



REDOX BIOLOGY, ENVIRONMENTAL EXPOSURES AND LIFESTYLE

# SFRR-E Annual Meeting

Mainz, Germany

2 0 2 6

June 03 - 05

SCIENTIFIC PROGRAM

# MANY THANKS TO OUR SPONSORS FOR THEIR GENEROUS SUPPORT!



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# WELCOME

Dear Colleagues,

the 2026 Society for Free Radical Research Europe (SFRR-E) meeting will be held June 3-5, 2026 in Mainz, Germany, at the Hilton Mainz positioned in the center of Europe, nearby Frankfurt airport and in the heart of the German wine area. The Roman name of Mainz „Mogontiacum“ and one of the largest domes in Germany reflect the vital history of the city.

The 2026 SFRR-E meeting will bring together scientists from different disciplines and regions from Europe and abroad to enjoy and discuss topics of redox biology in the context of environmental exposures and lifestyle risk factors.

In addition to peer reviewed symposia and competitive selective oral sessions, we are excited to share special sessions dedicated to young researchers and early bird activities as well as a 2-day pre-meeting workshop and symposium.

We extend a warm invitation to you, your accompanying guests and sponsors from across the world to the SFRR-E annual meeting in Mainz 2026. Your presence and contributions will enhance the overall scientific value of the event. The lovely Rhine-Main area will provide a perfect frame for an enjoyable and successful meeting.

We are looking forward to welcoming you in Mainz 2026,

Yours,  
Andreas Daiber and Tilman Grune



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# GENERAL INFORMATION

## Venue of the SFRR-E Annual Meeting

Hilton Mainz, Rheinstrasse 68  
55116 Mainz, Germany

## Local PCO

Conventive Kongressagentur GmbH  
office@conventive.at  
Phone +43 2236 40 46 49 or +43 650 2891979

## Registration & information

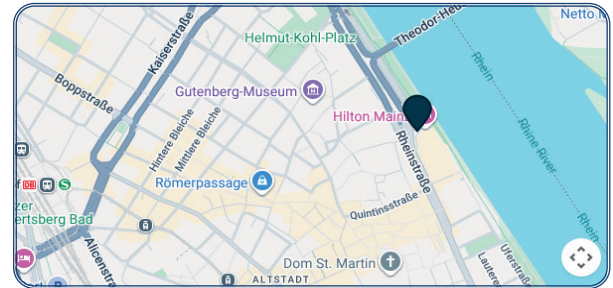
Registration and information desk is located at the **conference venue, the Hilton Mainz**. Delegates can pick up their conference materials from the desk during the below mentioned opening hours. Wearing your personal name badge is compulsory in order to attend the scientific program and social program. If you have any questions or need assistance during the conference hours please turn to the registration & information desk.

## Opening hours registration and information desk

June 2, 2026 19:00 - 20:00	June 4, 2026 07:00 - 18:30
June 3, 2026 07:00 - 20:00	June 5, 2026 07:00 - 13:30

## Social programme

June 2, 2026 20:00 Welcome Reception | Hotel Hilton Mainz  
June 4, 2026 20:00 Conference Dinner | Location: Restaurant Eulchen Mainz, Kupferbergstrasse 15, Mainz



# OVERVIEW PROGRAM

	EXPOHEALTH Symposium		SFRR-E Annual Meeting 2026 "Redox Biology, En			
	Monday, June 1	Tuesday, June 2	Wednesday, June 3 (Hilton Mainz)			
			Thursday, June 4			
07:00 - 07:30	Max Planck Institute for Chemistry	Max Planck Institute for Chemistry	Welcome Coffee / Registration / Exhibition & Poster set-up			
07:30 - 08:00			Welcome Coffee / Registration / Exhibition & Poster set-up			
08:00 - 08:30	Welcome	08:20 Welcome	Opening (Goldsaal A-D)			
08:30 - 09:00	Session I	Session I	SFRR-E Annual Award Lecture (Goldsaal A-D)			
09:00 - 09:30			SFRR-E Clinical Science Award Lecture (Goldsaal A-D)			
09:30 - 10:00			SFRR-E Basic Science Award Lecture (Goldsaal A-D)			
10:00 - 10:30			ECR Fellowship Presentations (Goldsaal A-D)			
10:30 - 11:00			Coffee	Coffee	Coffee / Posters / Exhibition (Brasserie Foyer)	
11:00 - 11:30	Session II	Session II	Introductory Session (Goldsaal A-D)			
11:30 - 12:00			Introductory Session (Goldsaal A-D)			
12:00 - 12:30			Plenary Lectures (Goldsaal A-D)			
12:30 - 13:00			Plenary Lectures (Goldsaal A-D)			
13:00 - 13:30	Lunch	Lunch	Lunchtime Session I ECR Mentoring (Brasserie Foyer)	Elsevier Editors Lunch (Brasserie Foyer)		
13:30 - 14:00	Session III	Session III	Symposium I (Goldsaal A-B)			
14:00 - 14:30			Symposium I (Goldsaal A-B)			
14:30 - 15:00			Symposium II (Goldsaal C-D)			
15:00 - 15:30			Symposium II (Goldsaal C-D)			
15:30 - 16:00			Symposium II (Goldsaal C-D)			
16:00 - 16:30	Coffee	Coffee	Selected Oral Presentations I (Goldsaal A-B)	Selected Oral Presentations II (Goldsaal C-D)		
16:30 - 17:00	Session IV	Session IV	Guided Poster Presentations I (Rhein 1-4) with Coffee			
17:00 - 17:30	Get-together Funzelfahrt				Guided Poster Presentations I (Rhein 1-4) with Coffee	
17:30 - 18:00						
18:00 - 18:30		Guided Poster Presentations I (Rhein 1-4) with Coffee				
18:30 - 19:00	Guided Poster Presentations I (Rhein 1-4) with Coffee					
19:00 - 19:30				Guided Poster Presentations I (Rhein 1-4) with Coffee		
19:30 - 20:00			Guided Poster Presentations I (Rhein 1-4) with Coffee			
20:00 - 20:30	Guided Poster Presentations I (Rhein 1-4) with Coffee					
20:30 - 21:00					Guided Poster Presentations I (Rhein 1-4) with Coffee	
21:00 - 21:30			Guided Poster Presentations I (Rhein 1-4) with Coffee			
21:30 - 22:00	Guided Poster Presentations I (Rhein 1-4) with Coffee					
22:00 - 22:30					Guided Poster Presentations I (Rhein 1-4) with Coffee	
22:30 - 23:00			Guided Poster Presentations I (Rhein 1-4) with Coffee			
23:00 - 23:30	Guided Poster Presentations I (Rhein 1-4) with Coffee					
23:30 - 24:00					Guided Poster Presentations I (Rhein 1-4) with Coffee	
			SFRR-E Registration (Hilton Mainz)	ECR Networking (Goldsaal A-B)		
	SFRR-E Welcome Reception (Hilton Mainz, Brasserie)					
				SFRR-E General Assembly (Goldsaal A-D)		
				SFRR-E Conference Dinner		





## Guidelines for oral presentations

It is mandatory to strictly stay within the time allocated to your presentation:

- Award lectures: 30' (25' presentation + 5' discussion)
- Selected oral and ECR fellowship presentations: 15' (12' presentation + 3' discussion)
- YIA recipient presentations: 12' (10' presentation + 2' discussion)
- Flash talks: 5' (5' presentation, no discussion)

## Guidelines for poster presentations

- Please note that all posters should be on display during the entire conference
- Mounting time: Wednesday, June 3, 07:00-08:30, removal time: Friday, June 5, 10:30-11:00
- Posters have been assigned individual IDs: session number (I or II), group (A-G), and poster number (01-19).
- Your poster ID can be found in the program, and the poster boards are labelled with the ID-numbers.
- All posters are presented in 4 parallel guided poster walks (A-D) with 2 chairs leading the discussions.
- You are expected to present your poster orally by summarizing its content in 3', followed by 2' discussion.
- Guided poster presentations I: June 3, 2026, 17:00-19:00, and II: June 4, 2026, 15:30-17:30.
- Posters still on display by June 5, 11:00 will be removed.
- Local poster printing opportunities, if needed: <https://www.copyprintmainz.de/kontakt>

## EXPOHEALTH Symposium

Monday, June 1, 2026

Max Planck Institute for Chemistry (Otto-Hahn-Institut), MPIC Building, Hahn-Meitner Weg 1, Mainz

08:00 – 08:10	<b>Welcome</b> <b>Andreas Daiber and Daniel Wollschläger</b> ( <i>University Medical Center Mainz, Mainz, Germany</i> ) <b>Thomas Berkemeier</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> )
	<b>EXPOHEALTH Session I</b> <i>Chairs: <u>Thomas Berkemeier</u> (Max Planck Institute for Chemistry, Mainz, Germany), and Pablo Evelson (Institute of Molecular Biochemistry and Medicine, School of Pharmacy and Biochemistry, University of Buenos Aires, Ciudad de Buenos Aires, Argentina)</i> -----
08:10 – 08:30	EH I_01 <b>Andreas Daiber</b> ( <i>Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany</i> ) <b>The exposome concept</b>
08:30 – 08:50	EH I_02 Hiba Oqba, <b>Emilio Gianicolo</b> ( <i>Institute of Medical Biostatistics, Epidemiology and Informatics, IMBEI, University Medical Center of the Johannes Gutenberg University, Mainz, Germany</i> ) <b>Epidemiological studies on the association between air pollution and childhood cancer: methodological challenges in exposure assessment</b>
08:50 – 09:10	EH I_03 <b>Mark Miller</b> ( <i>University of Edinburgh, Edinburgh, U.K.</i> ) <b>Air pollution health impact and redox considerations</b>
09:10 – 09:30	EH I_04 <b>Thomas Münzel</b> ( <i>University Medical Center Mainz, Mainz, Germany</i> ) <b>Noise pollution health impact and redox considerations</b>
09:30 – 09:50	EH I_05 <b>Marin Kuntic</b> ( <i>Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany</i> ) <b>Cardiovascular damage by noise and/or PM (UFP) in preclinical models – lung/brain-heart axis</b>
09:50 – 10:10	EH I_06 Thuy Thi Lai, Alexey Afonin, Aino-Kaisa Piironen, Mika Ihalainen, Tuukka Kokkola, Pasi Jalava, Olli Sippula, <b>Katja M. Kanninen</b> ( <i>A.I Virtanen Institute for Molecular Science, University of Eastern Finland, Kuopio, Finland</i> ) <b>Cerebral damage by noise and/or PM (UFP) in preclinical models – implications for Alzheimer’s disease</b>
10:10 – 10:30	EH I_07 <b>Thomas Berkemeier</b> ( <i>Multiphase Chemistry Department, Max Planck Institute for Chemistry, Mainz, Germany</i> ) <b>Kinetic computational model for lung damage by particulate matter</b>
10:30 – 11:00	<b>Coffee</b>

	<p><b>EXPOHEALTH Session II – co-sponsored by SFRR-E/SfRBM POC</b>  <i>Chairs: Daniel Wollschläger (University Medical Center Mainz, Mainz, Germany), and Natalia Magnani (Institute for General and Inorganic Chemistry, Department of Chemical Sciences, Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina)</i></p> <hr/>
11:00 – 11:20	<p>EH II_01 <b>Omar Hahad</b> (<i>University Medical Center Mainz, Mainz, Germany</i>)  <b>Non-optimal temperatures and health impact with focus on cardiovascular diseases</b></p>
11:20 – 11:40	<p>EH II_02 <b>Andrea Pozzer</b>, Brendan Steffens, Yiannis Proestos, Jean Sciare, Dimitris Akritidis, Sourangsu Chowdhury, Katrin Burkart, Sara Bacer (<i>Atmospheric Chemistry Department, Max Planck Institute for Chemistry, Mainz, Germany, and Climate and Atmosphere Research Center, The Cyprus Institute, Nicosia, Cyprus</i>)  <b>Computational modelling of climate hazards and interaction with air pollution</b></p>
11:40 – 12:00	<p>EH II_03 <b>Wenjun Meng</b>, Shu Tao, Yafang Cheng (<i>Aerosol Chemistry Department, Max Planck Institute for Chemistry, Mainz, Germany</i>)  <b>Source-specific air pollution pathways to physiological and psychophysical health</b></p>
12:00 – 12:20	<p>EH II_04 Aleksandra Korac, Bato Korac, <b>Aleksandra Jankovic</b> (<i>Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</i>)  <b>Redox-metabolic reprogramming by cold temperatures</b></p>
12:20 – 12:40	<p>EH II_05 <b>Bato Korac</b>, Aleksandra Korac, Aleksandra Jankovic (<i>Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</i>)  <b>Hibernation: molecular remodeling sustains life in the cold</b></p>
12:40 – 13:00	<p>EH II_06 <b>Stefan Schildknecht</b> (<i>Albstadt-Sigmaringen University, Sigmaringen, Germany</i>)  <b>Measuring the toxicity of chemicals</b></p>
13:00 – 14:00	<p><b>Lunch</b></p>

	<p><b>SFRR-E/SfRBM POC Session</b>  <i>Chairs: <u>Tilman Grune</u> (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany), <u>Daniela Caporossi</u> (Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Rome, Italy), and <u>Jacek Zielonka</u> (Department of Biophysics, Medical College of Wisconsin, Milwaukee, WI, USA)</i></p> <p>-----</p>
14:00 – 14:20	<p>EH III_01 <b>Tilman Grune</b> (<i>German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany</i>)  <b>Aging and environmental factors: effects of nutrition</b></p>
14:20 – 14:40	<p>EH III_02 <b>Daniela Caporossi</b>, <i>Monica Silvestri, Veronica Lisi, and Ivan Dimauro (Department of Movement, Human and Health Sciences, University of Rome "Foro Italico", Rome, Italy)</i>  <b>Mitigation of environmental exposure risk factors by physical exercise</b></p>
14:40 – 15:00	<p>EH III_03 <b>Pablo Evelson</b> (<i>Institute of Molecular Biochemistry and Medicine, School of Pharmacy and Biochemistry, University of Buenos Aires, Ciudad de Buenos Aires, Argentina</i>)  <b>Particulate matter induces tissue oxInflammation: From mechanism to prevention</b></p>
15:00 – 15:20	<p>EH III_04 <b>Natalia Magnani</b> (<i>Institute for General and Inorganic Chemistry, Department of Chemical Sciences, Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina</i>)  <b>Targeting inflammatory and oxidative pathways to prevent particulate matter-induced lung damage</b></p>
15:20 – 15:40	<p>EH III_05 <b>Giuseppe Valacchi</b> (<i>Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy; Department of Animal Sciences, Plants for Human Health Institute, NC State University, Kannapolis, NC, USA; Department of Food and Nutrition, Kyung Hee University, Seoul, South Korea</i>)  <b>Inflammasome involvement in skin response to pollution exposure</b></p>
15:40 – 16:00	<p>EH III_06 <b>Florian Gruber</b> (<i>Department of Dermatology, Medical University of Vienna, and CDL SKINMAGINE, Vienna, Austria</i>)  <b>Interventions against and measurement of skin aging</b></p>
16:00 – 16:20	<p><b>Coffee</b></p>
	<p><b>EXPOHEALTH Session IV</b>  <i>Chairs: <u>Marianne Müller</u> (LIR Main, Mainz, Germany), and <u>Florian Gruber</u> (Department of Dermatology, Medical University of Vienna, and CDL SKINMAGINE, Vienna, Austria)</i></p> <p>-----</p>
16:20 – 16:40	<p>EH IV_01  <b>Martin Feelisch</b> (<i>NIHR Southampton Biomedical Research Centre, University of Southampton &amp; University Hospital Southampton NHS Foundation Trust, Southampton, U.K.</i>)  <b>Of sensing, adaptation and resilience: coping with hypobaric hypoxia and psychosocial stress</b></p>

16:40 – 17:00	EH IV_02 <b>Giovanni Mann</b> ( <i>King's British Heart Foundation Centre of Research Excellence, School of Cardiovascular and Metabolic Medicine &amp; Sciences, King's College London, London, U.K.</i> ) <b>Increasing oxidative stress resistance in the brain by NRF2 activation</b>
17:00 – 18:00	<b>Travel from MPIC to Bodenheim train station and winery Lorch</b>
18:00 – 22:00	<b>Get-together "Funzelfahrt" Bodenheim</b> (vineyard tractor tour with wine tasting and brown-bag dinner)

# EXPOHEALTH Symposium

Tuesday, June 2, 2026

Max-Planck-Institut für Chemie (Otto-Hahn-Institut), MPIC Building, Hahn-Meitner Weg 1, Mainz

08:20 – 08:30	<b>Welcome</b> <b>Andreas Daiber and Daniel Wollschläger</b> ( <i>University Medical Center Mainz, Mainz, Germany</i> ) <b>Thomas Berkemeiner</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> )
08:30 – 09:30	<b>EXPOHEALTH Research Structures in Mainz – Part I</b> <i>Chairs: <u>Tilman Grune</u> (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany), and <u>Giuseppe Valacchi</u> (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy; Department of Animal Sciences, Plants for Human Health Institute, NC State University, Kannapolis, NC, USA; Department of Food and Nutrition, Kyung Hee University, Seoul, South Korea)</i> -----
09:30 – 10:30	<b>Philipp Lurz</b> ( <i>University Medical Center Mainz, Mainz, Germany</i> ) <b>Department of Cardiology - Clinical trials, novel drugs and future trends</b>
10:30 – 11:00	<b>Christoph Reinhardt</b> ( <i>Center for Thrombosis Research, Mainz, Germany</i> ), and <b>Michael Molitor</b> ( <i>Center for Thrombosis Research, Mainz, Germany, and University Medical Center Mainz, Mainz, Germany</i> ) <b>Center for Thrombosis and Hemostasis – CuraTime project, microbiota-heart axis and atherothrombotic pathways</b>
11:00 – 12:00	<b>Coffee</b>
12:00 – 13:00	<b>René Ketting</b> ( <i>Institute of Molecular Biology Mainz, Mainz, Germany</i> ) <b>Institute of Molecular Biology – Genome stability and epigenetics</b>
13:00 – 14:00	<b>Nadine Hövelmeyer</b> ( <i>University Medical Center Mainz, Mainz, Germany, and Paul-Klein-Center for Immune Intervention, Mainz, Germany</i> ) <b>Paul-Klein-Center for Immune Intervention – Personalized medicine</b>
14:00 – 15:00	<b>Lunch</b>
15:00 – 16:00	<b>EXPOHEALTH Excellence Institutes in Mainz – Part II</b> <i>Chairs: <u>Pablo Evelson</u> (Institute of Molecular Biochemistry and Medicine, School of Pharmacy and Biochemistry, University of Buenos Aires, Ciudad de Buenos Aires, Argentina), and <u>Natalia Magnani</u> (Institute for General and Inorganic Chemistry, Department of Chemical Sciences, Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina)</i> -----
14:00 – 15:00	<b>Thomas Kindler</b> ( <i>University Medical Center Mainz, Mainz, Germany, and Translational Oncology Mainz, Mainz, Germany</i> ) <b>Translational Oncology Mainz – Quo vadis cancer therapy?</b>
15:00 – 16:00	<b>Tanja Weil, Uladzimir Barayeu, and Aleksandra Pavicevic</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> ) <b>Max Planck Institute for Polymer Research - Novel insights in polymers and soft materials</b>

16:00 – 16:20	<b>Coffee</b>
16:20 – 17:20	<b>Marianne Müller</b> ( <i>Leibniz Institute for Resilience Research Mainz, Mainz, Germany</i> ) <b>Leibniz Institute for Resilience Research – Translational models for social stress and resilience: a systems biology perspective</b>
17:20 – 17:40	<b>Dilja Krüger-Burg</b> ( <i>University Medical Center Mainz, Mainz, Germany, and Johannes Gutenberg University, Mainz, Germany</i> ) <b>EXPOHEALTH talk: Resilience mechanisms against environmental stressors</b>
	<b>Max Planck Institute for Chemistry</b> <i>Chairs: <u>Marin Kuntic</u> (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany), and <u>Timoteo Marchini</u> (Department of Cardiology and Angiology, University Heart Center Freiburg-Bad Krozingen, University Hospital Freiburg, Freiburg, Germany)</i>
17:40 – 18:00	----- <b>Uli Pöschl</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> ) <b>Max Planck Institute for Chemistry - Multiphase Chemistry</b>
18:00 – 18:20	<b>Yafang Cheng</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> ) <b>Max Planck Institute for Chemistry - Aerosol Chemistry</b>
18:20 – 18:40	<b>Eric Kort</b> ( <i>Max Planck Institute for Chemistry, Mainz, Germany</i> ) <b>Max Planck Institute for Chemistry - Atmospheric Chemistry</b>
18:40	<b>End of the Meeting</b>

**SFRR-E Annual Meeting 2026**  
**“Redox Biology, Environmental Exposure and Lifestyle”**  
**Tuesday, June 2, 2026**  
Hilton Mainz

19:00 – 20:00	<b>SFRR-E Conference Registration</b> ( <i>Hilton Mainz</i> )
20:00 – 22:00	<b>SFRR-E Welcome Reception</b> ( <i>Hilton Mainz</i> )

**SFRR-E Annual Meeting 2026**  
**“Redox Biology, Environmental Exposure and Lifestyle”**  
**Wednesday, June 3, 2026**  
Hilton Mainz

07:00 – 08:00	<b>Welcome Coffee / Registration / Exhibition &amp; Poster Set-up</b> ( <i>Goldsaal Foyer</i> )
08:00 – 08:05	<b>Welcome Session</b> ( <i>Goldsaal A-D</i> )
08:05 – 08:10	<b>Giuseppe Valacchi</b> ( <i>President of SFRR-E</i> )
08:10 – 08:15	<b>Andreas Daiber and Tilman Grune</b> ( <i>Chair and Co-Chair of the Local Organizing Committee</i> )
08:15 – 08:20	<b>Stefan Müller-Stach</b> ( <i>Vice President for Research and Early Career Academics of the Johannes Gutenberg University Mainz</i> )
08:20 – 08:25	<b>Philipp Drees</b> ( <i>Scientific Director and Dean of the University Medical Center Mainz and Medical Faculty of Johannes Gutenberg University Mainz</i> )
08:25 – 08:30	<b>Enrique Cadenas</b> ( <i>Chair of the OCC Board of Directors</i> )
	<b>Giovanni E. Mann</b> ( <i>Past President of SFRR-E</i> )
	<b>SFRR-E Annual Award Lecture</b> ( <i>Goldsaal A-D</i> ) <i>Chairs: <u>Giuseppe Valacchi</u> (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy, Animal Science Department, Plants for Human Health Institute, NC State University, Kannapolis, NC, USA, and Department of Food and Nutrition, Kyung Hee University, Seoul, South Korea), and <u>Niki Chondrogianni</u> (National Hellenic Research Foundation, Athens, Greece)</i>
08:30 – 09:00	AL_01 <b>Clare L. Hawkins</b> ( <i>Department of Biomedical Science, University of Copenhagen, Copenhagen, Denmark</i> ) <b>Neutrophils as drivers of cellular damage and inflammation in disease</b>
	<b>SFRR-E Clinical Science Award Lecture</b> ( <i>Goldsaal A-D</i> ) <i>Chairs: <u>Giovanni Mann</u> (School of Cardiovascular and Metabolic Medicine &amp; Sciences, King’s British Heart Foundation Centre of Research Excellence, Faculty of Life Sciences &amp; Medicine, King’s College London, London, U.K.), and <u>Andreas Daiber</u> (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany)</i>
09:00 – 09:30	AL_02 <b>Christian Heiss</b> ( <i>School of Medicine, University of Surrey, Guildford, U.K., Vascular Department, Surrey and Sussex Healthcare NHS Trust, Redhill, U.K.</i> ) <b>From nitric oxide biology to precision vascular medicine</b>
	<b>SFRR-E Basic Science Award Lecture</b> ( <i>Goldsaal A-D</i> ) <i>Chairs: <u>Juan Sastre</u> (Department of Physiology, Faculty of Pharmacy, University of Valencia, Valencia, Spain), and <u>Enrique Cadenas</u> (Pharmacology and Pharmaceutical Sciences, USC Mann School of Pharmacy and Pharmaceutical Sciences, University of Southern California, Los Angeles, CA, USA)</i>
09:30 – 10:00	AL_03 <b>Elias Arner</b> ( <i>Division of Biochemistry, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden</i> ) <b>Selenoproteins and reductive enzyme pathways in control of cell fate</b>

	<b>ECR Fellowship Presentations (Goldsaal A-D)</b> <i>Chairs: <u>Carmen Veith</u> (Calliditas Therapeutics, Geneva, Switzerland), and <u>Michael J. Davies</u> (Department of Biomedical Science, University of Copenhagen, Copenhagen, Denmark)</i>		
10:00 – 10:15	<hr/> ECR_01 <b>Vanesa Cepas López</b> (Department of Oncology, University of Turin, Candiolo Cancer Institute FPO-IRCCS, Turin, Italy) <b>Redox regulation of cancer stem cell heterogeneity in breast cancer patient-derived organoids</b>		
10:15 – 10:30	ECR_02 <b>Tim Baldensperger</b> (Institute of Biological Chemistry, University of Vienna, Vienna, Austria) <b>Advancing strategies to combat lipofuscin toxicity</b>		
10:30 – 11:00	<b>Coffee / Poster / Exhibition (Brasserie Foyer / Goldsaal Foyer)</b>		
	<b>Environmental Exposure – Introductory Session (Goldsaal A-D)</b> <i>Chairs: <u>Mark Miller</u> (Centre for Cardiovascular Science, University of Edinburgh, Edinburgh, U.K.) and <u>Thomas Münzel</u> (University Medical Center, Johannes Gutenberg University, Mainz, Germany)</i>		
11:00 – 11:30	<hr/> PL_01 <b>Sanjay Rajagopalan</b> (University Hospitals, Harrington Heart and Vascular Institute, Case Western Reserve School of Medicine, Cleveland, OH, USA) <b>Toxic exposures to transformative exposomics: towards holistic frameworks to understand cardiovascular health</b>		
11:30 – 12:00	PL_02 <b>Thomas Münzel</b> (University Medical Center, Johannes Gutenberg University, Mainz, Germany) <b>Traffic Noise: The not-so-silent killer—how oxidative stress and inflammation drive cardiovascular disease</b>		
	<b>Plenary Lectures</b> <i>Chairs: <u>Andreas Daiber</u> (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany), and <u>Tilman Grune</u> (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany)</i>		
12:00 – 12:30	<hr/> PL_03 <b>Bernd Moosmann</b> (University Medical Center, Johannes Gutenberg University, Mainz, Germany) <b>What cysteine and methionine in mitochondrial proteins reveal about the rate-limiting redox step of the biological aging process</b>		
12:30 – 13:00	PL_04 <b>Antonio Cuadrado</b> (Department of Biochemistry, Faculty of Medicine Autonomous University of Madrid, Madrid, Spain) <b>Transcription factor NRF2: from redox control to disease intervention</b>		
13:00 – 14:00	Lunch (Brasserie Foyer)		
13:00 – 14:00	<b>Lunchtime Session I – Poster and ECR Mentoring (Brasserie Foyer)</b> <hr/> LS I_01 Tim Baldensperger, José C. Casas Martinez, Vanesa Cepas-Lopez, Avilien Dard, Ufuk Ersoy, Sophie Hendrix, Paraskevi Kritsiligkou, Marin Kuntic, Veronica Lisi, Timoteo	13:00 – 14:00	<b>Elsevier Editors’ Lunch (Brasserie Foyer)</b>

	Marchini, Christina Mas-Bargues, Verónica Miguel Herranz, Chantalle Moulton, Konstantinos Papanikolaou, Anne Sophie Scheller, Alina Sigaeva, José Manuel Ugalde, Julia Vorhauser <b>ECR activities at the SFRR-Europe Annual Meeting in Mainz 2026</b>		
14:00 – 14:30	<p><b>Symposium I – Redox Changes and Oxidative Stress by Air Pollution – Contribution to the Redox Exposome</b> (<i>Goldsaal A-B</i>)  <i>Chairs: Pablo Evelson (Department of General and Inorganic Chemistry, School of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina), and Andreas Daiber (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany)</i></p> <p>-----</p> <p>SL I_01 Sofia Reynoso, Mariana Garcés, Lourdes Cáceres, Agustina Freire, Laura Caltana, Manuela Martinefski, Mayra El Zahr, Florencia Sarno, Timoteo Marchini, Valeria Tripodi, Pablo Evelson, <b>Natalia Magnani</b> (<i>Department of Chemical Science, General and Inorganic Chemistry, School of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina</i>)  <b>Air pollution exposure impairs alveolar epithelium repair through oxi-inflammatory pathways</b></p>	14:00 – 14:30	<p><b>Symposium II – Exercise, Inflammation, and Redox Biology: Turning Stress into Adaptation</b> (<i>Goldsaal C-D</i>)  <i>Chairs: Daniela Caporossi (Department of Movement, Human and Health Sciences, University of Rome Foro Italico, Rome, Italy), and Maria Carmen Gómez-Cabrera (Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain)</i></p> <p>-----</p> <p>SL II_01 <b>Maria Carmen Gómez Cabrera</b> (<i>Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain</i>)  <b>Role of redox signaling in skeletal muscle damage and adaptation to training in young and old populations</b></p>
14:30 – 15:00	<p>SL I_02 <b>Marin Kuntic</b> (<i>Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany</i>)  <b>Effects of particulate matter and noise on multiple organ systems – potential pharmacological interventions</b></p>	14:30 – 15:00	<p>SL II_02 <b>Johanna Lanner</b> (<i>Department of Physiology and Pharmacology, Molecular Muscle Physiology and Pathophysiology, Karolinska Institutet, Stockholm, Sweden</i>)  <b>Unraveling molecular mechanisms of ROS and mitochondrial dysfunction in musculoskeletal impairments</b></p>
15:00 – 15:30	<p>SL I_03 <b>Timoteo Marchini</b> (<i>Department of Cardiology and Angiology, University Heart Center Freiburg-Bad Krozingen, University Hospital Freiburg, Freiburg, Germany</i>)  <b>Redox and inflammatory mechanisms linking PM2.5 exposure to impaired metabolism and thermogenesis</b></p>	15:00 – 15:30	<p>SL II_03 <b>Malcolm Jackson</b> (<i>Department of Musculoskeletal and Ageing Science, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, U.K.</i>)  <b>Hydrogen peroxide as a stimulant of adaptations to physical activity in skeletal muscle and the potential facilitatory role of peroxiredoxins</b></p>

	<p><b>Selected Oral Presentations I – Redox Signaling &amp; Molecular Biology (Goldsaal A-B)</b>  <i>Chairs: <u>Stefan Chlopicki</u> (Experimental Pharmacology, Jagiellonian Centre for Experimental Therapeutics, JCET, and Jagiellonian University, Krakow, Poland), and <u>Ana Ledo</u> (Faculty of Pharmacy, University of Coimbra, Portugal)</i></p> <hr/> <p>15:30 – 15:45 OP I_01 <b>Alessandra Pecorelli</b>, Anna Guiotto, Andrea Vallese, Sara Melija, and Giuseppe Valacchi (<i>Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy</i>)  <b>MAM proteomics identifies progressive ER–mitochondria signaling dysfunction in Rett Syndrome</b></p> <p>15:45 – 16:00 OP I_02 <b>Sara Melija</b>, Alessandra Pecorelli, and Giuseppe Valacchi (<i>Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy</i>)  <b>ER–mitochondria associated membranes (MAMs) dysfunction in Rett Syndrome: Investigating calcium signaling alterations and potential therapeutic strategies</b></p> <p>16:00 – 16:15 OP I_03 <b>Eva Martín Prieto</b>, Leonardo Catalano-Iniesta, Escarlata Fernández-Puente, Luan Americo-Da-Silva, Paula Montaña-Collao, Pedro Lobos, Paola Llanos, and Jesús Palomero (<i>Department of Physiology and Pharmacology, Institute of Neurosciences of Castilla y León, INCYL, Institute of Biomedical Research of Salamanca, IBSAL, University of Salamanca, Salamanca, Spain</i>)  <b>Oxidative eustress regulates insulin signaling and promotes GLUT4-mediated glucose uptake in insulin-resistant skeletal muscle fibres</b></p> <p>16:15 – 16:30 OP I_04 <b>Souradeep Chatterjee</b>, Niklas Herrle, Pedro F. Malacarne, Timothy Warwick, Luciana Hannibal, Ralf P. Brandes, Flavia Rezende (<i>Institute for Cardiovascular Physiology, Goethe University, Frankfurt, Germany</i>)</p>	<p>15:30 – 15:45</p> <p>15:45 – 16:00</p> <p>16:00 – 16:15</p> <p>16:15 – 16:30</p>	<p><b>Selected Oral Presentations II - Metabolism and Nutrition (Goldsaal C-D)</b>  <i>Chairs: <u>Antonio Martinez-Ruiz</u> (Instituto de Investigación Sanitaria Princesa, Madrid, Spain), and <u>Aleksandra Korac</u> (Faculty of Biology, University of Belgrade, Belgrade, Serbia)</i></p> <hr/> <p>OP II_01 <b>Eugenio Barone</b>, Simona Lanzillotta, Barbara Zulli, Valeria Sommella, Gabriele Paolozzo, Anna Picca, Riccardo Calvani, Emanuele Marzetti, Virginia Boccardi, Roberta Cecchetti, Bindu Paul, Patrizia Mecocci, Antonella Tramutola, Fabio Di Domenico, and Marzia Perluigi (<i>Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome, Rome, Italy</i>)  <b>Biliverdin reductase A and metabolic resilience in Alzheimer’s disease</b></p> <p>OP II_02 <b>Julia Jelleschitz</b>, Annette Brandt, Klara Brehm, Vanessa Schnell, Tobias Jung, Ina Bergheim, and Annika Höhn (<i>Department of Molecular Toxicology, German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany</i>)  <b>Age-dependent roles of Toll-like receptor 4 in islet inflammation and endocrine function</b></p> <p>OP II_03 <b>Barbara Rocha</b>, Beatriz Paiva, Cátia Marques, Ana Ledo, and João Laranjinha (<i>Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal</i>)  <b>Nitrate-mediated redox communication: a novel inter-kingdom signaling pathway between gut microbiota and host epithelial cells during dysbiosis</b></p> <p>OP II_04 <b>Beatriz Paiva</b>, Beatriz Murta, João Laranjinha, Bárbara Rocha, and Ana Ledo (<i>Center for Neuroscience and Cell Biology and Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal</i>)  <b>Dietary nitrate as a modulator of host–microbiota redox interactions under antibiotic-induced dysbiosis</b></p>
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16:30 – 16:45	<p><b>Kynurenine aminotransferases salvage methionine via glutamine transamination in endothelial cells</b></p> <p>OP I_05 <b>Asel Aydeđer</b>, Sena Yildirim, Tuba Akgul Caglar, Asal Ghaffari Zaki, Seyed Miri, Joudi Armouch, Hamzah Issa, Esranur Yavuz, Arda Kebapçı, Mehmet Koçak, Roland Malli, Pierre Gressens, Nikolaus Plesnila, and Emrah Eroglu (<i>Research Institute for Health Sciences and Technologies, Istanbul Medipol University, Istanbul, Türkiye</i>)</p> <p><b>Selective engagement of nitric oxide signaling as a feedback regulator of hippocampal calcium dynamics</b></p>	16:30 – 16:45	<p>OP II_05 <b>Ena Simunic</b>, Kate Šešelja, Iva Podgorski, Robert Belužić, Marija Mavar, Marijana Popović Hadžija; Mirna Halasz, Morana Jaganjac, Sara Stojanović, Aleksandra Korać, Tihomir Balog, and Sandra Sobočanec (<i>Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb, Croatia</i>)</p> <p><b>Loss of Sirtuin 3 drives lipid remodeling and mitochondrial sensitivity to Western diet-induced oxidative stress</b></p>
16:45 – 17:00	<p>OP I_06 <b>Rayen De Fazio</b>, Joshua Godoy Coto, María Ciancio, Alejandro Orłowski, Ernesto Aiello, Carolina Jaquenod De Giusti (<i>Cardiovascular Research Center, CIC - Dr. Horacio E. Cingolani, National University of La Plata, La Plata, Argentina</i>)</p> <p><b>Mitochondrial NHE1 mediates ROS-dependent mPTP opening via hyperpolarization</b></p>	16:45 – 17:00	<p>OP II_06 <b>Ivana Masci</b>, Timoteo Marchini, Christian Lezón, Laura Álvarez, Melisa Kurtz, and Deborah Tasat (<i>Environmental Biototoxicology Laboratory, Institute of Emerging Technologies and Applied Sciences, University of San Martín-CONICET, Buenos Aires, Argentina</i>)</p> <p><b>Early-life undernutrition modifies redox and inflammatory immune–cardiovascular responses to air particulate matter</b></p>
17:00 – 19:00	<p><b>Poster Presentations I Group A – Environmental Exposure</b>  <u>Timoteo Marchini</u> (<i>University Hospital Freiburg, Freiburg, Germany</i>), and <u>Lea Strohm</u> (<i>Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany</i>)</p> <hr/> <p>PP I_A01/FT IV_01 <b>Mariana Garcés</b>, Marcela Moretton, Alessandra Pecorelli, Octavio Diana, Natalia Magnani, Ailen Hvozda, Diego Chiappetta, Giuseppe Valacchi, Pablo Evelson (<i>Institute of Biochemistry and Molecular Medicine, Doctor Alberto Boveris (IBIMOL UBA-CONICET), University of Buenos Aires, Faculty of Pharmacy and Biochemistry, Buenos Aires, Argentina</i>)</p> <p><b>Co-delivery of ibuprofen and Curcumin in nebulized polymeric micelles to optimize household air pollution adverse effects</b></p> <p>PP I_A02/FT IV_02 <b>Ramses Belda-Perez</b>, Teresa Vergara, Andrea Bianchi, Martina Placidi, Valeria Cordone, Carla Tatone, Giovanna Di Emidio (<i>Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy</i>)</p> <p><b>Oral administration of nano- and microplastics disrupts redox homeostasis and spindle organization in mouse oocytes: enhancement by low-dose cadmium and limited protection by melatonin</b></p>		

- PP I\_A03/FT IV\_03 **Andrea Bianchi**, Teresa Vergara, Ramses Belda Perez, Carla Tatone, Giovanna Di Emidio, Valeria Cordone  
(*Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy*)  
**Resveratrol counteracts redox imbalance and mitochondrial dysfunctions induced by nano and microplastics (NMPs) in human granulosa cells**
- PP I\_A04 **Teresa Vergara**, Ramses Belda-Perez, Andrea Bianchi, Valeria Cordone, Giovanna Di Emidio, and Carla Tatone  
(*Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy*)  
**Redox imbalance mediates nano- and microplastic-induced meiotic dysfunction in mouse oocytes: protective effects of N-acetylcysteine**
- PP I\_A05 **Selene Del Duca**, Mascia Benedusi, and Giuseppe Valacchi  
(*Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy*)  
**NLRP3 inflammasome as a new player in microplastic cutaneous toxicity**
- PP I\_A06 Octavio Diana, Mariana Garcés, Agustina Freire, Ailen Hvozda-Arana, Valeria Calabró, Silvia Alvarez, Valeria Tripodi, Natalia Magnani, and **Pablo Evelson**  
(*Institute of Biochemistry and Molecular Medicine, Doctor Alberto Boveris (IBIMOL UBA-CONICET), Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina*)  
**Urban air pollution exposure induced region-specific modulation of the glutathione cycle in the central nervous system**
- PP I\_A07 **Donya Behzadpour**, Riikka Lampinen, Laura Mussalo, Laura Salo, Mika Ihalainen, Olli Sippula, Topi Rönkkö, Pasi Jalava, and Katja M. Kanninen  
(*Department of Health Sciences, A. I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, Kuopio, Finland*)  
**Cellular responses to traffic-related ultrafine particles and the role of NRF2 signaling as a mitigation strategy against toxicological effects**
- PP I\_A08 Donya Behzadpour, Claire Fayad, Laura Mussalo, Alexey Afonin, Riikka Lampinen, Thuy Lai, Pasi Jalava, **Katja M Kanninen**  
(*Department of Health Sciences, A. I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, Kuopio, Finland*)  
**Investigation of the cellular and molecular effects of emerging airborne pollutants in a unique human cell model**
- PP I\_A09 **Arijan Valar**, Silas Storbeck, Jiayin Zheng, Marin Kuntic, Yanislav Hrytseniuk, Matthias Oelze, Dominika Mihaliková, Lea Strohm, Ivana Kuntic, Huige Li, Philipp Lurz, Christiane Ott, Thomas Münzel, Tilman Grune, Andreas Daiber  
(*Department of Cardiology, University Medical Center Mainz, Mainz, Germany*)  
**Cardiometabolic biomarker screening in subchronic aircraft noise exposure in NZO mouse strain**
- PP I\_A10 **Silas Storbeck**, Arijan Valar, Jiayin Zheng, Marin Kuntic, Yanislav Hrytseniuk, Matthias Oelze, Dominika Mihaliková, Lea Strohm, Ivana Kuntic, Christiane Ott, Thomas Münzel, Andreas Daiber, Tilman Grune  
(*Group of Cardiac Aging and Nutrition, German Institute of Human Nutrition Potsdam-Rehbruecke (DIfE), Nuthetal, Germany; and German Center*

*for Cardiovascular Research (DZHK), Partner Site Berlin, Berlin, Germany)*

**Preadiposity and prediabetes biomarker screening in subchronic aircraft noise exposure mouse models**

PP I\_A11 Leonardo Nardi, Guilherme Horta, Marin Kuntic, Ivana Kuntic, Jannik Maier, **Yami George**, Thomas Münzel, Dilja Krueger-Burg, Andreas Daiber, Michael J. Schmeisser

*(Institute for Anatomy, University Medical Center Mainz, Mainz, Germany; and Mainz Research School of Translational Biomedicine, University Medical Center Mainz, Mainz, Germany)*

**Acute and chronic aircraft noise exposure induces differential behavioral, circuit, and synaptic adaptations in mice with a link to adverse redox processes**

PP I\_A12 **Paul Stamm**, Dominika Mihalikova, Lea Strohm, Alexander Czarnowski, Henning Ubbens, Zita Grund, Dominik Gillenkirch, Michael Molitor, Matthias Oelze, Marin Kuntic, Philipp Lurz, Thomas Münzel, Andreas Daiber, Thomas Jansen

*(Department of Cardiology, University Medical Center Mainz, Mainz, Germany; and Department of Cardiology, KVB Hospital Königstein, Königstein, Germany)*

**The impact of aircraft noise exposure on the therapeutic efficacy of empagliflozin in an animal model of obesity**

PP I\_A13 **Ashmi Mishra**, Matteo Krüger, Steven Lelieveld, Ulrich Pöschl, Thomas Berkemeier *(Multiphase Chemistry Department, Max Planck Institute for Chemistry, Mainz, Germany)*

**Molecular-level understanding of aerosol oxidative potential and its health effects**

PP I\_A14 **Gloria Salazar**, Ann M. Centner, Abigail Cullen, Leila Khalili *(Department of Health, Nutrition and Food Sciences, Florida State University, Tallahassee, FL, USA)*

**Sex effects of menthol in atherosclerosis in e-cigarette-exposed mice**

PP I\_A15 **Yanislav Hrytseniuk**, Ivana Kuntic, Arijan Valar, Jiayin Zheng, Dominika Mihaliková, Matthias Oelze, Lea Strohm, Henning Ubbens, Ying Zeng, Elsa W. Böhm, Hartmut Kleinert, Philipp Lurz, Adrian Gericke, Thomas Münzel, Andreas Daiber, Marin Kuntic

**Impact of shisha smoke exposure on health effects in mice – comparison of coal heating and electric heating**

PP I\_A16 **Giulia Trinchera**, Mascia Benedusi, Alessandra Pecorelli, Mirco Cescon, Luisa Pasti and Giuseppe Valacchi

**Preventing UV induced skin damage with a marine world based new technology**

PP I\_A17 **Christophe Jones**, Olivia Zobiri, Caroline Lajoie, Daniel Leonco, Virginie Piffaut, Eric Arbey, Dang Man Pham, Namita Misra, Nukhet Cavusoglu, Frédéric Flament, Hélène Zucchi, Fabien Girard, Peggy Sextius, Laurence Denat *(Research and Innovation, L'Oréal SA, Aulnay Sous-Bois, France)*

**Skin impairment of realistic photo pollutant polycyclic aromatic hydrocarbons and ozone exposure in vitro/vivo study**

	<p>PP I_A18 Ailen G. Hvozda Arana, Romina M. Lasagni Vitar, Valeria Tripodi, <b>Natalia Magnani</b>, Sandra M. Ferreira, Camilo López-Alarcón, Pablo A. Evelson (<i>Institute for General and Inorganic Chemistry, Department of Chemical Sciences, Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina; and CONICET - Institute of Biochemistry and Molecular Medicine (IBIMOL), University of Buenos Aires, Buenos Aires, Argentina</i>)</p> <p><b>Lens as a target of oxidative damage after chronic exposure to urban air pollution</b></p>
17:00 – 19:00	<p><b>Poster Presentations I Group B – Vascular Biology</b>  <i>Chairs: <u>Jacek Zielonka</u> (Department of Biophysics, Medical College of Wisconsin, Milwaukee, WI, USA), and <u>Dominika Mihalikova</u> (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany)</i></p> <hr/> <p>PP I_B01/FT III_03 Beatriz Murta, Beatriz Paiva, Cândida Dias, Cátia F. Lourenço, João Laranjinha, <b>Ana Ledo</b> (<i>Faculty of Pharmacy and Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal</i>)</p> <p><b>Dietary nitrate drives nitrite signaling to restrain complex I reverse electron transfer after ischemia–reperfusion</b></p> <p>PP I_B02/FT I_04 <b>Mikaela Peglow Pinz</b>, Isadora Medeiros, Luiz F. Souza, Larissa R. Diniz, Natalia Oddone, Dhilan Sharma, Sayuri Miyamoto, Marcelo A. Comini, Paul K. Witting, Flávia C. Meotti (<i>Department of Biochemistry, University of Sao Paulo, Sao Paulo, Brazil; and School of Medical Sciences, University of Sydney, Sydney, Australia</i>)</p> <p><b>Uric acid– driven redox modulation in endothelial cells: Insights from a novel biosensor</b></p> <p>PP I_B03/FT I_03 <b>Nuria Goya-Iglesias</b>, Per Hagglund, Paula Martínez-Cenalmor, Tina Nybo, Lasse Gobel Lorentzen, Maria A. Pajares, Michael J. Davies, Dolores Pérez-Sala (<i>Department of Cellular and Molecular Biosciences, Centro de Investigaciones Biológicas Margarita Salas, C.S.I.C., Madrid, Spain</i>)</p> <p><b>Mutations of glial fibrillary acidic protein associated with Alexander disease increase susceptibility to protein modification and network disruption by oxidants</b></p> <p>PP I_B04/FT III_06 <b>Nadja Paeslack</b>, Maximilian Mimmler, Jana Schulz, Julia Kownatzki, Bettina Kollar, Florentina Melzow, Julie Zamor, Marin Kuntic, Klytaimnistra Kiouptsi, Natalia Soshnikova, Amrit Mann, Jens M Kittner, Andreas Daiber, Felix Sommer, Christoph Reinhardt (<i>Center for Thrombosis and Hemostasis (CTH), University Medical Center, Johannes Gutenberg-University Mainz, Mainz, Germany; and German Center for Cardiovascular Research (DZHK), Partner Site Rhine-Main, Mainz, Germany</i>)</p> <p><b>Toll-like receptor 2 impacts small intestinal villus capillarization through epithelial dual oxidase 2</b></p> <p>PP I_B05 Sara M. Jørgensen, Karen C. Yang-Jensen, Lasse G. Lorentzen, Karin Yeung, Jonas P. Eiberg, <b>Michael J. Davies</b>, Christine Y. Chuang (<i>Department of Biomedical Sciences, Panum Institute, University of Copenhagen, Copenhagen, Denmark</i>)</p> <p><b>Hypoxia modulates the synthesis and post-translational modification of collagens generated by human coronary artery smooth muscle cells</b></p>

PP I\_B06 **Fan Yang**, Giovanni E. Mann, Joern R. Steinert (*School of Cardiovascular and Metabolic Medicine & Sciences, King's BHF Centre of Research Excellence, Faculty of Life Sciences & Medicine, King's College London, London, U.K.*)

**Physiological oxygen levels reset K<sup>+</sup> channel activity in human vascular endothelial cells**

PP I\_B07 **Jennifer Schmidt**, Markus Schmitz, Henner Hollert, Ralf P. Brandes (*Institute for Cardiovascular Physiology, Goethe University, Frankfurt am Main, Germany*)

**Effect of microplastic tire abrasion of endothelial angiogenic capacity**

PP I\_B08 **Pedro Malacarne**, Melina Lopez, Niklas Herrle, Stefan Günther, Dieter Lütjohann, Tim Warwick, Ralf Brandes, Flavia Rezende (*Goethe Universität, Institute for Cardiovascular Physiology, Frankfurt, Germany*)

**Endothelial cytochrome P450 reductase-derived cholesterol limits angiogenesis**

PP I\_B09 **Carine Kader**, Melina Lopez, Dominique Thomas, Sandra Trautmann, Niklas Herrle, Ralf P. Brandes, Flavia Rezende (*Institute for Cardiovascular Physiology, Vascular Research Centre, Goethe University, Frankfurt am Main, Germany; and German Center of Cardiovascular Research (DZHK), Partner site Rhein Main, Frankfurt, Germany*)

**Purine metabolism shows a biphasic response to oxidative stress in endothelial cells**

PP I\_B10 **Angelika Puzserova**, Peter Balis, Jana Radosinska, Tomas Jasenovec, Miroslava Tarcalova, Elena Takacsova, Anna Zemancikova, Andrea Berenyiova, Jozef Torok, Ulrika Dulova, Kristina Ferenczyova, Barbora Kalocayova, Jakub Janko, Jakub Strapec, Monika Bartekova (*Centre of Experimental Medicine, Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Bratislava, Slovakia*)

**Vascular and erythrocyte effects of quercetin in spontaneously hypertensive rats**

PP I\_B11 **Iveta Bernatova**, Peter Balis, Michal Kluknavsky, Anjum Anjum, Aybuke Bozkurt, Angelika Puzserova, Andrea Micurova, Jana Kopincova (*Institute of Normal and Pathological Physiology, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovakia*)

**Dimethyl fumarate reduces blood pressure and alters vascular function in Western diet-fed rats**

PP I\_B12 **Yuga Nakaguma**, Yukina Ishii, Yuri Kato, Tomoya Ito, Akiyuki Nishimura, Motohiro Nishida (*Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan*)

**Lipid A adjuvant ameliorates doxorubicin-induced mitochondrial dysfunction**

PP I\_B13 **Shuqi Xu**, Hong Peng, Dong Zhou, Zhao Zhang, Zhiyong Li, Changlong Zhou, Yong Xia (*Department of Cardiovascular Medicine, The Affiliated Yongchuan Hospital of Chongqing Medical University, Chongqing, China*)

**Endothelial cuproptosis drives atherosclerosis via a butyrylation-dependent STAT1–SLC31A1 axis**

	<p>PP I_B14 João Gonçalves, Ana Marçal, José Ferreira, Beatriz Nunes, João Laranjinha, <b>Cátia F. Lourenço</b> (<i>Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; and Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal</i>)  <b>Redox modulation of cerebrovascular dynamics and vascular remodeling by dietary inorganic nitrate in type 2 diabetes</b></p> <p>PP I_B15 <b>Zhanna V. Bochkova</b>, Maria Barshutina, Margarita A. Khlystova, Veronika A. Katrukha, Adil A. Baizhumanov, Anna A. Fedotova, Anastasiya E. Soldatova, Kristina V. Vasilyeva, Anastasiya E. Nosova, Andrei M. Karhov, Evgeniia Y. Parshina, Aleksandr A. Moshchenko, Kseniia I. Morozova, Amir M. Kassem, Georgy V. Maksimov, Vladimir A. Oleinikov, Vladimir A. Mitkevich, Alexander A. Makarov, Alexey R. Brazhe, Alexey V. Semyanov, Vsevolod V. Belousov, Ilya V. Fedotov, Sergey Novikov, Dmitry S. Bilan, Nadezda A. Brazhe (<i>Faculty of Biology, M.V. Lomonosov Moscow State University, Moscow, Russia</i>)  <b>Properties of erythrocyte hemoglobin in stroke and Alzheimer disease</b></p> <p>PP I_B16 <b>Peter Bališ</b>, Anna Zemancikova, Andrea Berenyiova, Iveta Waczulikova, Silvia Magyarova, Andrea Micurova, Jozef Torok, Angelika Puzserova, Miroslava Tarcalova (<i>Centre of Experimental Medicine, Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Bratislava, Slovakia</i>)  <b>Sex-dependent role of AMPK in the development of endothelial dysfunction in metabolic syndrome</b></p> <p>PP I_B17 <b>Miroslava Tarcalova</b>, Anna Zemancikova, Andrea Berenyiova, Iveta Waczulikova, Silvia Magyarova, Andrea Micurova, Jozef Torok, Marian Grman, Lenka Tomasova, Anton Misak, Zuzana Vysoka, Martina Manikova, Milan Zvarik, Patrick Mydla, Jana Vlkovicova, Peter Balis, Angelika Puzserova (<i>Centre of Experimental Medicine, Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Bratislava, Slovakia</i>)  <b>Protective role of AMPK during metabolic syndrome development: differences between males and females</b></p> <p>PP I_B18 <b>Marina Volkova</b>, Harsh Jain, Andrea Bošković, Felipe Perona Martinez, Romana Schirhagl (<i>Biomaterials &amp; Biomedical Technology, University Medical Center Groningen, Groningen, The Netherlands</i>)  <b>Extracellular quantum sensing in bioreactor-grown yeast cells using fluorescent nanodiamonds</b></p>
17:00 – 19:00	<p><b>Poster Presentations I Group C – Inflammation and Immunity</b>  <i>Chairs: Josiane Cillard (Faculté de Pharmacie, Université de Rennes, Rennes, France), and Avien Dard (VIB-UGent Center for Plant Systems Biology, Ghent, Belgium)</i></p> <hr/> <p>PP I_C01/FT IV_04 <b>Kosuke Takano</b>, Takuto Toriumi, Naoki Osada, Kazuki Yoshimura, Shunto Kawamura, Yukiko Misaki, Junko Takeshita, Yoshinobu Kanda, Yukio Nagasaki, Hideki Nakasone (<i>Division of Hematology, Jichi Medical University Saitama Medical Center, Saitama, Japan; and Division of Emerging Medicine for Integrated Therapeutics (EMIT), Center for Molecular Medicine, Jichi Medical University, Shimotsuke, Japan</i>)  <b>New therapeutic strategies for cytokine storm-associated diseases using redox nanoparticles</b></p> <p>PP I_C02/FT II_04 <b>Irene Cánovas-Cervera</b>, Elena Nacher-Sendra, Carolina Ferrando, Francisco Ros-Valverde, David Bolado, Beatriz Quevedo, Georgia García-Fernández, José Santiago Ibáñez-Cabellos, Marta Seco-Cervera, Nieves Carbonell, Salvador Mena-Mollá, Federico V. Pallardó, José Luis García-Giménez (<i>Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain; INCLIVA Health Research Institute,</i></p>

*Valencia, Spain; and Consortium Center for Biomedical Network Research (CIBER-ISCIII), Madrid, Spain)*

**Methylation analysis of sepsis patients reveals intrinsic differences at admission**

PP I\_C03/FT IV\_05 Chunyu Guo, Yukio Fujiwara, Yoshihiro Komohara, Tianli Zhang, Stephen Lindahl, Ming Xian, **Tomohiro Sawa** (*Department of Microbiology, Graduate School of Medical Sciences, Kumamoto University, Chuo-ku, Kumamoto, Japan*)

**Hepatic supersulfides attenuate acetaminophen-induced liver injury via enhanced detoxification and anti-inflammatory mechanisms**

PP I\_C04/FT II\_02 **Néstor Jiménez-Cañete**, Marc Beltrà, Xuerui Wang, Antonio Zorzano, Sergio Rius-Pérez, Juan Sastre (*Department of Physiology, Faculty of Pharmacy and Food Sciences, University of Valencia, Spain*)

**Mitofusin 2 deficiency causes pancreatic fibrosis after inducing acute pancreatitis in mice**

PP I\_C05/FT II\_05 **Meiling Wu**, Shenyu Yan, Sulan Yu, Jiangang Shen (*School of Chinese Medicine, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China*)

**Targeting IL-2R nitration to enhance Treg cell-based immunotherapy**

PP I\_C06 Mosi Lin, Sidorela Zefi, **Lin Mantell** (*St John's University College of Pharmacy and Health Sciences, Queens, New York/Feinstein Institutes for Medical Research, Northwell Health System, Manhasset, NY, USA*)

**Neuroimmune regulation of hyperoxia-induced lung injury via the cholinergic anti-inflammatory pathway**

PP I\_C07 Wendy Quilumbaquin, Tamara Vico, Guadalupe Roo, Pablo Evelson, Virginia Vanasco, **Silvia Alvarez** (*Institute of Biochemistry and Molecular Medicine, School of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina*)

**Mitochondrial dysfunction in AR42J pancreatic acinar cells during endotoxemia**

PP I\_C08 **Olga Oskolkova**, Bernd Gesslbauer, Teresa Pirker, Rudolf Bauer, Valery Bochkov (*Institute of Pharmaceutical Sciences, Division of Pharmaceutical Chemistry, University of Graz, Graz, Austria*)

**Electrophilic natural products and NRF2 activators exert bidirectional control over pro-inflammatory gene expression**

PP I\_C09/FT III\_02 **Laura Gemmo**, Sara Melija, Alessandra Pecorelli, Giuseppe Valacchi (*Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy*)

**Defective PI3K/Akt–FoxO3a–mediated stress adaptation in Rett syndrome**

PP I\_C10 **Andrea Vallese**, Valeria Cordone, Andrea Bianchi, Anna Guiotto, Alessandra Pecorelli, Giuseppe Valacchi (*Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy*)

**Targeting NF- $\kappa$ B/Nrf2 crosstalk restores redox–inflammatory signaling in Rett Syndrome**

	<p>PP I_C11 <b>Atefeh Moradi</b>, Matteo Theodule, Matteo Muccini, Agnes Thalhammer, Alessandra Pecorelli, Andrea Vallese, Laura Gemmo, Valeria Cordone, Giuseppe Valacchi, Gabriele Baj (<i>Department of Life Sciences, University of Trieste, Trieste, Italy</i>)  <b>Mitochondrial dysfunction and ox inflammatory signatures across Rett Syndrome progression: integrating in vitro and ex vivo evidence</b></p> <p>PP I_C12 <b>Nadine Bothen</b>, Michael G. Weller, Vanja Munk, Ulrich Pöschl, Janine Fröhlich-Nowoisky (<i>Multiphase Chemistry, Max Planck Institute for Chemistry, Mainz, Germany</i>)  <b>Site-selective tyrosine modifications and cross-linking of the grass pollen allergen Phl p 5a by peroxynitrite</b></p> <p>PP I_C13 <b>Lena Kühn</b>, Lisa R. Knoke, Frank M.L. Peeters, Kate S. Carroll, Christina Bunse, Katrin Marcus-Alic, Frank Schulz, Lars I. Leichert (<i>Microbial Biochemistry, Medical Faculty, Ruhr University Bochum, Bochum, Germany</i>)  <b>Detection and effects of microbial N-chloramines and thiol oxidation during host pathogen interaction</b></p> <p>PP I_C14 Mansi Kumari, Aura D. Solano Galarza, Theodoros Kapellos, Ali Önder Yildirim, <b>Christian Lindermayr</b> (<i>Institute of Lung Health and Immunity (LHI), Comprehensive Pneumology Center (CPC), Helmholtz Center Munich; Member of the German Center for Lung Research (DZL), Munich, Germany</i>)  <b>Nitric oxide regulates innate immune memory in alveolar macrophages</b></p> <p>PP I_C15 <b>Betül Çıki</b>, Damla Kayalı, Betül Yılmaz (<i>Department of Medical Biochemistry, School of Medicine, Marmara University, Istanbul, Türkiye</i>)  <b>Immunoproteasome inhibition reduces inflammation driven oxidative protein damage in diabetic wound healing</b></p> <p>PP I_C16 Rebecca Cecci, Mariachiara Albertino, Serena Giannelli, Sara Rosano, Erica Staurengi, Lucrezia Floro, Gianni Vinay, Paola Gamba, Gabriella Leonarduzzi, <b>Gabriella Testa</b> (<i>Department of Clinical and Biological Sciences, University of Turin, Orbassano, Italy</i>)  <b>Olive oil-derived hydroxytyrosol counteracts oxysterol-induced neuro-inflammation in Alzheimer's disease through activation of the SIRT1 pathway</b></p> <p>PP I_C17 Regina E. Yadi, Lena Kühn, Lisa R. Knoke, Meryem Halatci, Kate S. Carroll, Natalie Lupilov, Lars I. Leichert (<i>Microbial Biochemistry, Medical Faculty, Ruhr University Bochum, Bochum, Germany</i>)  <b>Mechanisms of N-Chloramine reduction in Escherichia coli during host-pathogen interaction</b></p> <p>PP I_C18 <b>Tomoya Ito</b>, Yuga Nakakuma, Akiyuki Nishimura, Yuri Kato, Masahiro Goto, Motohiro Nishida (<i>Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan</i>)  <b>Development of oxidized glutathione based skin-permeable gels to prevent postoperative adhesions</b></p>
17:00 – 19:00	<p><b>Poster Presentations I Group D – Brain Function &amp; Neurodegeneration and Ageing</b>  <i>Chairs: <u>Giuseppe Poli</u> (Dept. of Clinical and Biological Sciences, University of Turin, Turin, Italy), and <u>Chantalle Moulton</u> (Human Longevity Program, IRCCS San Raffaele, Rome, Italy)</i></p> <p>-----</p>

PP I\_D01/FT III\_01 Fabio Di Domenico, Sara Pagnotta, Viviana Greco, Antonella Tramutola, Eugenio Barone, Yann Herault, Elizabeth Head, Andrea Urbani, **Marzia Perluigi** (*Department of Biochemical Sciences, Sapienza University of Rome, Rome, Italy*)

**Proteome profile of Alzheimer-like phenotypes in the brain of young and old individuals with Down Syndrome: focus on BACH1/NRF2 axis**

PP I\_D02/FT III\_05 Iciar Polo-Fernández, Susana Delgado-Martín, Ana Belén López-Rodríguez, Martín Hugo, Céline Decouty-Pérez, Júlia Baixauli-Martín, Fuertes-Yebra E, Ana María Pacheco, Cristóbal de Los Ríos, Po-Wah So, Javier Egea, **Antonio Martínez-Ruiz** (*Research Unit, Santa Cristina Hospital, Princesa Institute for Health Research (IIS-IP), Madrid, Spain*)

**Role of the mitochondrial sodium/calcium exchanger NCLX in ferroptosis, cell viability and brain injury after ischemic stroke**

PP I\_D03/FT III\_04 **Jiangang Shen**, Qing Liu, Ziqiao Xu (*School of Chinese Medicine, University of Hong Kong, Hong Kong, China*)

**APPL2 deletion promotes neurogenesis and functional recovery after ischemic stroke via regulation of mitochondrial dynamics and function**

PP I\_D04 **Cristina Mas-Bargues**, Javier Huete-Acevedo, Marta Arnal-Forné, Nada Belhadj, Aurora Román-Domínguez, Virgilio Pérez, Consuelo Borrás, José Viña (*Freshage Research Group, Department of Physiology, Faculty of Medicine, University of Valencia, Centro de Investigación Biomédica en Red Fragilidad y Envejecimiento Saludable-Instituto de Salud Carlos III (CIBERFES-ISCI), INCLIVA, Valencia, Spain*)

**Peripheral blood biomarkers RCAN1, Clusterin, RAGE, and malondialdehyde for early diagnosis and progression of Alzheimer's Disease**

PP I\_D05 Jennifer Cale, Sébastien Serres, Tracy D. Farr, **Joern R. Steinert** (*School of Life Sciences, University of Nottingham, Nottingham, U.K.*)

**Physiological oxygen determines ion channel activities: role of physioxia in understanding vascular insufficiency**

PP I\_D06 Marcelo Acúrcio, Gabriel Morais, Natércia Teixeira, Tiago Lima, João Laranjinha, Cátia Marques, **Carla Nunes** (*CNC-UC – Center for Neuroscience and Cell Biology and CiBB – Centre for Innovative Biomedicine and Biotechnology, University of Coimbra, Coimbra, Portugal; Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal*)

**Exploring the neuroprotective potential of a red wine polyphenolic extract in rotenone-based cellular and mouse models of Parkinson's disease**

PP I\_D07 James H. Skoyles, Lisette Sanchez-Aranguren, Theo Kantidakis, Andrew Ellis, **Irundika H.K. Dias** (*Aston Medical School, Aston University, Birmingham, U.K.*)

**Modulation-specific effects of telecommunication radiation on metabolic activity and gene expression in neuronal-like cells**

PP I\_D08 **Agatha Yokoi**, Yusuke Uchibori, Keito Okazaki, Hiroki Sekine, Hozumi Motohashi (*Department of Medical Biochemistry, Graduate School of Medicine, Tohoku University, Sendai, Japan*)

**The PNPO–PLP pathway is required for neonatal survival and cellular redox homeostasis**

PP I\_D09/FT II\_06 Abril Gorgori González, Silvana Soto-Rodriguez, Jorge Serna-de Pradenas, Remus Lupu, Kristine Stromsnes, Eva Tamayo-Torres, Miriam Martinez-Canton, Nimra Razzaq, Jaime López, Aitor Carretero, Juan Gambini, Gloria Olaso-Gonzalez, **Maria del Carmen Gomez-Cabrera** (Department of Physiology, Faculty of Medicine, University of Valencia, INCLIVA Biomedical Research Institute, Valencia, Spain)

**Resistance training preserves functional capacity in aged mice: interactions with harmol and piceid supplementation**

PP I\_D10/FT II\_03 **Marco Morosetti**, Francesco Mengarelli, Loredana Rao, Sonia Silvestri, Andrea Frontini, Michele Guescini, Luca Tiano, Patrick Orlando (Department of Life and Environmental Sciences, Polytechnic University of Marche, Ancona, Italy)

**Coq10 supplementation prevents the inhibition of myogenic differentiation in injured c2c12 murine myoblasts**

PP I\_D11/FT I\_06 **Ufuk Ersoy**, Malcolm J. Jackson (Department of Musculoskeletal and Ageing Sciences, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, U.K.)

**Ageing alters cysteine oxidation-mediated redox signalling in skeletal muscle: Integrative omics and AI-based structural predictions**

PP I\_D12 **Jana Radosinska**, Tomas Jasenovec, Angelika Puzserova, Norbert Vrbjar (Institute of Physiology, Faculty of Medicine, Comenius University in Bratislava, Bratislava, Slovakia)

**Comparative analysis of oxidative stress markers and erythrocyte functional properties in healthy children and young adults**

PP I\_D13 **Anne S. Scheller**, Katrin Spengler, Heena Doshi, Holger Steinbrenner, Regine Heller, Lars O. Klotz (Institute of Nutritional Sciences, Nutrigenomics Section, Friedrich Schiller University Jena, Jena, Germany)

**From scents to senescence: SELENBP1 as a regulator of redox signaling and endothelial aging**

PP I\_D14 **Alessia Luccarini**, Sara Barbarossa, Marco Morosetti, Elodie Dehay, Niccolò Miraglia, Patrick Orlando, Fabio Marcheggiani, Andrea Frontini, Luca Tiano, Elisabetta Damiani (Department of Life and Environmental Sciences, Polytechnic University of Marche, Ancona, Italy)

**Feeding skin cellular regeneration: the importance of 1c metabolism and the potential of 5-MTHF to counteract UV-induced damage**

PP I\_D15 **Valeria Cordone**, Ramses Belda-Perez, Teresa Vergara, Andrea Vallese, Sara Melija, Sarah Beggiato, Edoardo Tiziani, Giovanna Di Emidio, Alessandra Pecorelli, Giuseppe Valacchi, Carla Tatone (Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy)

**MeCP2 deficiency promotes mitochondrial alterations and inflammaging-related dysfunctions in ovaries: potential implications for neurodevelopmental disorders**

PP I\_D16 Anne S. Scheller, **Nina Luderer**, Carola Neef, Josephine Priebs, Lars-Oliver Klotz (Nutrigenomics Section, Institute of Nutritional Sciences, Friedrich Schiller University Jena, Jena, Germany; Section of Pharmacology, Faculty of Science and Medicine, University of Fribourg, Fribourg, Switzerland)

**The methanethiol oxidase SEMO-1 modulates lifespan and oxidative stress resistance in C. elegans in a substrate-dependent manner**

	<p>PP I_D17 <b>Ankush Prasad</b>, Renu Kushwaha, Richa Sharma, Pavel Pospíšil, Tanesha Naiken, Zineb El Idrissi, Gallic Beauchef, Robin Kurfurst, Carine Nizard, Karl Pays, Judith Elkaim (<i>Department of Biophysics, Faculty of Science, Palacký University, Olomouc, Czech Republic</i>)  <b>Replicative ageing in human keratinocytes links cell cycle dysregulation with enhanced oxidative reactivity</b></p> <p>PP I_D18 Aditya Upadhyay, Luke A. Farmer, Svenja M. Lorenz, Alireza Dehdari, Denis Kieseewetter, Mariia Novikova, Eda Kiliç, Melodie Mallais, Michael N. Donohoe, Uladzimir Barayeu, Frauke Gräter, Scott J. Dixon, Bettina Proneth, Marcus Conrad, and <b>Derek A. Pratt</b> (<i>Department of Chemistry and Biomolecular Sciences, University of Ottawa, Ottawa, Canada</i>)  <b>Lysosomal membrane-targeting unlocks exceptional ferroptosis suppression</b></p>		
19:00 – 20:00	ECR Networking ( <i>Goldsaal A-B</i> )	19:00 – 20:00	Elsevier Editors Meeting ( <i>Goldsaal C-D</i> )

**SFRR-E Annual Meeting 2026**  
**“Redox Biology, Environmental Exposure and Lifestyle”**  
**Thursday, June 4, 2026**  
**Hilton Mainz**

07:00 – 07:30	<b>Welcome Coffee</b>		
	<p><b>Sunrise Session I – Air Pollution and Redox Biology in the Lung - Insights from Preclinical and Computational Approaches</b> (Goldsaal A-B)  <i>Chairs: Daniela Caporossi</i> (Department of Movement, Human and Health Sciences, University of Rome “Foro Italico”, Rome, Italy) and <i>Ralf Brandes</i> (Goethe University, Institute for Cardiovascular Physiology, Frankfurt, Germany)</p> <p>-----</p>		<p><b>Sunrise Session II – How to Write a Good Paper and a Successful Grant Application</b> (Goldsaal C-D)  <i>Chairs: Marzia Perluigi</i> (Department of Biochemical Sciences “A. Rossi Fanelli”, Sapienza University, Rome, Italy) and <i>Tilman Grune</i> (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany)</p> <p>-----</p>
07:30 – 07:50	<p>SSL I_01 <b>Timoteo Marchini</b> (Vascular Immunology Laboratory, Department of Cardiology and Angiology, University Heart Center Freiburg-Bad Krozingen, Faculty of Medicine, University of Freiburg, Freiburg, Germany)</p> <p><b>Air pollution and redox biology: insights from animal studies</b></p>	07:30 – 08:00	<p>SSL II_01 <b>Mark Gannon</b> (Elsevier, Oxford, UK)  <b>Publishing your first article: best practices for preparing and submitting a manuscript</b></p>
07:50 – 08:10	<p>SSL I_02 <b>Mariana Garcés</b> (Institute of Biochemistry and Molecular Medicine, Doctor Alberto Boveris, IBIMOL UBA-CONICET, University of Buenos Aires, Faculty of Pharmacy and Biochemistry, Buenos Aires, Argentina)</p> <p><b>From 2D to 3D, the evolution and impact of in vitro air pollution exposure models</b></p>	08:00 – 08:30	<p>SSL II_02 <b>Anna-Liisa Levonen</b> (A.I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, Kuopio, Finland)  <b>How to write a successful grant application: from Early-career fellowships to EU consortia</b></p>
08:10 – 08:30	<p>SSL I_03 <b>Thomas Berkemeier</b>, Ashmi Mishra, Matteo Krüger, Anna T. Backes, Ulrich Pöschl (Multiphase Chemistry Department, Max Planck Institute for Chemistry, Mainz, Germany)</p> <p><b>Air pollution and oxidative damage in the lung epithelial lining fluid - insights from computational investigations</b></p>		

	<p><b>Flash Talks I – Redox biology of human diseases</b> (Goldsaal A-B) Chairs: <u>Katja Kanninen</u> (A.I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, Kuopio, Finland), and <u>Antonio Martinez-Ruiz</u> (Unidad de Investigación, Hospital Santa Cristina, Instituto de Investigación Sanitaria Princesa, IIS-IP, Madrid, Spain)</p> <hr/> <p>08:30 – 08:35 FT I_01/PP II_B03 <b>Dominika Mihaliková</b>, Alexander Czarnowski, Lea Strohm, Michael Molitor, Marin Kuntic, Dominik Gillenkirch, Natalie Wörle, Pauline Linnebach, Philipp Lurz, Andreas Daiber, Thomas Jansen, and Paul Stamm (Department of Cardiology, Cardiology I, University Medical Center Mainz, Mainz, Germany) <b>AMPK as a key mediator of cardioprotection in doxorubicin-induced cardiotoxicity</b></p> <p>08:35 – 08:40 FT I_02/PP II_B02 <b>Ramona Clemen</b>, Wiebke Dethloff, Kevin Arlt, and Sander Bekeschus (Leibniz Institute for Plasma Science and Technology, ZIK plasmatis, Greifswald, Germany) <b>Oxidized insulin alters glucose signaling and has immunogenic potential</b></p> <p>08:40 – 08:45 FT I_03/PP I_B03 <b>Nuria Goya Iglesias</b>, Per Hagglund, Paula Martínez-Cenalmor, Tina Nybo, Lasse Gobel Lorentzen, Maria A Pajares, Michael J. Davies, and Dolores Pérez-Sala (Department of Cellular and Molecular Biosciences, Centro de Investigaciones Biológicas Margarita Salas, C.S.I.C., Madrid, Spain) <b>Mutations of glial fibrillary acidic protein associated with Alexander disease increase susceptibility to protein modification and network disruption by oxidants</b></p> <p>08:45 – 08:50 FT I_04/PP I_B02 <b>Mikaela Pinz</b>, Isadora Medeiros, Luiz Souza. Larissa Diniz, Natalia Oddone, Dhilan Sharma, Sayuri Miyamoto, Marcelo Comini, Paul Witting, and Flavia Meotti</p>		<p><b>Flash Talks II – Inflammation and redox-regulated adaptations</b> (Goldsaal C-D) Chairs: <u>Ana Ledo</u> (Faculty of Pharmacy, University of Coimbra, Portugal) and <u>Uladimir Barayeu</u> (Department of Environmental Medicine and Molecular Toxicology, Tohoku University Graduate School of Medicine, Sendai, Japan)</p> <hr/> <p>08:30 – 08:35 FT II_01/PP II_B09 <b>Solveigh Koeberle</b>, Loc Le Xuan, and Andreas Koeberle (Department of Pharmacognosy, Institute of Pharmaceutical Sciences, University of Graz, Graz, Austria) <b>Non-canonical ferroptosis inhibitor orchestrates metabolic, redox, and iron-regulatory adaptations</b></p> <p>08:35 – 08:40 FT II_02/PP I_C04 <b>Néstor Jiménez Cañete</b>, Marc Beltrà, Antonio Zorzano, Sergio Rius-Pérez, and Juan Sastre (Department of Physiology, University of Valencia, Valencia, Spain) <b>Mitofusin 2 deficiency causes pancreatic fibrosis after inducing acute pancreatitis in mice</b></p> <p>08:40 – 08:45 FT II_03/PP I_D10 <b>Marco Morosetti</b>, Francesco Mengarelli, Loredana Rao, Sonia Silvestri, Andrea Frontini, Michele Guescini, Luca Tiano and Patrick Orlando (Department of Life and Environmental Sciences, Polytechnic University of Marche, Ancona, Italy) <b>Coq10 supplementation prevents the inhibition of myogenic differentiation in injured c2c12 murine myoblasts</b></p> <p>08:45 – 08:50 FT II_04/PP I_C02 <b>Irene Cánovas-Cervera</b>, Elena Nacher-Sendra, Carolina Ferrando, Francisco Ros-Valverde, David Bolado, Beatriz Quevedo, Georgia García-Fernández, José Santiago Ibáñez-Cabellos, Marta Seco-Cervera, Nieves Carbonell, Salvador Mena-Mollá, Federico Pallardó, and José Luis García-Giménez (Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain)</p>
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<p>08:50 – 08:55</p> <p>08:55 – 09:00</p>	<p><i>(Department of Biochemistry, University of Sao Paulo, Sao Paulo, Brazil)</i>  <b>Uric acid– driven redox modulation in endothelial cells: Insights from a novel biosensor</b></p> <p>FT I_05/PP II_B01 <b>Sehee Yoon</b> and Kukro Yoon <i>(Department of Internal Medicine, Konyang University College of Medicine, Daejeon, South Korea)</i>  <b>Copper oxide nanoparticles restore redox-regulated autophagic homeostasis via tfeb signaling in colistin-induced acute kidney injury</b></p> <p>FT I_06/PP I_D11 <b>Ufuk Ersoy</b> and Malcolm Jackson <i>(Department of Musculoskeletal and Ageing Sciences, Institute of Life Course and Medical Sciences, University of Liverpool, UK)</i>  <b>Ageing alters cysteine oxidation-mediated redox signalling in skeletal muscle: Integrative omics and AI-based structural predictions</b></p>	<p>08:50 – 08:55</p> <p>08:55 – 09:00</p>	<p><b>Methylation analysis of sepsis patients reveals intrinsic differences at admission.</b></p> <p>FT II_05/PP I_C05 <b>Meiling Wu</b>, Shenyu Yan, Sulan Yu, Xiang Lin, and Jiangang Shen <i>(School of Chinese Medicine, The University of Hong Kong, Hong Kong, China)</i>  <b>Targeting IL-2R nitration to enhance Treg cell-based immunotherapy</b></p> <p>FT II_06/PP I_D09 Abril Gorgori González, Silvana Soto-Rodriguez, Jorge Serna-de Pradenas, Remus Lupu, Kristine Stromsnes, Eva Tamayo-Torres, Miriam Martinez-Canton, Nimra Razzaq, Jaime López, Aitor Carretero, Juan Gambini, Gloria Olaso-Gonzalez, and <b>Maria del Carmen Gomez-Cabrera</b> <i>(Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain)</i>  <b>Resistance training preserves functional capacity in aged mice: interactions with harmol and piceid supplementation</b></p>
<p>09:00 – 09:30</p> <p>09:30 – 10:00</p>	<p><b>Symposium III – Lipid Peroxidation and Ferroptosis in Health and Disease</b> <i>(Goldsaal A-B)</i>  <i>Chairs: <u>Marcus Conrad</u> (Institute of Metabolism and Cell Death, Helmholtz Center Munich and Technical University of Munich, Munich, Germany), and <u>José Pedro Friedmann Angeli</u> (Rudolf Virchow Zentrum, Center for Integrative and Translational Bioimaging, University of Würzburg, Würzburg, Germany)</i></p> <p>-----</p> <p>SL III_01 <b>Maria Fedorova</b> <i>(Center of Membrane Biochemistry and Lipid Research, Technical University of Dresden, Faculty of Medicine Carl Gustav Carus, Dresden, Germany)</i>  <b>Lipid peroxidation as a marker of ferroptotic cell death: analytical and biochemical perspectives</b></p> <p>SL III_02 <b>Derek Pratt</b> <i>(University of Ottawa, Ottawa, Canada)</i></p>	<p>09:00 – 09:30</p> <p>09:30 – 10:00</p>	<p><b>Symposium IV – Lipid and Epilipid Signatures of Metabolic and Environmental Stress</b> <i>(Goldsaal C-D)</i>  <i>Chairs: <u>Francisco José Schopfer</u> (Department of Pharmacology and Chemical Biology, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA), and <u>Corinne M. Spickett</u> (School of Biosciences, College of Health and Life Sciences, Aston University, Birmingham. UK)</i></p> <p>-----</p> <p>SL IV_01 <b>Matej Orešič</b> <i>(School of Medical Sciences, Örebro University, Örebro, Sweden)</i>  <b>Lipidomic approaches to study the exposome in health and disease</b></p> <p>SL IV_02 <b>Francisco José Schopfer</b> <i>(Department of Pharmacology and Chemical Biology, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA)</i></p>

10:00 – 10:30	<p><b>Spatiotemporal monitoring of subcellular lipid peroxidation during ferroptosis enables the targeting of hotspots for intervention</b></p> <p>SL III_03 <b>Uladzimir Barayeu</b> (<i>Department of Environmental Medicine and Molecular Toxicology, Tohoku University Graduate School of Medicine, Sendai, Japan, and Max-Planck-Institute for Polymer Research, Mainz, Germany</i>)</p> <p><b>Evolutionarily conserved cyclo-octasulfur prevents ferroptosis in mammals</b></p>	10:00 – 10:30	<p><b>Stored for the storm: phospholipids release anti-inflammatory nitro-lipids in endotoxemia</b></p> <p>SL IV_03 <b>Tiago Conde</b>, Diana Lopes, Ana Rita Pais, Joana Batista, Tatiana Maurício, Felisa Rey, Tânia Melo, Pedro Domingues, and M. Rosário Domingues (<i>CESAM—Centre for Environmental and Marine Studies, Department of Chemistry, University of Aveiro, Aveiro, Portugal</i>)</p> <p><b>Algal lipids and epilipids as markers of environmental stress and beneficial bioactive compounds</b></p>
10:30 – 11:00	<b>Coffee / Poster / Exhibition</b> (Brasserie Foyer / Goldsaal Foyer)		
11:00 – 11:30	<p><b>Symposium V – Switches in the Balance: Redox Regulation of Kinase–Phosphatase Signalling</b> (<i>Goldsaal A-B</i>)</p> <p><i>Chairs: Paraskevi Kritsiligkou</i> (<i>Department of Biochemistry, Cell and Systems Biology, University of Liverpool, Liverpool, U.K.</i>), and <i>Olena Rudyk</i> (<i>School of Cardiovascular and Metabolic Medicine &amp; Sciences, Faculty of Life Science and Medicine, King’s College London, London, U.K.</i>)</p> <p>-----</p> <p>SL V_01 <b>Hayley Sharpe</b> (<i>Babraham Institute, Cambridge, U.K.</i>)</p> <p><b>Cysteine redox switches in phosphotyrosine signalling</b></p>	11:00 – 11:30	<p><b>Symposium VI – Principles of Compartmentalized Redox Signalling across Kingdoms</b> (<i>Goldsaal C-D</i>)</p> <p><i>Chairs: Vanesa Cepas López</i> (<i>Department of Oncology, University of Turin, Candiolo Cancer Institute FPO-IRCCS, Turin, Italy</i>), and <i>José Manuel Ugalde</i> (<i>Institute of Crop Science and Resource Conservation. INRES, Faculty of Agriculture, University of Bonn, Bonn, Germany</i>)</p> <p>-----</p> <p>SL VI_01 <b>José Manuel Ugalde</b> (<i>Institute of Crop Science and Resource Conservation. INRES, Faculty of Agriculture, University of Bonn, Bonn, Germany</i>)</p> <p><b>Shining light into plant redox dynamics</b></p>
11:30 – 12:00	<p>SL V_02 <b>Dominic Byrne</b> (<i>Department of Biochemistry, Cell and Systems Biology, University of Liverpool, Liverpool, U.K.</i>)</p> <p><b>Understanding oxidation-dependent regulation of protein kinases</b></p>	11:30 – 12:00	<p>SL VI_02 <b>Ilaria Sorrentino</b>, Eduardo Arevalo-Nuñez de Arenas, Angie Katherine Molina-Oviedo, Roberto Sitia, and Iria Medraño-Fernandez (<i>Department of Bioengineering, University Carlos III of Madrid, Madrid, Spain</i>)</p> <p><b>Surfing on redox waves: ER peroxiporin AQP11, more than a channel</b></p>
12:00 – 12:30	<p>SL V_03 <b>Olena Rudyk</b> (<i>School of Cardiovascular and Metabolic Medicine &amp; Sciences, Faculty of Life Science and Medicine, King’s College London, London, U.K.</i>)</p> <p><b>Disulfide dependent PKAR1<math>\alpha</math> regulation as a novel redox sensing mechanism of vasodilation</b></p>	12:00 – 12:30	<p>SL VI_03 <b>Laura de Cubas Landaluce</b> (<i>Division of Redox Regulation, German Cancer Research Center, DKFZ, Heidelberg, Germany</i>)</p> <p><b>Exploring the interplay between redox and condensate biology</b></p>
	<b>Flash Talks III – Brain function, neurodegeneration and ischemia-reperfusion</b> ( <i>Goldsaal A-B</i> )		<b>Flash Talks IV – Environmental and pharmaceutical exposures III</b> ( <i>Goldsaal C-D</i> )

	<p>Chairs: <u>Chang Chen</u> (Institute of Biophysics, Chinese Academy of Sciences, Beijing, China), and <u>Maria Federova</u> (Technische Universität Dresden, Dresden, Germany)</p> <p>-----</p>		<p>Chairs: <u>Hozumi Motohashi</u> (Department of Medical Biochemistry, Tohoku University Graduate School of Medicine, Sendai, Japan), and <u>Christiane Ott</u> (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany)</p> <p>-----</p>
12:30 – 12:35	<p>FT III_01/PP I_D01 Fabio Di Domenico, Sara Pagnotta, Viviana Greco, A Tramutola, Eugenio Barone, Y Herault, E Head, Andrea Urbani, and <b>Marzia Perluigi</b> (Department of Biomedical Sciences, Sapienza University, Rome, Italy) <b>Proteome profile of Alzheimer-like phenotypes in the brain of young and old individuals with Down Syndrome: focus on BACH1/NRF2 axis</b></p>	12:30 – 12:35	<p>FT IV_01/PP I_A01 <b>Mariana Garcés</b>, Marcela Moretton, Alessandra Pecorelli, Octavio Diana, Ailen Hvozda Arana, Natalia Magnani, Diego Chiappeta, Giuseppe Valacchi, and Pablo Evelson (Institute of Biochemistry and Molecular Medicine, Doctor Alberto Boveris, University of Buenos Aires, Buenos Aires, Argentina) <b>Co-delivery of ibuprofen and curcumin in nebulized polymeric micelles to optimize household air pollution adverse effects</b></p>
12:35 – 12:40	<p>FT III_02/PP I_C09 <b>Laura Gemmo</b>, Sara Melija, Alessandra Pecorelli, and Giuseppe Valacchi (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy) <b>Defective PI3K/Akt–FoxO3a–mediated stress adaptation in Rett Syndrome</b></p>	12:35 – 12:40	<p>FT IV_02/PP I_A02 <b>Ramses Belda Perez</b>, Teresa Vergara, Andrea Bianchi, Martina Placidi, Valeria Cordone, Carla Tatone, and Giovanna Di Emidio (Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy) <b>Oral administration of nano- and microplastics disrupts redox homeostasis and spindle organization in mouse oocytes: enhancement by low-dose cadmium and limited protection by melatonin</b></p>
12:40 – 12:45	<p>FT III_03/PP I_B01 <b>Beatriz Paiva</b>, Cândida Dias, Cátia Lourenço, João Laranjinha, and Ana Ledo (Faculty of Pharmacy, University of Coimbra, Portugal) <b>Dietary nitrate drives nitrite signaling to restrain Complex I reverse electron transfer after ischemia-reperfusion</b></p>	12:40 – 12:45	<p>FT IV_03/PP I_A03 <b>Andrea Bianchi</b>, Teresa Vergara, Ramses Belda Perez, Carla Tatone, Giovanna Di Emidio, and Valeria Cordone (Department of Life, Health and Environmental Science, University of L'Aquila, L'Aquila, Italy) <b>Resveratrol counteracts redox imbalance and mitochondrial dysfunctions induced by nano and microplastics (NMPs) in human granulosa cells</b></p>
12:45 – 12:50	<p>FT III_04/PP I_D03 <b>Jiangang Shen</b>, Qing Liu, and Ziqiao Xu (School of Chinese Medicine, University of Hong Kong, Hong Kong, China) <b>APPL2 deletion promotes neurogenesis and functional recovery after ischemic stroke via regulation of mitochondrial dynamics and function</b></p>	12:45 – 12:50	<p>FT IV_04/PP I_C01 <b>Kosuke Takano</b>, Takuto Toriumi, Naoki Osada, Kazuki Yoshimura, Shunto Kawamura, Yukiko Misaki, Junko Takeshita, Yoshinobu Kanda, Yukio Nagasaki, and Hideki Nakasone (Division of Emerging Medicine for Integrated Therapeutics, Jichi Medical University, Shimotsuke, Japan)</p>
12:50 – 12:55	<p>FT III_05/PP I_D02 Icíar Polo-Fernández, Susana Delgado-Martín, Ana Belén López-Rodríguez, Martín Hugo, Céline Decouty-Pérez, Júlia Baixauli-Martín, Fuertes-Yebra E, Ana María Pacheco, Cristóbal de Los Ríos, Po-Wah So, Javier Egea,</p>		



	<p>Liverpool, Liverpool, UK), <b>Phounganh Phungdao</b> (GlaxoSmithKline, Siena, Italy), and <b>Angela Mastaloudis</b> (Women In Nutraceuticals, Chandler, AZ, USA, and Dynamis Nutrition Science, Salt Lake City, UT USA)  <b>Networking and Community Building</b></p>		<p>LS III_02 Kinana Habra, Georgia Wilson, Jade Creighton, Maria Hatzia Apostolou, and <b>Zoi Michailidou</b> (Department of Biosciences, Centre for Systems Health and Integrated Metabolic Research, Nottingham Trent University, Nottingham, UK)  <b>Adipose tissue oxygen levels matter; are we capturing true metabolic intra-organ cellular responses in standard in vitro models?</b></p>
<p>14:00 – 14:15</p> <p>14:15 – 14:30</p> <p>14:30 – 14:45</p>	<p><b>Selected Oral Presentations III - Environmental exposure and lifestyle risk factors (Goldsaal A-B)</b>  Chairs: <u>Judy de Haan</u> (Cardiovascular Inflammation and Redox Biology Laboratory, Baker Heart and Diabetes Institute, Melbourne, Australia), and <u>Bato Korac</u> (Department of Physiology, Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, Belgrade, Serbia)  -----  OP III_01 <b>Anthony White</b>, Hazel Quek, Patrick Asare, Emily Vivian, Dayeon Kim, Fazeleh Etebar, Carla Cuni-Lopez, and Zoran Ristovski (Department of Brain and Mental Health, QIMR Berghofer Medical Research Institute, Brisbane, Australia)  <b>Redox biology of wildfire smoke and impacts on human health</b>  -----  OP III_02 <b>Jiayin Zheng</b>, Marin Kuntić, Matthias Oelze, Ivana Kuntić, Nora de Camp, Jürgen Bergeler, Arijan Valar, Loreen Jager, Yanislav Hrytseniuk, Dominika Mihaliková, Lea Strohm, Huige Li, Philipp Lurz, Dilja Krueger-Burg, Michael Schmeisser, Thomas Münzel, and Andreas Daiber (Laboratory of Molecular Cardiology, Department of Cardiology 1, University Medical Center of the Johannes Gutenberg-University, Mainz, Germany)  <b>Long-term aircraft noise exposure induces neuroelectrophysiological remodeling and brain–heart axis oxidative stress in mice</b></p>	<p>14:00 – 14:15</p> <p>14:15 – 14:30</p> <p>14:30 – 14:45</p>	<p><b>Selected Oral Presentations IV – Vascular biology and redox biology-associated modifications (Goldsaal C-D)</b>  Chairs: <u>Albert van der Vliet</u> (Department of Pathology and Laboratory Medicine, Larner College of Medicine, University of Vermont, Burlington, VT, USA), and <u>Aleksandra Jankovic</u> (Department of Physiology, Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, Belgrade, Serbia)  -----  OP IV_01 <b>Sana'a Khraisat</b>, Moritz Brandt, and Philip Wenzel (Center for Thrombosis and Hemostasis, Johannes Gutenberg University Mainz, Mainz, Germany)  <b>Telomeric noncoding RNA TERRA and its regulatory network in murine heart failure</b>  -----  OP IV_02 <b>Helen Hemmling</b>, Nina Dickerhof, Michael Maze, and Clare Hawkins (Department of Biomedical Sciences, University of Copenhagen, Denmark)  <b>Hypochlorous acid-mediated modification diminishes the ability of histones to kill bacteria</b>  -----  OP IV_03 <b>Qi Luo</b>, Melania Aluia, Stefanie Finger, Philipp Lurz, Philip Wenzel, and Michael Molitor (Center for Thrombosis and Hemostasis, Johannes Gutenberg University Mainz, Mainz, Germany)  <b>Inhibiting coagulation factor XI improves cardiac dysfunction in ischemia/reperfusion injury in mice with excess neurohormonal activation.</b></p>

14:45 – 15:00	<p>OP III_03 <b>Thuy Lai</b>, Alexey Afonin, Laura Mussalo, Paula Korhonen, Mika Ihalainen, Tuukka Kokkola, Ghulam Mustafa, Veronika Górová, Hennariikka Koivisto, Pasi Miettinen, Riikka Lampinen, Heikki Tanila, Pasi Jalava, Olli Sippula, and Katja Kanninen (<i>A. I Virtanen Institute for Molecular Science University of Eastern Finland, Kuopio, Finland</i>)</p> <p><b>Synergistic effects of ultrafine particulate matter and noise in Alzheimer’s disease and wild-type mouse models</b></p>	14:45 – 15:00	<p>OP IV_04 Lasse Lorentzen, Karin Yeung, Camilo Lopez-Alarcon, Jonas Eiberg, and <b>Michael Davies</b> (<i>Department of Biomedical Sciences, University of Copenhagen, Denmark</i>)</p> <p><b>Proteomic analysis of oxidative modifications on metabolic proteins in human atherosclerotic plaques and control arteries</b></p>
15:00 – 15:15	<p>OP III_04 <b>Lea Strohm</b>, Dominika Mihalikova, Alexander Czarnowski, Omar Hahad, Marin Kuntic, Michael Molitor, Philipp Lurz, Thomas Münzel, Andreas Daiber, and Paul Stamm (<i>Department of Cardiology 1, University Medical Center of the Johannes Gutenberg-University, Mainz, Germany</i>)</p> <p><b>Cardiovascular and metabolic acute effects of heated tobacco products in healthy smokers</b></p>	15:00 – 15:15	<p>OP IV_05 <b>Tamara Zakic</b>, Jelena Jevtic, Maja Vukobratovic, Igor Golic, Biljana Srdic Galic, Aleksandra Korac, Vanja Pekovic-Vaughan, Aleksandra Jankovic, and Bato Korac (<i>Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</i>)</p> <p><b>Mitochondrial remodelling as a pivotal redox-sensitive mediator of breast cancer-adipose tissue crosstalk</b></p>
15:15 – 15:30	<p>OP III_05 <b>Siobhan Crosby</b>, Magdalena Minnion, Sascha Freigang, Colleen Deane, Michael Grocott, Andrew Cumpstey, Stephen Wotton, Alan Jackson, and Martin Feelisch (<i>University of Southampton, UK</i>)</p> <p><b>Redox and allostasis: coping with the challenges of overwintering in Antarctica</b></p>	15:15 – 15:30	<p>OP IV_06 <b>Charlie Boutin</b>, Daniel Kierzkowski, Ryan Mailloux, and David Morse (<i>IRBV, Département de Sciences Biologiques, Université de Montréal, Montréal, Canada</i>)</p> <p><b>One protein, two enzymatic chemistries: cryptic redox catalysis in a plant glycolytic enzyme</b></p>
15:30 – 17:30	<p><b>Poster Presentations II Group A – Redox Chemistry, Redox Signaling and Molecular Biology</b></p> <p><i>Chairs: <u>Malcolm Jackson</u> (Department of Musculoskeletal and Ageing Science, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, UK), and <u>Veronica Miquel Herranz</u> (Institute of Experimental Internal Medicine and Systems Biology, RWTH Aachen, Aachen, Germany)</i></p> <p>-----</p>		

PP II\_A01 **Ivan Gout** (*Division of Biosciences, Department of Structural and Molecular Biology, University College London, London, U.K.*)  
**Coenzyme A biology under oxidative stress**

PP II\_A02 **Yuhan Zhao**, Ivan Gout (*Department of Structural and Molecular Biology, University College London, London, U.K.*)  
**Detection and partial purification of mammalian CoA-dependent thiol transferase**

PP II\_A03 Caleb Fredrick, Asamina Villalobos, Jennifer Gavina Chavez, Matea Juric, **Jacek Zielonka** (*Department of Biophysics, Medical College of Wisconsin, Milwaukee, WI, USA*)  
**Orthovanadate – a redox switch for superoxide?**

PP II\_A04 **Bruce Morgan**, Jannik Zimmermann, Lukas Lang, Julia Malo Pueyo, Joris Messens, Marcel Deponte (*Institute for Biochemistry, Saarbrücken, Germany*)  
**Hetero-oligomerization drives structural plasticity of eukaryotic peroxiredoxins**

PP II\_A05 **Lara Biegel**, Nina Luderer, Josephine Priebes, Lars-Oliver Klotz (*Nutrigenomics Section, Institute of Nutritional Sciences, Friedrich Schiller University Jena, Jena, Germany*)  
**Copper-induced methanethiol oxidase activity of selenium-binding protein in *Caenorhabditis elegans***

PP II\_A06 **Sabine Schmitt**, Timea Komlódi, Lucie Rychtarova, Chris Donnelly, Hans Zischka, Erich Gnaiger (*Oroboros Instruments, Innsbruck, Austria*)  
**Oxygen dependence of hydrogen peroxide production in isolated mitochondria and permeabilized cells**

PP II\_A07 Zuzanna Urban-Wójciuk, Alicja Dziadosz-Brzezińska, Maciej Cieśla, Sara Kusiński, Elżbieta Chruściel, Ines Papak, Łukasz Arcimowicz, Natalia Marek-Trzonkowska, Tomasz Marjański, Witold Rzyman, **Alicja Sznarkowska** (*University of Gdansk, International Centre for Cancer Vaccine Science, Gdansk, Poland*)  
**Dual promoter architecture of NFE2L2 underlies isoform-specific translational control of NRF2**

PP II\_A08 **Uraiwan Panich**, Tasanee Onkoksoong (*Department of Pharmacology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand*)  
**Hypoxia-driven temozolomide resistance in glioblastoma is mediated by NRF2 and PGC-1 $\alpha$  signaling**

PP II\_A09 **Adriana Martišková**, Natália Andelová, Miroslav Ferko, Olga Gawrys, Luděk Červenka, Matúš Sýkora, Katarína Ondreják Andelová, Barbara Szeiffová Bačová (*Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovakia*)  
**Stimulator of sGC attenuates pro-oxidant activity in the model of chronic heart failure caused by pressure and volume overload**

PP II\_A10 **Karen Usgame**, Per M. Häggglund, Michael J. Davies, Eduardo Fuentes-Lemus, Camilo López-Alarcón (*Faculty of Chemistry and Pharmacy, Pontifical Catholic University of Chile, Santiago, Chile*)

**Oxidative modification of human glucose 6-phosphate dehydrogenase induced by peroxynitrite affects enzyme activity in a bicarbonate-dependent manner**

PP II\_A11 **Harsh Jain**, Romana Schirhagl (*Department of Biomaterials and Biomedical Technology, University Medical Center Groningen, Groningen, The Netherlands*)

**Nanodiamond quantum sensing of free radicals in chinese hamster ovary cells**

PP II\_A12 **Patricia Capillas Herrero**, Luke F. Gamon, Michael J. Davies (*Department of Biomedical Science, University of Copenhagen, Copenhagen, Denmark*)

**Identification of 4-hydroxynonenal adducted proteins in T cells**

PP II\_A13 Sena Unver, Asena Himmetoglu, Saima Ikram, Timucin Avsar, Serdar Durdagi, **Yesim Negis** (*Department of Medical Biochemistry, School of Medicine, Bahçeşehir University, Istanbul, Türkiye*)

**An in silico multi-scale molecular modeling and in vitro analysis of  $\alpha$ -tocopherol and  $\alpha$ -tocopheryl phosphate interactions with the Nox2 complex**

PP II\_A14 **Jose C. Casas-Martinez**, Penglin Li, Qin Xia, Antonio Miranda-Vizueté, Emma McDermott, Peter Dockery, Afshin Samali, Brian McDonagh (*Department of Physiology, School of Pharmacy and Medical Sciences, University of Galway, Galway, Ireland; and Apoptosis Research Centre, University of Galway, Galway, Ireland*)

**PRDX-2 coordinates redox and ER stress signalling to support mitochondrial–ER communication during exercise**

PP II\_A15 **Yuna Baba**, Shota Wada, Hiroaki Takayama, Takashi Toyama, Yoshiro Saito, Toshinari Takamura, Ryo Ushioda (*Graduate School of Life Sciences, Kyoto Sangyo University, Kyoto, Japan*)

**Disruption of ER homeostasis by selenoproteins-induced reductive stress**

PP II\_A16 **Hatsuho Kawauchi**, Chika Tsutsumi, Keitaro Umezawa, Shota Wada, Ryo Ushioda (*Division of Life Science, Graduate School of Kyoto Sangyo University, Kyoto, Japan*)

**Maintenance of ER homeostasis through protein persulfidation**

PP II\_A17 **Inga Peters**, Timo Bunger, Julia J. Forst, Rabea Bartölke, Alina Sigaeva, Henrik Mouritsen, Karin Dedek (*Neurosensorics/Animal Navigation, Institute for Biology and Environmental Sciences, University of Oldenburg, Oldenburg, Germany*)

**Exploring the role of retinal cryptochromes and the radical pair mechanism in avian navigation**

	<p>PP II_A18 <b>Monthon Tangjitmungman</b> (<i>Department of Life Sciences, University College London, London, U.K.</i>)  <b>Identifying the enzymes of the coalation/decoalation cycle</b></p>
15:30 – 17:30	<p><b>Poster Presentations II Group B – Redox Biology of Human Diseases</b>  <i>Alfonso Pompella</i> (<i>Department of Translational Research NTMS, University of Pisa Medical School, Pisa, Italy</i>), and <i>Alina Sigaeva</i> (<i>Division of Cellular and Clinical Proteomics, Department of Protein Science, KTH Royal Institute of Technology, Stockholm, Sweden</i>)</p> <hr/> <p>PP II_B01/FT I_05 <b>Sehee Yoon</b>, Kukro Yoon (<i>Department of Internal Medicine, Konyang University College of Medicine, Daejeon, South Korea</i>)  <b>Copper oxide nanoparticles restore redox-regulated autophagic homeostasis via tfeb signaling in colistin-induced acute kidney injury</b></p> <p>PP II_B02/FT I_02 <b>Ramona Clemen</b>, Wiebke Dethloff, Kevin Arlt, Sander Bekeschus (<i>ZIK plasmatis, Leibniz Institute for Plasma Science and Technology (INP), Greifswald, Germany</i>)  <b>Oxidized insulin alters glucose signaling and has immunogenic potential</b></p> <p>PP II_B03/FT I_01 <b>Dominika Mihalikova</b>, Alexander Czarnowski, Lea Strohm, Michael Molitor, Marin Kuntic, Natalie Wörle, Pauline Linnebach, Philipp Lurz, Andreas Daiber, Thomas Jansen, Paul Stamm (<i>Department of Cardiology, University Medical Center Mainz, Mainz, Germany</i>)  <b>AMPK as a key mediator of cardioprotection in doxorubicin-induced cardiotoxicity</b></p> <p>PP II_B04 <b>Alexander Czarnowski</b>, Dominika Mihalikova, Lea Strohm, Michael Molitor, Marin Kuntic, Natalie Wörle, Pauline Linnebach, Philipp Lurz, Andreas Daiber, Thomas Jansen, Paul Stamm (<i>Department of Cardiology, University Medical Center Mainz, Mainz, Germany</i>)  <b>Sex specific mechanisms of oxidative stress, inflammation, and cardiac dysfunction in doxorubicin-induced cardiotoxicity</b></p> <p>PP II_B05 <b>Viktória Líšková</b>, Miroslav Barančík, Barbora Svetláková (<i>Institute for Heart Research, Centre for Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovakia</i>)  <b>The role of autophagy in doxorubicin-induced toxicity</b></p> <p>PP II_B06 Angélique Schniebs, Stella Youssafi, Claudia Götsch, Leticia Prates Roma, <b>Janina Frisch</b> (<i>Biophysics, Saarland University, Homburg, Germany</i>)  <b>Txnip signaling in diabetic cardiomyopathy: exploring novel therapeutic avenues</b></p> <p>PP II_B07 Adrián Bayonas-Ruiz, Juan R. Gimeno-Blanes, Francisca M. Muñoz-Franco, María del Carmen Olmo-Conesa, María Sabater-Molina, <b>Bárbara Bonacasa</b> (<i>Department of Physiology, Human Physiology Area, Edificio Departamental, Campus CC Salud-El Palmar, Campus de Excelencia Internacional de la Universidad de Murcia, Murcia, Spain; and Research Group of Physical Exercise and Human Performance, Edificio LAIB. Campus CC Salud-El Palmar, Campus de Excelencia Internacional de la Universidad de Murcia, Murcia, Spain</i>)  <b>Enhanced oxygen efficiency and cardiometabolic adaptability after concurrent training in hypertrophic cardiomyopathy</b></p>

PP II\_B08 **Daria Kornieieva**, Matus Sykora, Barbora Kalocayova, Adriana Martiskova, Barbora Szeiffova Bacova, Branislav Kura (*Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovakia; Institute of Biochemistry and Microbiology, Faculty of Chemical and Food Technology, Slovak University of Technology, Bratislava, Slovakia*)

**Effects of molecular hydrogen on the pathophysiology of heart failure**

PP II\_B09/FT II\_01 Loc Le Xuan, Andreas Koeberle, **Solveigh C. Koeberle** (*Department of Pharmacognosy, Institute of Pharmaceutical Sciences, University of Graz, Graz, Austria*)

**Non-canonical ferroptosis inhibitor orchestrates metabolic, redox, and iron-regulatory adaptations**

PP II\_B10 **Aleksandra Grzelakowska**, Jacek Zielonka (*Institute of Polymer and Dye Technology, Faculty of Chemistry, Lodz University of Technology, Lodz, Poland*)

**Targeting azo initiators to mitochondria - a novel approach to study the role of mitochondrial lipid peroxidation in ferroptosis**

PP II\_B11 **Oren Tirosh**, Sarit Anavi, Nicole Giltman, Haim Zeigerman, Zecharia Madar (*Institute of Biochemistry, Food Science and Nutrition, Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot, Israel*)

**The hormetic effect of 7-ketocholesterol in preventing ferroptosis**

PP II\_B12 Yoon Yong Choi, Weon-Ju Lee, **Yong Chool Boo** (*Kyungpook National University Hospital, Kyungpook National University, Daegu, South Korea*)

**Protective effects of cysteine analogs against methylglyoxal-Induced cytotoxicity in human dermal fibroblasts and retinal pigment epithelial cells**

PP II\_B13 **Tom S. Dixon**, Albena T. Dinkova-Kostova, Sharadha Dayalan Naidu, Martina Klevstig, John D. Hayes (*The University of Dundee, Jacqui Wood Cancer Centre, Dundee, U.K.; and Bioscience COPD/IPF, Respiratory & Immunology, Biopharmaceuticals R&D, AstraZeneca, Cambridge, U.K.*)

**Evaluation of the mechanisms by which Nrf2 activation inhibits lung fibrosis**

PP II\_B14 **Manami Tomomatsu**, Naoto Imamura, Hoshimi Izumi, Masatsugu Watanabe, Masataka Ikeda, Tomomi Ide, Shohei Uchinomiya, Akio Ojida, Mirinthorn Jutanom, Kazushi Morimoto, Ken-ichi Yamada (*Department of Molecular Pathobiology, Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan*)

**Oxidized-LDL induces metabolic alterations in retinal pigment epithelial cells**

PP II\_B15 **Maria Borja-Gonzalez**, Raúl González-Ojeda, Anthony J. Sannicandro, Chao Su, Elan C. McCarthy, Clara Sanz-Nogués, Roisin M. Dwyer, Brian McDonagh, Katarzyna Goljanek-Whysall (*Discipline of Physiology, College of Medicine, Nursing and Health Sciences and Galway RNA Research Cluster, University of Galway, Galway, Ireland; Apoptosis Research Centre, University of Galway, Galway, Ireland*)

**miR-379-3p regulates mitochondrial homeostasis and innate inflammation response**

	<p>PP II_B16 <b>Jakub Śliwowski</b>, Aleksandra Wojszel, Justyna Rentflejsz, Małgorzata M. Brzóska, Joanna Rogalska, Zyta B. Wojszel (<i>Interdisciplinary Students' Scientific Group, Department of Geriatrics, Medical University of Białystok, Białystok, Poland</i>)  <b>Association of appendicular skeletal muscle mass and strength with BDNF, irisin, and redox balance in geriatric patients</b></p> <p>PP II_B17 <b>Aleksandra Wojszel</b>, Jakub Śliwowski, Justyna Rentflejsz, Małgorzata M. Brzóska, Joanna Rogalska, Zyta B. Wojszel (<i>Interdisciplinary Students' Scientific Group, Department of Geriatrics, Medical University of Białystok, Białystok, Poland; and Doctoral School, Medical University of Białystok, Białystok, Poland</i>)  <b>Serum lipid peroxide levels and their associations with muscle mass, muscle strength, and body fat indices in older adults</b></p> <p>PP II_B18 <b>Dejun Zhang</b>, Oksana Malanchuk, Jiusheng Lin, Charlie Brett, Mark A. Wilson, Tammaryn Lashley, Sew-Yeu Peak-Chew, Mark Skehel, Gyorgy Szabadka, Ivan Gout (<i>Structural and Molecular Biology, University College London, London, U.K.</i>)  <b>Regulation of DJ-1 by CoAlation in Parkinson's Disease</b></p> <p>PP II_B19 <b>Elena Ainzúa</b>, Aurora Santamaría, Víctor Marqués, María Martínez-Azcona, Guillermo Zalba, María Ujué Moreno (<i>Department of Biochemistry and Genetics, University of Navarra, Pamplona, Spain; and Institute for Health Research (IdiSNA), Pamplona, Spain</i>)  <b>Endothelial NADPH oxidase 5 (NOX5) exacerbates renal damage induced by type II diabetes</b></p>
15:30 – 17:30	<p><b>Poster Presentations II Group C – Cancer and Pharmacology &amp; Toxicology</b>  <i>Chairs: Mascia Benedusi (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy), and Ufuk Ersoy (Department of Musculoskeletal and Ageing Sciences, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, U.K.)</i></p> <hr/> <p>PP II_C01 <b>William A. James</b>, Amy Bankier, Isavella Petrou, Adele Valentova, Ying Zhang, Oliver Read, Sharadha Dayalan Naidu, Albena T. Dinkova-Kostova (<i>Jacqui Wood Cancer Centre, Division of Cancer Research, School of Medicine, University of Dundee, Dundee, U.K.</i>)  <b>Nrf2 activation sensitizes cancer cells to quinone-based Hsp90 inhibitors</b></p> <p>PP II_C02 <b>Maja Vukobratovic</b>, Jelena Jevtic, Tamara Zakic, Aleksandra Korac, Vanja Pekovic-Vaughan, Bato Korac, Aleksandra Jankovic (<i>Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</i>)  <b>Brown adipose tissue undergoes Nrf2-driven redox reprogramming in orthotopic breast cancer mouse model</b></p> <p>PP II_C03 <b>Jelena Jevtic</b>, Maja Vukobratovic, Tamara Zakic, Aleksandra Korac, Vanja Pekovic-Vaughan, Bato Korac, Aleksandra Jankovic (<i>Institute for Biological Research "Sinisa Stankovic"-National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia</i>)  <b>Nrf2-dependent changes in FAS and NADPH-producing enzymes in cancer-associated adipose tissue during in vivo breast tumor growth</b></p> <p>PP II_C04 <b>Clara García-Calvo</b>, Lucía Santos-Sendín, Carla Ijurko, Sandra Muntión, María Díez-Campelo, María-Belén Vidriales, Fermín Sánchez-Guijo, Ángel Hernández-Hernández (<i>Department of Biochemistry and Molecular Biology, University of Salamanca, Salamanca, Spain; and Institute of</i></p>

*Biomedical Research of Salamanca, Salamanca, Spain)*

**NOX2-mediated mitochondrial dysfunction unveils a therapeutic window for ferroptosis induction in acute myeloid leukaemia**

PP II\_C05 **Dusan Nemes**, Krystina Gloc Pimkova (*BIOCEV, First Faculty of Medicine, Charles University, Prague, Czech Republic*)

**Redox proteomic analysis of pathways induced by glutathione and thioredoxin system inhibition in leukemia cells**

PP II\_C06 **Makamas Chanda**, Uraiwan Panich, Siwanon Jirawatnotai (*Siriraj Center of Research Excellence for Precision Medicine and Systems Pharmacology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand; and Department of Pharmacology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand*)

**KRAS G12D hyperactivation promotes proliferation and migration in cholangiocarcinoma and increases dependence on G6PD-mediated NADPH metabolism**

PP II\_C07 Maria Borja-Gonzalez, Chao Su, Brian McDonagh, **Katarzyna Goljanek-Whysall** (*Department of Physiology, University of Galway, Galway, Ireland; and Galway RNA Research Cluster, Galway, Ireland*)

**microRNAs regulate cancer cachexia through mitochondrial stress and interferon response**

PP II\_C08 **Wojciech Witkowski**, Anna Deręgowska, Ravikumar Kapavarapu, Paulina Stec, Weronika Pieszko, Olga Kołodziej, Michał Żebrowski, Martyna Boruc, Piotr Łętowski, Michał Łukaszyk, Maciej Wnuk, Grzegorz Litwinienko, Anna Lewińska (*Faculty of Chemistry, University of Warsaw, Warsaw, Poland*)

**From carbonyl to thiocarbonyl: impact of thionation of flavones on their anti-cancer and redox activity**

PP II\_C09 **Elkin Escobar**, Lee Graves, Romana Schirhagl, Deepak Veeregowda (*Scientific applications and engineering, QT Sense, Groningen, The Netherlands*)

**Converting free radical kinetics into a functional metabolic pK in metastatic breast cancer cells using quantum sensing**

PP II\_C10 **Stefano Putaggio**, Annamaria Russo, Giuseppe T. Patanè, Antonella Calderaro, Davide Barreca, Silvana Ficarra, Ester Tellone (*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale Ferdinando Stagno d'Alcontres, Messina, Italy*)

**Oxidative and metabolic profile of human red blood cells in the presence of bisphenol B**

PP II\_C11 **Daria Kotova**, Aleksandra Ivanova, Antoine de Vries, Sylvestre Bonnet (*Leiden Institute of Chemistry, Leiden University, Leiden, The Netherlands; and Laboratory of Experimental Cardiology, Leiden University Medical Center, Leiden, The Netherlands*)

**Chemogenetic modulation of H<sub>2</sub>O<sub>2</sub> to overcome multidrug resistance in glioblastoma using photoactivated chemotherapy**

PP II\_C12 **Kamil A. Sobieszek**, Kinga Kocemba-Pilarczyk, Małgorzata Kalemba-Drożdż (*Student Scientific Group of Epigenetics and Medical Nanotechnology "EPIGENius", Faculty of Medicine, Jagiellonian University Medical College, Krakow, Poland*)

**Dual redox activity of rose extract modulates metabolism and proliferation in multiple myeloma cells**

PP II\_C13 Giulia Paties Montagner, Simona Piaggi, **Alfonso Pompella**, Alessandro Corti (*Department of Translational Research and NTMS, University of Pisa, Pisa, Italy*)

**Glutathione transferase omega 1-1 and cancer resistance against Topotecan: new insights into the pathogenetic mechanism**

PP II\_C14 **Othman Eldalal**, Steven Lockhart, Huan Liu, Dinesh Babu, Lusine Tonoyan, Arno Siraki (*Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada*)

**Quetiapine-induced myeloperoxidase-dependent neutrophil extracellular trap formation in dimethylformamide-differentiated HL-60 cells**

PP II\_C15 Luís G. González-Arostegui, Alberto Muñoz-Prieto, José J. Cerón, Luis J. Bernal, **Camila P. Rubio** (*Interdisciplinary Laboratory of Clinical Analysis of the University of Murcia (Interlab-UMU), Department of Animal Surgery and Medicine, Veterinary School, University of Murcia, Murcia, Spain*)

**Time- and matrix-dependent variation of redox biomarkers following an experimental systemic corticosteroid administration in dogs**

PP II\_C16 **Francesco Mengarelli**, Loredana Rao, Marco Morosetti, Sonia Silvestri, Andrea Frontini, Michaele Guescini, Luca Tiano, Patrick Orlando (*Department of Life and Environmental Sciences, Polytechnic University of Marche, Ancona, Italy*)

**Coenzyme Q deprivation and side effects induced by Simvastatin on early differentiating and mature C2C12 murine skeletal muscle myotubes**

PP II\_C17 **Puvaneswari Meganathan**, Fu Ju Yen, Kanga Rani Selvaduray, Suniza Jamaris, Nur Aishah Taib, Ho Gwo Fuang, Retnagowri Rajandram, Zamri Chik (*Malaysian Palm Oil Board (MPOB), Kajang, Selangor, Malaysia; Department of Surgery, Faculty of Medicine, Universiti Malaya, Kuala Lumpur, Malaysia; and Department of Pharmacology, Universiti Malaya, Kuala Lumpur, Malaysia*)

**Pharmacology and systemic bioavailability of tocotrienol-rich fraction in healthy individuals and women with pre-operative breast cancer**

PP II\_C18 **Eisho Kozakura**, Ryoya Ueno, Tomohiro Yamashita, Tomomi Hashidate-Yoshida, Hideo Shindou, Mirinthorn Jutanom, Kazushi Morimoto, Ken-ichi Yamada (*Department of Molecular Pathobiology, Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan*)

**Identification of novel oxidized phospholipids that activate platelet-activating factor receptor using HPLC fractionation and comprehensive LC-MS/MS analysis**

PP II\_C19 **Mariella Rosalia**, Marco Malferrari, Enrico Grassilli, Stefania Rapino (*InSimili srl, Bologna, Italy; and Department of Chemistry "Giacomo Ciamician", University of Bologna, Bologna, Italy*)

**Modeling tumor hypoxia in standard laboratory settings with an engineered biomaterial-based cell culture device**

15:30 – 17:30

**Poster Presentations II Group D – Metabolism and Nutrition**

*Alessandra Pecorelli (Institute of Biochemistry and Molecular Medicine, Doctor Alberto Boveris, University of Buenos Aires, Buenos Aires, Argentina), and Marin Kuntic (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany)*

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PP II\_D01/FT IV\_06 **Nadia Cruz**, Felipe Ávila, Nicolás Mora, Felipe Jiménez-Aspee, Francisco Armijo (*Department of Nutrition and Food Science, School of Nutrition and Dietetics, Health Science Faculty, Campus Lircay, University of Talca, Talca, Chile*)

**Oxygen-dependent effects of thermal treatment on (poly)phenol composition and antiglycation mechanisms in chilean blackcurrant (*Ribes cucullatum*) extracts**

PP II\_D02 **Manuela Hidalgo**, Alba Pérez, Aitami Arranz, Ignacio Prieto, Irina Milisav, Yolanda Olmos, María Monsalve (*Biomedicine Research Institute Sols-Morreale (IIBM, CSIC-UAM), Madrid, Spain*)

**Loss of mitochondrial plasticity negatively impacts on HCC development in the context of MASLD**

PP II\_D03 **Giuseppe T. Patané**, Ruben J. Moreira, Stefano Putaggio, Ester Tellone, Pedro F. Oliveira, Davide Barreca, Marco G. Alves (*Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy; and Institute of Biomedicine, Department of Medical Sciences (iBiMED), University of Aveiro, Aveiro, Portugal*)

**Dietary cyanidin-3-O-glucoside reshapes redox homeostasis and steroidogenic signalling in healthy leydig cells**

PP II\_D04 **Cristina D'Amelio**, Sara Barbarossa, Loredana Rao, Alessia Luccarini, Elisabetta Damiani, Patrick Orlando, Michele Guescini, Saverio Marchi, Andrea Frontini (*Department of Life and Environmental Sciences (DiSVA), Marche Polytechnic University, Ancona, Italy*)

**Communication between skeletal muscle and adipose tissue: extracellular vesicles as modulators of lipid metabolism and potential regulators of adipocytes phenotype**

PP II\_D05 **Ambaga Miyeogmbo** (*Department of Biomedical Science, "New medicine" Medical University, Ulaanbaatar, Mongolia*)

**A new conception of the existence of the Closed 9-Stepped Cycle of Proton Conductance**

PP II\_D06 Ena Šimunić, Kate Šešelja, Iva I. Podgorski, Robert Belužić, Marija Mavar, Marijana Popović Hadžija, Lucija Devčić, Tihomir Balog, **Sandra Sobočanec** (*Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb, Croatia*)

**Sirtuin 3 controls sex-specific metabolic flexibility in white adipose tissue under Western diet-induced stress**

PP II\_D07 **Kate Šešelja**, Ena Šimunić, Iva I. Podgorski, Robert Belužić, Marijana Popović Hadžija, Marija Mavar, Tihomir Balog, Sandra Sobočanec (*Laboratory for Metabolism and Aging, Division of Molecular Medicine, Ruđer Bošković Institute, Zagreb, Croatia*)

**Loss of Sirtuin 3 impairs AMPK–Acc1 signaling and promotes lipid accumulation in female adipocytes**

PP II\_D08 **Petronela Rezbáriková**, Silvia Micháliková, Jana Viskupičová (*Centre of Experimental Medicine of SAS, Institute of Experimental Pharmacology & Toxicology, Slovak Academy of Sciences, Bratislava, Slovak Republic*)

**Oxidative and structural insights into palmitate-induced SERCA1a inhibition**

PP II\_D09 **Silvia Micháliková**, Carlos Cruz-Cortés, Petronela Rezbáriková, Michel L. Espinoza-Fonseca, Jana Viskupičová (*Center of Experimental Medicine, Institute of Experimental Pharmacology & Toxicology, Slovak Academy of Sciences, Bratislava, Slovakia*)

**Targeted sarco/endoplasmic reticulum Ca<sup>2+</sup>-ATPase activation reverses pump impairment under diabetogenic conditions**

PP II\_D10 **Niklas Krafczyk**, Anne S. Scheller, Alina Löser, Kristina Lossow, Holger Steinbrenner, Anna P. Kipp, Lars-Oliver Klotz (*Nutrigenomics Section, Department of Nutritional Physiology, Institute of Nutritional Sciences, Friedrich Schiller University Jena, Jena, Germany*)

**Dietary copper deficiency impairs the capability for systemic methanethiol oxidation in mice**

PP II\_D11 **Jonas Benjamim**, Leonardo Santos Lopes da Silva, Leonardo da Silva Gonçalves, Marcio Fernando Tasinafo Junior, Yaritza Brito Alves Sousa, Carolina Scoqui Guimaraes, Carlos Roberto Bueno Júnior (*Institute for Physical Activity and Nutrition, School of Exercise and Nutrition Sciences, Deakin University, Victoria, Australia; and Department of Internal Medicine, Ribeirao Preto Medical School, University of São Paulo, São Paulo, Brazil*)

**Beetroot juice nitrate-rich enhances nitrate metabolism and endothelial function in response to isometric exercise in males under androgenic anabolic steroid abuse**

PP II\_D12 **Paul Stamm**, Lea Strohm, Dominika Mihaliková, Patrick Dittmann, Alexander Czarnowski, Omar Hahad, Marin Kuntic, Michael Molitor, Philipp Lurz, Thomas Münzel, Andreas Daiber (*Department of Cardiology, University Medical Center Mainz, Mainz, Germany; German Center for Cardiovascular Research (DZHK), Partner Site Rhine-Main, Mainz, Germany; and Department of Cardiology, KVB Hospital Königstein, Königstein, Germany*)

**The preventive influence of beetroot juice on cardiovascular effects of heated tobacco products**

PP II\_D13 George G. Nastos, Lorenzo Lolli, Greg Atkinson, Anastasios A. Theodorou, Vassilis Paschalis, Antonios Kyparos, Michalis G. Nikolaidis, **Nikos V. Margaritelis** (*Department of Physical Education and Sports Science at Serres, Aristotle University of Thessaloniki, Serres, Greece*)

**Effects of vitamin C supplementation on individualized oxidative stress and inflammation responses: A set of n-of-1 trials**

PP II\_D14 **Sara Barbarossa**, Marco Morosetti, Elisabetta Damiani, Andrea Frontini, Luca Tiano, Paolo Lucci, Dalene De Beer, Patrick Orlando (*Department of Life and Environmental Sciences, Polytechnic University of Marche, Ancona, Italy*)

**Dry and liquid marination with rooibos extracts protects pork patties from lipid oxidation and maintains oxidative balance during refrigerated storage and after cooking by different methods**

	<p>PP II_D15 <b>Omar M. Atrooz</b>, Nour Hani Al-Sarireh (<i>Department of Biological Sciences, Faculty of Science, Mutah University, Mutah, Jordan</i>)  <b>In vitro and in vivo investigation of antioxidant potential of Varthemia iphionoides methanolic extract on rat brain tissue</b></p> <p>PP II_D16 <b>Chuttikran Ronsiri</b>, Uraiwan Panich (<i>Department of Pharmacology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand</i>)  <b>Cyanidin-3-O-glucoside modulates mitochondrial redox responses and protects against endothelial lipotoxicity in vitro and in high-fat diet-induced obese mice</b></p> <p>PP II_D17 <b>Mohammad Umar</b>, Olha Lakhneko, Oleg Stasik, Maksym Danchenko (<i>Institute of Plant Genetics and Biotechnology, Plant Science and Biodiversity Centre, Slovak Academy of Sciences, Nitra, Slovakia</i>)  <b>Deciphering the consequences of transient drought on the grain proteome of wheat</b></p> <p>PP II_D18 <b>Ju-Yen Fu</b>, Puvaneswari Meganathan, Nisanthei Gunasegaran, Mohamad Daniel Bin Noorazmi, Kanga Rani Selvaduray (<i>Product Development and Advisory Department, Malaysian Palm Oil Board, Kuala Lumpur, Malaysia</i>)  <b>Clinical translation of nanostructured lipid carrier (NLC) encapsulating vitamin E tocotrienols: Phase 1 bioavailability / bioequivalence study</b></p>
17:30 – 18:30	<b>Meet-the-Professors</b> ( <i>Goldsaal A-B</i> )
18:30 – 19:30	<b>SFRR-E General Assembly</b> ( <i>Goldsaal A-B</i> )
20:00 – 24:00	<b>Conference Dinner</b> ( <i>Restaurant Eulchen, Mainz</i> )

**SFRR-E Annual Meeting 2026**  
**“Redox Biology, Environmental Exposure and Lifestyle”**  
**Friday, June 5, 2026**  
Hilton Mainz

07:00 – 07:30	<b>Welcome Coffee</b> ( <i>Goldsaal Foyer</i> )
	<p><b>Sunrise Session III – From Bench to Bedside</b> (<i>Goldsaal A-D</i>)  <i>Chairs: <u>Andreas Daiber</u> (Laboratory for Molecular Cardiology, Department of Cardiology 1, University Medical Center Mainz, Mainz, Germany), and <u>Giuseppe Valacchi</u> (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy, Animal Science Department, Plants for Human Health Institute, NC State University, Kannapolis, NC, USA, and Department of Food and Nutrition, Kyung Hee University, Seoul, South Korea)</i></p> <hr style="border-top: 1px dashed black;"/>
07:30 – 08:30	<p>SSL III_01 <b>Thomas Thum</b> (<i>University Medical School Hannover, Hannover, Germany</i>)  <b>Looking beyond one's own nose: novel therapies based on noncoding RNAs</b></p>
	<p><b>Young Investigator Award Winners – SFRR-E Biennial Conference, Galway, June 2025</b> (<i>Goldsaal A-D</i>)  <i>Chairs: <u>Clare L. Hawkins</u> (Department of Biomedical Science, University of Copenhagen, Copenhagen, Denmark), and <u>Ann Cuypers</u> (Hasselt University, Diepenbeek, Belgium)</i></p> <hr style="border-top: 1px dashed black;"/>
08:30 – 08:42	<p>YIA I_01 <b>Aseel Saadi</b> and Tawfeeq Shekh-Ahmad (<i>The Institute for Drug Research, The School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem, Jerusalem, Israel</i>)  <b>Redox-targeted gene therapy for pharmaco-resistant epilepsy</b></p>
08:42 – 08:54	<p>YIA I_02 <b>Ana Mata</b> and Susana Cadenas (<i>Centro de Biología Molecular Severo Ochoa, CSIC/UAM, Madrid, Spain</i>)  <b>Proteomic analysis of mouse cardiomyocytes after hypoxia and hypoxia/reoxygenation</b></p>
08:54 – 09:06	<p>YIA I_03 Justine A. Williams, Sara Abad Herrera, Sascha Heinrich, Frank M.L. Peeters, Natalie Lupilov, Julia E. Bandow, Thomas Günther Pomorski, and <b>Lisa R. Knoke</b> (<i>Microbial Biochemistry, Institute of Biochemistry and Pathobiochemistry, Medical Faculty, Ruhr University, Bochum, Germany</i>)  <b>Modifications of the bacterial cell envelope by neutrophil-derived oxidants</b></p>
09:06 – 09:18	<p>YIA I_04 <b>Radosveta Gencheva</b>, Giovanni Chiappetta, Zhiyu Haoc, Qing Cheng, Joelle Vinh, Arne Lindqvist, and Elias Arnér (<i>Division of Biochemistry, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden</i>)  <b>Kinetics of thioredoxin reductase 1 derivatization and associated cancer cell death by the small molecule inhibitor TRi-1</b></p>

09:18 – 09:30	YIA I_05 <b>Shani Doron</b> and Shilo Rosenwasser ( <i>The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture, The Hebrew University of Jerusalem, Rehovot, Israel</i> ) <b>In-vivo quantification of the Arabidopsis redox proteome under dynamic light conditions and its effect on the photosynthetic efficiency</b>
	<b>Young Investigator Award Winners – SFRR Biennial Conference, Galway, June 2025, and 3rd Virtual SFRR-E ECR PhD Symposium, November 2025 (Goldsaal A-D)</b> <i>Chairs: Nesrin Kartal Özer (Üsküdar University, Istanbul, Türkiye), and Mascia Benedusi (Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy)</i>
09:30 – 09:42	YIA II_01 <b>Anna Migni</b> , Desirée Bartolini, Roberta Russo, and Francesco Galli (Department of Pharmaceutical Sciences, University of Perugia, Perugia, Italy) – YIA winner, SFRR Biennial Conference, Galway, June 2025 <b>Melatonin counteracts Cd-and FFA-induced lipotoxicity in human hepatocytes: molecular insights from lipidomics</b>
09:42 – 09:54	YIA II_02 <b>Marie Jakešová</b> , Markéta Nečasová, Karolína Halbrštátová, Jiří Ehlich, and Eric D. Głowacki ( <i>Central European Institute of Technology, Brno University of Technology, Brno, Czech Republic</i> ) YIA winner, SFRR Biennial Conference, Galway, June 2025 <b>Electrochemical on-demand generation of oxidant species on carbon electrodes in multiwell cell culture platforms</b>
09:54 – 10:06	YIA II_03 <b>Lucas Carvalho</b> , Iordan Miranda, Marcelo Neves, Caio Lima, Gabriel Jesus, Julianna Zeidler, Andrea Ferreira, Aina Domingos, Fernando Seara, Rodrigo Fortunato ( <i>Carlos Chagas Filho Institute of Biophysics, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil</i> ) – YIA winner, Virtual ECR PhD Symposium, November 2025 <b>Sex-dependent effects of aging on NAD<sup>+</sup> metabolism and redox homeostasis in visceral adipose tissue</b>
10:06 – 10:18	YIA II_04 <b>Valentin J. Kapferer</b> , Andriy Mokhir ( <i>Department of Chemistry and Pharmacy, Friedrich-Alexander University, Erlangen-Nuremberg, Germany</i> ) – YIA winner, Virtual ECR PhD Symposium, November 2025 <b>Stabilizing aminoferrocene-based reactive oxygen species catalysts through dialkylation to improve anticancer efficacy</b>
10:18 – 10:30	YIA II_05 <b>Lara Rodríguez Outeiriño</b> , Raúl Gonzalez-Ojeda, Anthony J. Sannicandro, María Borja-Gonzalez, and Katarzyna Goljanek-Whysall ( <i>Physiology Department, School of Medicine, College of Medicine, Nursing and Health Sciences, University of Galway, Galway, Ireland</i> ) – YIA award winner, Virtual ECR PhD Symposium, November 2025 <b>miR-199a inhibition ameliorates the amyotrophic lateral sclerosis phenotype in SOD1 mice by preserving neuromuscular junctions</b>
10:30 – 11:00	<b>Coffee / Posters / Exhibition (Brasserie Foyer / Goldsaal Foyer) / Poster removal (before 11:00)</b>
	<b>SFRR-E Leopold Flohe Award Lecture (Goldsaal A-D)</b> <i>Chairs: Aphrodite Vasilaki (Department of Musculoskeletal &amp; Ageing Science, Institute of Life Course &amp; Medical Sciences, Faculty of Health &amp; Life Sciences, University of Liverpool, Liverpool, U.K.), and Tilman Grune (German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany)</i>

11:00 – 11:30	AL_04 <b>José Pedro Friedmann Angeli</b> ( <i>Rudolf Virchow Center for Integrative and Translational Bioimaging, Julius-Maximilians University of Würzburg, Würzburg, Germany</i> ) <b>Identification and targeting of mechanisms regulating membrane redox homeostasis</b>
11:30 – 12:00	<b>SFRR-E Catherine Pasquier Award Lecture - (Goldsaal A-D)</b> <i>Chairs: Irundika H. K. Dias (College of Life and Health Sciences, Aston University, Birmingham, U.K.), and João Laranjinha (Faculty of Pharmacy, University of Coimbra, Coimbra, Portugal)</i> ----- AL_05 <b>Pablo Hernansanz-Agustín</b> ( <i>Cajal Neuroscience Centre, Spanish National Center for Cardiovascular Research, Autonomous University of Madrid, Madrid, Spain</i> ) <b>The unexpected role of sodium in mitochondrial redox biology</b>
12:00 – 12:30	<b>Lunchtime Session IV (Goldsaal A-D)</b> <i>Chairs: Cristina Mas Barques (Department of Physiology, Faculty of Medicine, University of Valencia, Valencia, Spain), and Rakesh Patel (Center for Free Radical Biology, Department of Pathology, Hersink School of Medicine, University of Alabama at Birmingham, Birmingham, AL, USA)</i> ----- LS IV_01 <b>Anne McArdle</b> ( <i>Institute of Life Course &amp; Medical Sciences, Faculty of Health and Life Sciences, University of Liverpool, Liverpool, U.K.</i> ) <b>Reactive oxygen species in space: challenges for exploration and lessons for earth</b>
12:30 – 12:45	<b>COST Actions and Redox Biology Research (Goldsaal A-D)</b> <i>Chairs: Florian Gruber (Department of Dermatology, Medical University of Vienna, and CDL SKINMAGINE, Vienna, Austria), and Antonio Cuadrado (Department of Biochemistry, Medical School, Autonomous University of Madrid, Madrid, Spain)</i> ----- LS IV_02 <b>Antonio Cuadrado</b> ( <i>Department of Biochemistry, Medical School, Autonomous University of Madrid, Madrid, Spain</i> ) <b>Impact of COST Action CA20121 (BenBedPhar) on strengthening the SFRR community and advancing translational redox research</b>
12:45 – 13:00	LS IV_03 <b>Florian Gruber</b> ( <i>Department of Dermatology, Medical University of Vienna, and CDL SKINMAGINE, Vienna, Austria</i> ) <b>How the cost actions EpiLipidNET (CA19105) and COMULIS (CA17121) facilitated our skin biology research</b>
13:00 – 13:15	<b>Take-home Message (Goldsaal A-D)</b> <i>Chairs: Anna-Liisa Levonen (A.I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, Kuopio, Finland), and Joris Messens (VIB-VUB Center for Structural Biology, Vrije Universiteit Brussel, Brussels, Belgium)</i> ----- LS IV_04 <b>Michael J. Davies</b> ( <i>Department of Biomedical Science, University of Copenhagen, Copenhagen, Denmark</i> ) <b>How to propose a competitive SFRR-E Symposium</b>
13:15 – 13:30	<b>Closing (Goldsaal A-D)</b>
13:30 – 14:30	<b>Lunch (Brasserie Foyer)</b>

## G-ReXS Symposium

### “Global Exploration for Redox Supermolecules Evolving in Life Functions”

Saturday, June 6, 2026

Hermann Staudinger Lecture Hall, Max Planck Institute for Polymer Research, Ackermannweg 10, Mainz

08:55 – 09:00	<b>Welcome and Housekeeping</b> <i>Uladimir Barayeu (Max Planck Institute for Polymer Research, Mainz, Germany)</i>
	<b>Session I – What are Supersulfides?</b> <i>Chairs: Takaaki Akaike (Tohoku University, Sendai, Japan), and Uladimir Barayeu (Max Planck Institute for Polymer Research, Mainz, Germany)</i>
09:00 – 09:20	GR I_01 <b>Hozumi Motohashi</b> ( <i>Graduate School of Medicine, Tohoku University, Sendai, Japan</i> ) <b>Supersulfides in Skeletal Muscle Homeostasis</b>
09:20 – 09:40	GR I_02 <b>Péter Nagy</b> ( <i>Department of Molecular Immunology and Toxicology, National Institute of Oncology, Budapest, Hungary</i> ) <b>Cystine C-S bond cleavage fuels cysteine production under disulfide reductase deficiency</b>
09:40 – 10:00	GR I_03 <b>Tobias Dick</b> ( <i>Division of Redox Regulation, German Cancer Research Center, Heidelberg, Germany</i> ) <b>Radical-induced protein persulfidation protects proteins against radical damage</b>
10:00 – 10:20	GR I_04 <b>Ming Xian</b> ( <i>Department of Chemistry, Brown University, USA</i> ) <b>Chemical tools for reactive sulfur species</b>
10:20 – 10:40	GR I_05 <b>Kenjiro Hanaoka</b> ( <i>Faculty of Pharmacy, Keio University, Tokyo, Japan</i> ) <b>Development of reactive sulfur species-producing enzyme inhibitors by fluorescent probe-based screening</b>
10:40 – 11:00	<b>Coffee / Posters</b>
	<b>Session II – Redox Reactions in Biology</b> <i>Chairs: Albert van der Vliet (Department of Pathology and Laboratory Medicine, Larner College of Medicine, University of Vermont, Burlington, VT, USA), and Joris Messens (VIB-VUB Center for Structural Biology, Vrije Universiteit Brussel, Brussels, Belgium)</i>
11:00 – 11:20	GR II_01 <b>Bernd Moosmann</b> ( <i>Institute for Pathobiochemistry, University Medical Center of Johannes Gutenberg University, Mainz, Germany</i> ) <b>Cysteine avoidance as key structural adaptation of aerobic life</b>
11:20 – 11:40	GR II_02 <b>Günter Schwarz</b> ( <i>Department of Chemistry and Biochemistry, Institute of Biochemistry, University of Cologne, Cologne, Germany</i> ) <b>Sulfite impacts health and disease in an organ-specific manner</b>

11:40 – 12:00	GR II_03, <b>Fan-Yan Wei</b> ( <i>Department of Modomics, Institute of Development, Aging and Cancer, IDAC, Tohoku University, Sendai, Japan</i> ) <b>Decoding the RNA Modification Atlas under Oxidative Stress</b>
12:00 – 12:15	<b>Poster Session - Short Talks</b>
12:15 – 13:30	<b>Lunch</b>
	<b>Session III – Lipid Peroxidation and Ferroptosis</b> <i>Chairs: <u>Marcus Conrad</u> (Technical University Munich, Munich, Germany), and <u>José Pedro Friedmann Angeli</u> (Rudolf Virchow Center for Integrative and Translational Bioimaging, Julius-Maximilians University of Würzburg, Würzburg, Germany)</i> -----
13:30 – 13:50	GR III_01 <b>Derek Pratt</b> ( <i>Department of Chemistry and Biomolecular Sciences, University of Ottawa, Ottawa, Canada</i> ) <b>Do GPX4 mimetics really function as peroxidases?</b>
13:50 – 14:10	GR III_02 <b>Kenichi Yamada</b> ( <i>Faculty of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan</i> ) <b>Lysosomal lipid peroxidation triggers ferroptosis induction</b>
14:10 – 14:30	GR III_03 <b>Soni Deshwal</b> ( <i>Institute of Metabolism and Cell Death, Helmholtz Center Munich, Munich, Germany</i> ) <b>Mitochondria orchestrate the balance between Coenzyme Q and cholesterol synthesis</b>
14:30 – 14:50	GR III_04 <b>Jessalyn Ubellacker</b> ( <i>Department of Environmental Health, Harvard T.H. Chan School of Public Health, Boston, USA</i> ) <b>Inducing lipid peroxidation in lymph nodes to inhibit metastasis</b>
14:50 – 15:10	<b>Coffee / Posters</b>
	<b>Session IV – Sulfur Species in Physiology and Disease I</b> <i>Chairs: <u>Carsten Berndt</u> (Heinrich Heine University, Düsseldorf, Germany), and <u>Paraskevi Kritsilikou</u> (University of Liverpool, Liverpool, UK)</i> -----
15:10 – 15:30	GR IV_01 <b>Thales Papagiannakopoulos</b> ( <i>Department of Pathology, NYU Grossman School of Medicine, New York, NY, USA</i> ) <b>Elucidating the role of oxidative stress in cancer</b>
15:30 – 15:50	GR IV_02 <b>Rakesh Patel</b> ( <i>Department of Pathology, University of Alabama at Birmingham, Birmingham, AL, USA</i> ) <b>Sulfur species and sickle cell disease</b>
15:50 – 16:10	GR IV_03 <b>Daria Ezeriņa</b> ( <i>Brussels Center for Redox Biology, Vrije Universiteit Brussels, Brussels, Belgium</i> ) <b>Persulfides in neglected muscle degenerative diseases</b>
16:10 – 16:30	GR IV_04 <b>Motohiro Nishida</b> ( <i>Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan</i> ) <b>Zn<sup>2+</sup>-mediated supersulfide formation prevents age-related fibrosis in mice</b>
16:30 – 16:50	<b>Coffee / Posters</b>
	<b>Session V – Sulfur Species in Physiology and Disease II</b>

	<p><i>Chairs: <u>Tetsuro Matsunaga</u> (Akita University, Akita, Japan), and <u>Ryo Ushioda</u> (Kyoto Sangyo University, Kyoto, Japan)</i></p> <p>-----</p>
16:50 – 17:10	<p>GR V_01 <b>Tomohiro Sawa</b> (<i>Department of Microbiology, Kumamoto University, Kumamoto, Japan</i>)  <b>Innate immune regulation targeting supersulfide metabolism</b></p>
17:10 – 17:30	<p>GR V_02 <b>Christopher Switzer</b> (<i>Department of Molecular and Cell Biology, University of Leicester, Leicester, UK</i>)  <b>Reactive sulfur species in hypoxia across biology</b></p>
17:30 – 17:50	<p>GR V_03 <b>Martin Feelisch</b> (<i>Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, Southampton, UK</i>)  <b>The Fate of circulating persulfides in hypoxia and hyperoxia</b></p>
17:50 – 18:00	<b>Concluding Remarks</b>
18:00 – 18:10	<b>Poster Session - Short Talks</b>
18:10 – 19:00	<b>BBQ</b>
19:00 – 20:00	<b>Poster Session</b>
20:10	<b>Announcement of Poster Awards winners</b>

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