



# FASEB

Federation of American Societies  
for Experimental Biology

## Science Research Conferences

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### Functional Disulfide Bonds in Health and Disease

June 17 - June 22, 2018

National Conference Center

Leesburg, VA

#### Organizers:

Dr. Robert Flaumenhaft  
Harvard Medical School, Boston, MA

Dr. Chaitan Khosla  
Stanford University, Stanford, CA  
[khosla@stanford.edu](mailto:khosla@stanford.edu)

Dr. Philip Hogg  
University of Sydney, Sydney, Australia

Sunday, June 17, 2018

<b>Time</b>	<b>Title/Topic Event</b>	
4:00 p.m. – 9:00 p.m.	Conference Registration	
5:30 p.m. – 6:30 p.m.	Welcome Reception	
6:30 p.m. – 7:30 p.m.	DINNER	
7:30 p.m. – 9:30 p.m.	<p>Keynote Address Chair: Robert Flaumenhaft, Harvard Medical School</p> <p>Session 1: Protein disulfide structure-function Chair: Deborah Fass, Weizmann Institute</p>	<p>Keynote Address: <b>Ruma Banerjee</b>, University of Michigan Redox Metabolic Reprogramming by Hydrogen Sulfide</p> <p>In Memoriam: Robert B. Freedman</p> <p><u>Speaker 1:</u> <b>Eranthie Weerapana</b>, Boston College Functional disulfide bonds in proteases</p> <p><u>Speaker 2:</u> <b>Philip Hogg</b>, University of Sydney Auto-regulation of von Willebrand factor by a disulfide bond switch</p> <p><u>Speaker 3:</u> <b>Deborah Fass</b>, Weizmann Institute QSOX and control of extracellular matrix</p>

Monday, June 18, 2018

<u>Time</u>	<u>Title/Topic Event</u>	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 10:00 p.m.	Session 2: Protein folding and disulfide bond exchange  Chair: Kate S. Carroll, Scripps Research Institute	<u>Speaker 1:</u> Yimon Aye, Cornell University Privileged electrophile sensors and covalent drug development  <u>Speaker 2:</u> Matthias J. Feige, Technische Univeristat Munchen Oxidative folding regulates interleukin biogenesis
10:00 a.m. – 10:15 a.m.	<i>FASEB Sponsored Coffee Break</i>	
10:15 a.m. – 11:45 a.m.		<u>Speaker 3:</u> Dave Thirumalai, University of Maryland Protein folding guides disulfide bond formation  <u>Speaker 4:</u> Colin Thorpe, University of Delaware QSOX and disulfide bond exchange  <u>Speaker 5:</u> Arek Melkonian, Stanford University Transglutaminase 2 inactivation by ERp57
12:00 p.m. – 1:00 p.m.	LUNCH	
1:00 p.m. – 2:30 p.m.	Career Development Workshop	Panel: Rami Hannoush (Genentech), Barry Collier (Rockefeller University), Rita Sarkar (NHLBI), Henry Chang (NHLBI), Phil Hogg (University of Sydney), Chaitan Khosla (Stanford University)
2:30 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	Session 3: Engineering disulfide bonds  Chair: Rami Hannoush, Genentech	<u>Speaker 1:</u> Elizabeth M. Nolan, Massachusetts Institute of Technology Disulfide bonds in human host-defense peptides and proteins  <u>Speaker 2:</u> Stefan Matile, University of Geneva, Cell-penetrating polydisulfides  <u>Speaker 3:</u> Rami Hannoush, Genentech Cystine-knot peptides  <u>Speaker 4:</u> Lars Ellgaard, University of Copenhagen How cone snails engineer disulfide bonds
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. –	Selected oral presentations from	Poster speakers

7:30 p.m.	abstracts	
7:30 p.m. – 9:00 p.m.	<b>Poster Session</b>	

Tuesday, June 19, 2018

<b>Time</b>	<b>Title/Topic Event</b>	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. - 10:00 a.m.	Session 4: Cysteine S-alkylations  Chair: Jonathan Stamler, Case Western Reserve	<u>Speaker 1:</u> Jonathan Stamler, Case Western Reserve Mechanisms of S-nitrosylation  <u>Speaker 2:</u> <b>Kenneth D. Tew</b> , Medical University of South Carolina S-glutathionylation and the unfolded protein response
10:00 a.m. – 10:30 a.m.	<i>FASEB Sponsored Coffee Break and *Group Photo</i>	
10:30 a.m. - 12:00 a.m.		<u>Speaker 3:</u> <b>Sergi Garcia-Manyes</b> , Kings College S-sulfenylation as a molecular switch  <u>Speaker 4:</u> <b>Oskar Eriksson</b> , Harvard Medical School ERp57 modulation of complement activation  <u>Speaker 5:</u> <b>Pietro Ghezzi</b> , Brighton and Sussex Medical School Oxidative stress theory of disease
12:00 p.m. – 1:00 p.m.	LUNCH and Meet the Experts Session	Ruma Banerjee (University of Michigan), Eranthie Weerapana (Boston College), Jonathan Stamler (Case Western Reserve University), Rami Hannoush (Genetech), and Barry Collier (Rockefeller University)
1:00 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	Session 5: Functional disulfides  Chair: <b>Freda Passam</b> , St. George Hospital	<u>Speaker 1:</u> <b>David Essex</b> , Temple University Protein Disulfide Isomerases in Thrombosis  <u>Speaker 2:</u> <b>Irwin Chaiken</b> , Drexel University Disulfide sensitivity of HIV1 Env protein  <u>Speaker 3:</u> <b>Tal Ilani</b> , Weizmann Institute Evaluation of Disulfide Bonds in vivo  <u>Speaker 4:</u> <b>Freda Passam</b> , St. George Hospital, Sydney, Australia Disulfide regulation of integrin de-adhesion
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. –	DINNER	

7:00 p.m.		
7:00 p. m. – 7:30 p. m.	Selected oral presentations from abstracts	Poster speakers
7:30 p.m. – 9:00 p.m.	<b>Poster Session</b>	

Wednesday, June 20, 2018

<b>Time</b>	<b>Title/Topic Event</b>	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 10:00 p.m.	Session 6: Endoplasmic reticulum stress  Chair: Lars Ellgaard, University of Copenhagen	<u>Speaker 1:</u> <b>Claudio Hetz</b> , Harvard School of Public Health Defining the role of ER proteostasis in neurodegenerative diseases  <u>Speaker 2:</u> Yair Argon, University of Pennsylvania ERp5 and the unfolded protein response
10:00 a.m. – 10:15 a.m.	<i>FASEB Sponsored Coffee Break</i>	
10:15 a.m. – 11:15 a.m.		<u>Speaker 3:</u> <b>Roberto Satia</b> , San Raffaele Scientific Institute Redox signaling in and from the early secretory compartment  <u>Speaker 4:</u> Greg Poet, St. Jude's Children Research Hospital ER stress in health and disease
11:15 a.m. – 12:00 p.m.	<b>Business Meeting</b>	
12:00 p.m. – 1:00 p.m.	LUNCH	
1:00 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	Session 7: Functional disulfide bonds in cancer  Chair: Nouri Neamati, University of Michigan College of Pharmacy	<u>Speaker 1:</u> Nouri Neamati, University of Michigan College of Pharmacy Targeting PDI in cancer  <u>Speaker 2:</u> David Liu, Protagonist Inc. Oral Peptide Therapeutics for IBD: Discovery to Clinical Development  <u>Speaker 3:</u> <b>Thomas Simmen</b> , University of Alberta Redox-based signaling in cancer  <u>Speaker 4:</u> <b>Brian Law</b> , University of Florida Disulfide bond disrupting agents in cancer
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. –	Selected oral presentations from	Poster speakers

7.30 p. m.	abstracts	
7:30 p.m. – 9:00 p.m.	<b>Poster Session</b>	

**\*(confirm the actual day with your Conference Manager)**

Thursday, June 21, 2018

<u>Time</u>	<u>Title/Topic Event</u>	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 10:00 p.m.	Session 8: Functional disulfide bonds in thrombosis  Chair: Barry Coller, Rockefeller University	<u>Speaker 1:</u> <b>Wolfram Ruf</b> , University Medical Center, Mainz, Thiol isomerases and tissue factor  <u>Speaker 2:</u> <b>Bruce Furie</b> , Harvard Medical School Thiol isomerases and their vascular substrates
10:00 a.m. – 10:15 a.m.	<i>FASEB Sponsored Coffee Break</i>	
10:15 a.m. – 12:00 a.m.		<u>Speaker 3:</u> Jose Lopez, University of Washington School of Medicine N-acetylcysteine in thrombotic thrombocytopenic purpura  <u>Speaker 4:</u> <b>Jeffrey Zwicker</b> , Harvard Medical School Anti-PDI therapy in cancer thrombosis  <u>Speaker 5:</u> Andrew Barazia, 3I Imaging Intravital microscopy and functional disulfide bonds  Poster speakers
12:00 p.m. – 1:00 p.m.	LUNCH and Meet the Experts Session	Ruma Banerjee (University of Michigan), Eranthie Weerapana (Boston College), Jonathan Stamler (Case Western Reserve University), Rami Hannoush (Genetech), and Barry Coller (Rockefeller University)
1:00 p.m. – 4:00 p.m.	<b>Group Activity (optional)</b>	
4:00 p.m. – 6:00 p.m.	Session 9: Functional disulfide bonds in neuroprotection  Chair: Daphne Atlas, The Hebrew University of Jerusalem	<u>Speaker 1:</u> <b>Thomas Hollis</b> , Wake Forest University Functional disulfide bonds in SAMDH1  <u>Speaker 2:</u> <b>Daphne Atlas</b> , The Hebrew University of Jerusalem Thioredoxin mimetic peptides and neuronal protection  <u>Speaker 3:</u> <b>Julie D. Atkin</b> , Macquarie University The unfolded protein response and PDI in neurodegeneration
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:00 p.m.	Poster Session (optional)	

Friday, June 22, 2018

Option 1

<b><u>Time</u></b>	<b><u>Title/Topic Event</u></b>	
7:30 a.m. – 9:00 a.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 9:00 a.m.	Conference Registration	
9:00 a.m.	Boxed Snacks to Go and DEPARTURES	

**END OF CONFERENCE**

For additional information contact:  
FASEB Science Research Conferences  
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