. Kelvin J. A. Davies, University of South			
	Room: Great Hall	iletti California, USA		
15:00 – 17:00	Inflammation and Immunity Oral	Cancer and Ageing (	Oral Presentations	Cardiovascular, Metabolic &
13.00 17.00	Presentations	Co-Chairs: Daniela C		Environmental Disorders I Oral
	Co-Chairs: Yuji Naito (Japan)	Holly van Remmen (		Presentations
	Phyllis Dennery (USA)			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	O26 The effect of re		O27 Heme oxygenase 1 induction in the
	autoimmune hemolytic anemia;	microenvironment		peri-infarct region after cerebral
	supporting evidences from genetically modified mice	of normal liver cells	telomerase activity	ischemia-reperfusion injury in rats is associated with reduced blood-brain
	T. Konno, N. Ohtsuki, N. Kibe,	D.Y. Shi* <sup>1,2</sup> , Y.L. Sui <sup>1</sup>		barrier breakdown
	S. Tsunoda, Y. Iuchi, J. Fujii*, <i>Yamagata</i>	F.Z. Xie <sup>2</sup> , S.L. LIU <sup>2</sup> , <sup>1</sup> .		A. Alfieri <sup>1</sup> , S. Srivastava <sup>1</sup> , R.C.M. Siow <sup>1</sup> ,
	University, Japan	College of Fudan Un		M.R. Duchen <sup>2</sup> , P.A. Fraser <sup>1</sup> , G.E. Mann <sup>1</sup>
	<sup>2</sup> Fudan University, Cl		hina	<sup>1</sup> Kings College London, UK, <sup>2</sup> University
				College London, UK
15:15 – 15:30		O29 Tumor microen		O30 Kriti1 and reactive oxygen species:
		oxidative stress: inv		a novel molecular pathway involved in
		metabolic reprogram	_	cerebral cavernous malformations
		resistance of prosta M.L. Taddei, T. Fiaso		L. Goitre, M. Villoria-Recio, V. Cutano,
		V. Farini, S. Stinziani		R. Canzoneri, E. Trapani, A. Morina, F.
		University of Florence		Retta*, University of Turin, Italy
				O22 A diship I / dispulsing we do not specified in
15:30 - 15:45	O31 ROS as signalling molecule in TNF-α	O32 Asbestos surfa	ce provides a niche	O33 A dithiol/disulfide redox switch in

	macrophages A. Fragoulis*, A. Greiber, C. Rosen, T. Pufe, C.J. Wruck, Department of Anatomy and Cell Biology, Germany	of free radicals in carcinogenesis H. Nagai, Y. Okazaki, L. Jiang, S. Akatsuka, Y. Yamashita, S. Toyokuni*, Nagoya University, Japan	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* <sup>1</sup> , S.A. Jewell <sup>2</sup> , P.G. Petrov <sup>2</sup> , C.P. Winlove <sup>2</sup> , P. Eggleton <sup>1</sup> , P.G. Winyard <sup>1</sup> , <sup>1</sup> Peninsula Medical School, Exeter University, UK, <sup>2</sup> 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* <sup>1</sup> , E. Roos-Engstrand <sup>2</sup> , A. Blomberg <sup>2</sup> , A. Behndig <sup>2</sup> , I.S. Mudway <sup>1</sup> , <sup>1</sup> King's College London, UK, <sup>2</sup> Umeå University, Sweden	O36 The role of NOX isoforms in ischemia/reperfusion injury of different organs K. Wingler <sup>1</sup> , K. Radermacher <sup>1</sup> , P.W.M. Kleikers* <sup>1</sup> , S. Altenhoefer <sup>1</sup> , N. Weissmann <sup>2</sup> , H.H.H.S. Schmidt <sup>1</sup> , <sup>1</sup> Maastricht University, The Netherlands, <sup>2</sup> University Giessen Lung Centre, The Netherlands
16:00 – 16:15	O37 Sulforaphane decreases neutrophil hyperactivity by reducing intracellular oxidative stress H.K.I. Dias <sup>1</sup> , M. Milward <sup>2</sup> , M. Grant <sup>2</sup> , I.L.C. Chapple <sup>2</sup> , H.R. Griffiths* <sup>1</sup> , <sup>1</sup> Aston University, UK, <sup>2</sup> The University of Birmingham, UK	O38 Eccentric exercise as an oxidant stimulus for studying redox homeostasis: an aging study M.G. Nikolaidis* <sup>1</sup> , A. Kyparos <sup>1</sup> , C. Spanou <sup>1</sup> , V. Paschalis <sup>2</sup> , A.A. Theodorou <sup>3</sup> , G.V. Grivas <sup>1</sup> , <sup>1</sup> Aristotle University of Thessaloniki, Greece, <sup>2</sup> University of Thessaly, Greece, <sup>3</sup> 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* <sup>1</sup> , K. Newick <sup>1</sup> , J. Stumpff <sup>1</sup> ,  J.A. Melendez <sup>2</sup> , B. Kalyanaraman <sup>3</sup> ,  N. Heintz <sup>1</sup> , <sup>1</sup> University of Vermont, USA, <sup>2</sup> Albany Medical College, USA, <sup>3</sup> 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 <i>Mycobacterium tuberculosis</i> K. Van Laer <sup>1,2</sup> , L. Buts <sup>1</sup> , N. Foloppe <sup>3</sup> , D. Vertommen <sup>4</sup> , N.A.J. Van Nuland <sup>1,2</sup> , J. Messens* <sup>1,2</sup> , <sup>1</sup> VIB-Vrije Universiteit Brussel, Belgium, <sup>2</sup> Brussels Center for Redox Biology, Belgium, <sup>3</sup> Karolinska Institutet, Sweden, <sup>4</sup> de Duve Instituut, Belgium	changes in ROS production and adaptive responses in muscle specific SOD1 knockout mice G.K. Sakellariou*¹, A. Kayani¹, A. Vasilaki¹, A. Scott¹, H. Van Remmen², S. Brooks³, A. McArdle¹, M.J. Jackson¹, ¹University of Liverpool, Liverpool, UK, ²University of Texas Health Center at San Antonio and the Barshop Institute for Longevity and Aging Studies, San Antonio, USA, ³University of Michigan, USA	O45 Epigenetic alterations in skeletal muscle metabolism are associated with weight loss resistance  B. Beauchamp*1, S. Ghosh2, A. Chu1, A. Blais1, K. Rajamanickam3, E. Tsai3, M.E. Patti4, M.E. Harper1, 1University of Ottawa, Canada, North Carolina Central University, USA, 3Ottawa Hospital Research Institute, Canada, 4Harvard 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* <sup>1</sup> , S. Piras <sup>1</sup> , M. Passalacqua <sup>1</sup> , C. Domenicotti <sup>1</sup> , M.A. Pronzato <sup>1</sup> , U.M. Marinari <sup>1</sup> , L. Moretta <sup>2</sup> , N. Traverso <sup>1</sup> , M. Nitti <sup>1</sup> , <sup>1</sup> University of Genoa, Italy, <sup>2</sup> 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 & SF	RR-Europe AGM (17:00 – 18:00) Great Hall
18:30 – 19:30	Huxley Building 344)  IUBMB Jubilee Lecture (Introduced by Jose Nutrient Sensing Pathways and Ageing Prof. Dame Linda Partridge, FRS, University Room: Great Hall	v College London, UK and Max Planck Institut	r, Köln, Germany

Saturday, 8 Sep 07:30				
08:30 – 10:30	Conference Registration Open  Symposium 9 - Selenium, Selenoproteins a Type 2 Diabetes: An Unexpected Link  Sponsored by:			active Nitrogen Species and Reactive ardiac Myocyte Signal Transduction
	Room: Great Hall `		Room: Clore	
08:30 - 08:35	Introduction Chairs – Prof. Regina Brigelius-Flohe, Germ Human Nutrition, Germany and Dr. Holger 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	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 an Xingen Lei, Cornell University, USA	imal studies -	In vivo dissection of	redox-regulated protein kinase activation Eaton, St Thomas' Hospital London, UK
09:25 – 09:50	Interference of selenium with the carbohy Holger Steinbrenner, University of Düsseld	orf, Germany	muscle – Chris Ward	<b>&lt;2-dependent signal transduction in</b> I, University of Maryland, Baltimore, USA
09:50 - 10:15	Endoplasmic reticulum-localized selenopri resistance - Vadim Gladyshev, Brigham & V USA		•	endent regulation of cardiac stress h, King's College London, UK
10:15 – 10:30	Closing comments for Symposium 9		Closing comments for	or Symposium 10
10:30 – 11:00 11:00 – 13:00	Refreshment Break - Queens Tower Room Symposium 11 - Protein Oxidation, Proteo			e conversion of Redox Signals into Highly nals
11:00 – 11:05	Room: Great Hall ` Introduction Chairs – Prof. Kelvin J. A. Davies, University California, Los Angeles, USA and Prof. Mich		_	ang Maret, King's College London, UK and and, 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 Grune, University of Jena, Germany	and ageing - Tilman	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 k and tissular ageing – Bertrand Friguet, Uni 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 the presentation - Deborah Ferrington, Univer 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 Huxley Building 344	Tower Room &	13:00 – 14:00 SFRR Asia Business Meeting Salc 1	
14:00 – 14:50	Informa Award Lecture (Introduced by Hel NADPH Oxidases as Mediators of Vascular Prof. Kathy Griendling, Emory University So Room: Great Hall	r <b>Physiology</b> chool of Medicine, Atla	y of Aston, UK) anta, USA	
15:00 – 17:00	Neuroscience and Nitric Oxide Oral Presentations Co-Chairs: Shinya Toyokuni (Japan) Aldini Giancarlo (Italy)	Oxidation of Macron Presentations Co-Chairs: Maria Fed 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 <sup>1</sup> , S.K. Kang <sup>1</sup> , Y.G. Kwon <sup>4</sup> ,  K.P. Kim <sup>2</sup> , I. Komuro <sup>3</sup> , S.I. Park* <sup>1</sup> , <sup>1</sup> Korea National Institute of Health, Republic of Korea, <sup>2</sup> Konkuk University, Republic of Korea, <sup>3</sup> Chiba University, Japan, <sup>4</sup> Yonsei University, Republic of Korea	O50 Generation and Cellular 5-Hydroxym redox-active quinon B-Z. Zhu, Research C Environmental Scien Academy of Sciences	nethylcytosine by nes Center for Eco- ces, Chinese	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* <sup>1</sup> , L. LIU <sup>2</sup> , Y. LIU <sup>2</sup> , Q.L. HOU <sup>1</sup> ,	O53 Yeast 20S prote generate diverse pe same protein substr M. Demasi* <sup>1</sup> , V. Sim	ptide sets from ates	O54 Heme oxygenase-1 regulates mitochondrial coenzyme Q and reactive oxygen species formation – possible implications for the metabolic

	H.Q. JIANG <sup>2</sup> , X. ZHANG <sup>1</sup> , <sup>1</sup> National Laboratory of Biomacromolecules, China, <sup>2</sup> Chinese Academy of Sciences, China	F.C. Gozzo <sup>3</sup> , L.E.S. Netto <sup>2</sup> , <sup>1</sup> Instituto Butantan, Brazil, <sup>2</sup> USP, Brazil, <sup>3</sup> UNICAMP, Brazil	reprogramming in response to hypoxia E.J. Collinson <sup>1</sup> , K.H. Chan <sup>2</sup> , G.J. Maghzal <sup>1</sup> , J. Cantley <sup>3</sup> , C. Suarna <sup>1</sup> , L. Dunn <sup>2</sup> , J. Ni <sup>1</sup> , R.G. Midwinter <sup>1</sup> , H.A. Hamid <sup>1</sup> , D.L. Newington <sup>1</sup> , Y.T. Lam <sup>2</sup> , D.E. James <sup>3</sup> , C.F. Clarke <sup>4</sup> , M.K.C. Ng <sup>2</sup> , R. Stocker <sup>*1</sup> , <sup>1</sup> University of Sydney, Australia, <sup>2</sup> The Heart Research Institute, Australia, <sup>3</sup> Garvan Institute of Medical Research, Australia, <sup>4</sup> University of California, USA
15:30 – 15:45	O55 Antioxidant defense systems in the human parasite <i>Giardia intestinalis</i> D. Mastronicola* <sup>1</sup> , F. Testa <sup>2</sup> , E. Forte <sup>2</sup> , M. Falabella <sup>2</sup> , P. Sarti <sup>1,2</sup> , A. Giuffrè <sup>1</sup> , <sup>1</sup> CNR Institute of Molecular Biology and Pathology, Italy, <sup>2</sup> 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 <sup>1</sup> , P. Mecocci <sup>2</sup> , D.A. Butterfield <sup>3</sup> , M. Perluigi* <sup>1</sup> , <sup>1</sup> Sapienza University of Rome, Italy, <sup>2</sup> University of Perugia, Italy, <sup>3</sup> 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. Gago¹, R.M. Barbosa¹,  J.O. Lundberg², R. Radi³, J. Laranjinha¹,  ¹University of Coimbra, Portugal,  ²Karolinska Institute, Sweden,  ³Universidad 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* <sup>1</sup> , Y.X. Xie <sup>2</sup> , H. Cao <sup>2</sup> , X.Q. Chen <sup>2</sup> , <sup>1</sup> Shanghai Normal University, China, <sup>2</sup> 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* <sup>1,2</sup> , T. Morikawa <sup>1</sup> , Y. Yukutake <sup>1</sup> , M. Suematsu <sup>1,2</sup> , <sup>1</sup> Keio University, Japan, <sup>2</sup> 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 <sup>1</sup> , F.A. Summers <sup>1</sup> , T.J. Barrett <sup>1,2</sup> , C.A. Bursill <sup>1,2</sup> , C.L. Hawkins* <sup>1,2</sup> , <sup>1</sup> Heart Research Institute, Australia, <sup>2</sup> 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* <sup>1,2</sup> , E. Head <sup>2</sup> , D.A. Butterfield <sup>2</sup> , <sup>1</sup> Swiss Federal Institute of Technology, Switzerland, <sup>2</sup> University of Kentucky, USA	O65 Measurement of serum autoantibodies against oxidatively modified autoantigens in human autoimmune diseases P.G. Winyard* <sup>1</sup> , A. Nissim <sup>2</sup> , B. Ryan <sup>3</sup> , M. Whiteman <sup>1</sup> , P. Eggleton <sup>1</sup> , <sup>1</sup> University of Exeter, UK, <sup>2</sup> Queen Mary University of London, UK, <sup>3</sup> 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 <sup>1</sup> , I. Dimauro <sup>1</sup> ,  A. Brunelli <sup>1</sup> , P. Caserotti <sup>2</sup> , A. Parisi <sup>1</sup> ,  D. Caporossi* <sup>1</sup> , <sup>1</sup> University of Rome "Foro Italico", Italy, <sup>2</sup> 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* <sup>1</sup> , E. Schroder <sup>2</sup> , P. Eaton <sup>2</sup> , <sup>1</sup> INIBIC. CHU A Coruña, Spain, <sup>2</sup> King's College London, <sup>2</sup> 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. Barbosa¹,², E. Cadenas³, R. Radi⁴, J. Laranjinha¹,², ¹Center for Neuroscience and Cell Biology, Portugal, ²University of Coimbra, Portugal, ³University of Southern California, Los Angeles, USA, ⁴Universidad de la Republica, Uruguay	071 Soluble mediators from activated leukocytes cause oxidative DNA damage in adjacent cells  N. Schupp* <sup>1</sup> , Z. Schmidt <sup>1</sup> , N. Queisser <sup>1</sup> , S. Sela <sup>2</sup> , <sup>1</sup> University of Würzburg, Germany, <sup>2</sup> Western Galilee Hospital, Israel	O72 Dietary quercetin improves endothelial function and protects against atherosclerosis in ApoE knockout mice fed a high-fat diet Y. Shen <sup>1,3</sup> , N.C. Ward <sup>1</sup> , J.M. Hodgson <sup>1</sup> , Y. Wang <sup>2</sup> , R. Stocker <sup>2</sup> , K.D. Croft* <sup>1</sup> , University of Western Australia, Australia, <sup>2</sup> University of Sydney, Australia, <sup>3</sup> Nanjing University, Australia
17:00 – 18:30	Drinks with Poster Presentations (Queens Huxley Building 344)	Tower Room & SFRR	II AGM Meeting (17:00 – 18:00) Great Hall
19:30 – 23:00	Gala Dinner(Optional event – entry by tick The Grand Connaught Rooms, 61-65 Great		s Covent Garden / Holborn

	ember 2012			
07:30	Conference Registration Open			
08:15 - 08:25	Introduction to Catherine Pasquier Awards (Great Hall)			
08.13 - 08.23	Prof Nesrin Kartal-Ozer (President Elect SFRR Europe) Marmara Ur	niversitv. Turkev Gr	eat 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	Symposium 14 -	Inflammation and Neurodegeneration	
	Antioxidants			
	Room: Great Hall	Room: Huxley 30	08 and via video link to Huxley 311	
09:25 - 09:30	Introduction	Introduction		
	Chairs - Prof. Malcolm Jackson, University of Liverpool, UK and	Chairs – Prof. Ca	tarina Oliveira, University of Coimbra,	
	Prof. Michael Reid, University of Kentucky, USA	Portugal and Pro	f. Guy Brown, University of Cambridge, UK	
09:30 - 09:55	The roles of reactive oxygen and nitrogen species in muscle	Prognostic biom	arkers of oxidative stress in Alzheimer's	
	fatigue - Hakan Westerblad, Karolinska Institut, Sweden	<b>Disease</b> - Allan B	utterfield, University of Kentucky, USA	
09:55 - 10:20	Adaptations in mitochondria to exercsie training; the role of	Neurovascular a	nd metabolic coupling: diffusible bridging	
	free radicals - Jose Vińa, Universidad de Valencia, Spain	supported by nit	tric oxide - João Laranjinha, University of	
		Coimbra, Portug		
10:20 – 10:45	Inflamation and muscle dysfunction: Role of redox signaling -		n neurodegeneration - Stuart Lipton,	
	Michael Reid, University of Kentucky, Lexingtonn, USA		n Medical Research Institute, USA	
10:45 – 11:10	Nitrate/nitrite supplementation, mitochondrial efficiency and		and nitrogen species in inflammatory	
	exercise capacity - Eddie Weitzberg, Karolinska Institut, Sweden	_	ion – 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	Summasium 16	Clutathiana, A Bala in Baday Signaling	
11:55 – 13:55	Symposium 15 - Autophagy and Oxidative Stress in Health and		Glutathione: A Role in Redox Signaling,	
			Glutathione: A Role in Redox Signaling, ise– sponsored by:	
	Symposium 15 - Autophagy and Oxidative Stress in Health and			
	Symposium 15 - Autophagy and Oxidative Stress in Health and			
11:55 – 13:55	Symposium 15 - Autophagy and Oxidative Stress in Health and	Ageing and Disea		
	Symposium 15 - Autophagy and Oxidative Stress in Health and Disease  Room: Great Hall Introduction	Ageing and Disea KYOWA Room: Huxley 30 Introduction	se- sponsored by: 8 and via video link to Huxley 311	
11:55 – 13:55	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr.	Room: Huxley 30 Introduction Chairs – Prof. Fed	18 and via video link to Huxley 311  Herico Pallardo, Universidad de Valencia,	
11:55 – 13:55	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US	Room: Huxley 30 Introduction Chairs – Prof. Fed	se- sponsored by: 8 and via video link to Huxley 311	
11:55 – 13:55	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr.	Room: Huxley 30 Introduction Chairs – Prof. Fed	18 and via video link to Huxley 311  Herico Pallardo, Universidad de Valencia,	
11:55 – 13:55 11:55 – 12:00	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B	8 and via video link to Huxley 311  lerico Pallardo, Universidad de Valencia, rian Day, Denver, USA	
11:55 – 13:55 11:55 – 12:00	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US Autophagic response to bioenergetic and oxidative stress -	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B	Read via video link to Huxley 311  Derico Pallardo, Universidad de Valencia, rian Day, Denver, USA  Epigenetics and role of glutathione in redox regulation Federico V. Pallardó, Universidad de	
11:55 – 13:55 11:55 – 12:00 12:00 – 12:25	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US Autophagic response to bioenergetic and oxidative stress - Jianhua Zhang, University of Alabama, USA	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B 12:00 – 12:20	8 and via video link to Huxley 311  derico Pallardo, Universidad de Valencia, rian Day, Denver, USA  Epigenetics and role of glutathione in redox regulation Federico V. Pallardó, Universidad de Valencia, Spain	
11:55 – 13:55 11:55 – 12:00	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US Autophagic response to bioenergetic and oxidative stress - Jianhua Zhang, University of Alabama, USA Autophagy - a guardian against neurodegeneration - David	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B	le and via video link to Huxley 311  derico Pallardo, Universidad de Valencia, rian Day, Denver, USA  Epigenetics and role of glutathione in redox regulation Federico V. Pallardó, Universidad de Valencia, Spain  Glutathione in ageing	
11:55 – 13:55 11:55 – 12:00 12:00 – 12:25	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US Autophagic response to bioenergetic and oxidative stress - Jianhua Zhang, University of Alabama, USA	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B 12:00 – 12:20	8 and via video link to Huxley 311  derico Pallardo, Universidad de Valencia, rian Day, Denver, USA  Epigenetics and role of glutathione in redox regulation Federico V. Pallardó, Universidad de Valencia, Spain	
11:55 – 13:55 11:55 – 12:00 12:00 – 12:25 12:25 – 12:50	Room: Great Hall Introduction Chairs – Dr. Jianhua Zhang, University of Alabama, USA and Dr. Bradford Hill, University of Louisville, US Autophagic response to bioenergetic and oxidative stress - Jianhua Zhang, University of Alabama, USA Autophagy - a guardian against neurodegeneration - David Rubinsztein, University of Cambridge, UK	Room: Huxley 30 Introduction Chairs – Prof. Fed Spain and Prof. B 12:00 – 12:20	Ise— sponsored by:  18 and via video link to Huxley 311  Ilerico Pallardo, Universidad de Valencia, rian Day, Denver, USA  Epigenetics and role of glutathione in redox regulation Federico V. Pallardó, Universidad de Valencia, Spain  Glutathione in ageing  Brian Day, University of Colorado, USA	
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