

## RESEARCH CONFERENCES

ESF-EMBO Symposium

## Thiol-based Redox switches in life sciences

12-17 September

Sant Feliu, Spain

## LIST OF ACCEPTED POSTERS

Surname	Firstname	Abstract title
Adeyemi	Oluyomi Stephen	Gallotannin killed cells by altering cellular redox status
Baig	Mirza Saqib	Non canonical role of macrophage matrix metalloproteinase-8 (MMP-8) in alcoholic liver disease (ALD).
Becker	Katja	Redox-regulatory networks in malaria parasites - implications for host-parasite interactions
Bogdanova	Yulia	Genetically encoded H2O2 producing/reporter system in neuronal cells, based on synaptically-targeted D-amino acid oxidase and new version of the fluorescent indicator HyPer
Bogeski	Ivan	NADPH-oxidase 2 and CRAC Ca2+ channels form a feedback loop to control phagocyte oxidative burst and bacterial killing: experimental and theoretical aspects
Brandstädter	Christina	Peroxiredoxin networks in the malaria parasite Plasmodium falciparum
Dansen	Tobias	Redox control of the p16INK4A cell cycle inhibitor.
De Henau	Sasha	A Redox Signaling Globin is Essential for Reproduction in Caenorhabditis elegans
De Smet	Barbara M.	Mining the ROS-sensors of Arabidopsis thaliana with sulfenomic approaches
Deponte	Marcel	Molecular multitasking - a novel mechanism for balancing turnover and redox-regulated inactivation of peroxiredoxins
Diederich	Kathrin	Stress-induced protein thiol oxidation in African trypanosomes
Doka	Eva	A novel method for protein persulfide measurement presented on the example of human serum albumin sulfhydration in blood plasma
Duquette	Michelle	Local Redox State and the DNA Damage Response
Fabrega Prats	Marta	Identification and quantification of low-molecular-weight thiols in plants and food by LC-MS/MS analysis of their fluorescent derivatives
	Adeyemi  Baig  Becker  Bogdanova  Bogeski  Brandstädter  Dansen  De Henau  De Smet  Deponte  Diederich  Doka  Duquette	Adeyemi Oluyomi Stephen  Baig Mirza Saqib  Becker Katja  Bogdanova Yulia  Bogeski Ivan  Brandstädter Christina  Dansen Tobias  De Henau Sasha  De Smet Barbara M.  Deponte Marcel  Diederich Kathrin  Doka Eva  Duquette Michelle

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15	Flohé	Leopold	The Selenenic Acid Selenenylamide Switch in Glutathione Peroxidases: A Novel Mechanism of Potential Regulatory Relevance.
16	Garcia- Manyes	Sergi	Force-activated reactivity switch within an individual disulfide bond
17	Gellert	Manuela	Redox control of cytoskeletal dynamics: toggling the thiol switch in CRMP2
18	Gil	Lizette	Oxidant/antioxidant status and progression markers in HIV/AIDS patient's blood samples in different clinical conditions and antiretroviral combination
19	Gomes Barata	Ana	Regulation and consequences of mitochondrial H2O2
20	Grant	Chris	The yeast Tsa1 peroxiredoxin protects against protein aggregate induced oxidative stress
21	Hildebrandt	Thomas	A specific thiol redox circuit regulates activity of Sirtuin 1 and vertebrate development
22	Hillion	Melanie	Protein S-mycothiolation in response to oxidative stress in the respiratory pathogen Corynebacterium diphtheriae.
23	Jacquot	Jean-Pierre	see Gütle application
24	Joshi	Sadhana	Increased oxidative stress from early pregnancy in women who develop preeclampsia
25	Jovanovic	Bogdan	Thiols regulating HRI kinase activation upon arsenite-induced oxidative stress
26	Keyes	Jeremiah	Modulation of Erk Activity by Reversible Cysteine Oxidation
27	Knuesting	Johannes	Arabidopsis Glutaredoxin S17 (GrxS17) as a possible redox-switch in several developmental processes
28	Kuban- Jankowska	Alicja	The Fenton chemistry and enzymatic activity of catalytic thiolate anion -regulated CD45, LAR and PTP1B protein tyrosine phosphatases
29	Latimer	Heather	Elucidating H2O2-sensing mechanisms in Schizosaccharomyces pombe
30	Leichert	Lars	Functional Metagenomics of the Thioredoxin Superfamily
31	Lepka	Klaudia Maria	Holo Glutaredoxin 2 protects oligodendrocytes against neuroinflammatory cell death using an unconventional thiol switch
32	Lillig	Christopher Horst	What determines the specificity and efficiency of thioredoxin family proteins in thiol-disulfide exchange reactions?
33	Lo Conte	Mauro	Chemical approaches for detecting protein sulfinylation
34	Lopez-Maury	Luis	Characterization of TrxC an atypical thioredoxin exclusively present in cyanobacteria.
35	Lu	Jun	The synergistic anti-bacterial effects of ebselen and silver combination
36	Maiorino	Matilde	Glutathione peroxidase 8: transcriptional regulation and role in growth factor signaling
37	Meyer	Andreas	Glutathione redox homeostasis in mitochondria and chloroplasts of Arabidopsis thaliana

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38	Mohanraj	Karthik	MIA40 interactions in Human Cells
39	Mohring	Franziska	Comparison of methods probing the intracellular redox milieu in Plasmodium falciparum
40	Mordas	Amelia Victoria	Identification of Protein Partners of Redox-active Proteins Targeted to the Mitochondrial Intermembrane Space
41	Morgan	Brian	Regulation of a conserved cyclin-dependent kinase inhibitor
42	Mostertz	Jörg	MS-based analysis of thiol-redox and phosphorylation cross talk in human bronchial epithelial cells
43	Naranjo Rio- Miranda	Belen	Type-f thioredoxins activate primary carbon metabolism within seconds after a dark-light transition
44	Netto	Luis	Ohr (organic hydroperoxide resistance protein) is a non-thioredoxin fold protein that reduces organic hydroperoxides and peroxynitrite with extraordinary efficiency.
45	Orian	Laura	Mechanism of GSH Peroxidases I: a DFT/QM analysis of the catalytic cycle
46	Padayachee	Letrisha	Quantification of the thioredoxin system using the thioredoxin redox ratio as a surrogate measure for flux
47	Panzilius	Elena	Functional changes in cellular redox capacity during invasion and metastasis
48	Pastor Flores	Daniel	H2O2-based redox regulation of mitochondrial biogenesis
49	Pedre Pérez	Brandán	The Corynebacterium glutamicum mycothiol peroxidase Mpx is a ROS-scavenging enzyme that shows promiscuity in thiol redox control
50	Peleh	Valentina	Molecular dissection of Mia40 functions in Saccharomyces cerevisiae
51	Perez Ruiz	Juan Manuel	The NADPH-dependent (NTRC) and ferredoxin-dependent redox systems act concertedly in chloroplast redox regulation
52	Radhakrishnan	Sunish Kumar	Redox regulation of topoisomerase IV activity in bacteria
53	Radyuk	Svetlana	Peroxiredoxins control immune and stress responses mediated via the mitochondrial and endoplasmic reticulum pathways
54	Rahbari	Mahsa	Establishment of genetically encoded H2O2 probes and dynamic measurements of H2O2 levels in the malaria parasite Plasmodium falciparum
55	Rahlfs	Stefan	Insights into redox regulation of Plasmodium falciparum S-adenosylmethionine synthetase
56	Ramesh	Ajay	Molecular Dissection of the Mitochondrial Protein Import Machinery
57	Reichheld	Jean-Philippe	GRXS17, an iron-sulfur glutaredoxin is acting in meristem development and thermotolerance
58	Sahay	Akriti	Placental regional differences in oxidative stress markers and their association with birth outcome in preeclampsia
59	Salvador	Armindo	Is the Peroxiredoxin 2/Thioredoxin/Thioredoxin Reductase system in human erythrocytes geared for H2O2-mediated redox signaling?
60	Scheibe	Renate	Arabidopsis Glutaredoxin S17 (GrxS17) as a possible redox-switch in several developmental processes

61	Schuh	Anna Katharina	Real-time monitoring of the glutathione redox potential in the malaria parasite Plasmodium falciparum
62	Schwarzländer	Markus	The dynamic interplay between respiratory metabolism and thiol switches in plant mitochondria
63	Selinski	Jennifer	Multiple AOX isoforms in Arabidopsis: What makes the difference?
64	Selvaggio	Gianluca	Kinetic properties and protein abundances in the human peroxiredoxin/thioredoxin system explain phenotypic dichotomy in cell's responses to H2O2
65	Staudacher	Verena	Systematic re-evaluation of the bis(2-hydroxyethyl)disulfide (HEDS) assay reveals an alternative mechanism and activity of glutaredoxins
66	Sthijns	Mireille	The effect of flavonoids on redox regulation.
67	Stottmeier	Benjamin	Redox regulation of pro-inflammatory signaling
68	Suzuki	Yutaka	pH- and PDI-dependent thiol switching of an A/B toxin in vitro and during host cell intoxication
69	Topf	Ulrike	Proteome-wide identification of reversible thiol oxidation modification
70	Tossounian	Maria-Armineh	Corynebacterium diphtheriae methionine sulfoxide reductase A exploits a unique mycothiol redox relay mechanism.
71	Ursini	Fulvio	Mechanism of GSH Peroxidases III: GPx4 but not GPx1 binds to polar heads of phospholipids in membranes through a cationic area that also precisely addresses the hydroperoxide groups to the redox centre of the enzyme.
72	Van Dam	Loes	The PP2A regulating protein TIPRL as a cysteine-dependent redox-sensitive protein
73	Van Laer	Koen	roGFP2-Tsa2dCr, a novel ultrasensitive peroxiredoxin-based H2O2 probe
74	Voth	Wilhelm	The Protein Targeting Factor Get3 Functions as ATP-Independent Chaperone under Oxidative Stress Conditions
75	Vu	Van Loi	Bacilliredoxin-fused redox probes to monitor the bacillithiol redox potential in Staphylococcus aureus.
76	Wang	Jun-Feng	Cysteine oxidative modification of vesicular transporters in brain of amyloid precursor protein/presenilin 1 double transgenic mice
77	Wasilewski	Michal	Crosstalk of reactive oxygen species and protein import into mitochondria.
78	Wellinger	Ralf	Impaired Sod1-activity is Linked to Selenite Resistance in Yeast
79	Wolters	Lando P.	Insight from Quantum Chemistry on the Reactivity of Organochalcogen Compounds: Fundamental Achievements for De Novo Enzymatic Design
80	Wright	Aaron	Characterization of live cell protein thiol redox dynamics associated with hydrogen production in Cyanothece sp. ATCC 51142 by chemical probing
81	Zaccarin	Mattia	Mechanism of GSH Peroxidases II: Identification by MS of a selenenylamide as stable oxidized form of Sec and its conversion to dehydroalanine.