



FASEB

Federation of American Societies
for Experimental Biology

SRC: Science Research Conferences

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Trace Elements in Biology and Medicine June 1-6, 2014 Steamboat Springs, CO

Co-Organizers:

Caryn Outten

University of South Carolina
Columbia, SC

Kerry Kornfeld

Washington University School of Medicine
St. Louis, MO

Sunday, June 1, 2014

4:00PM – 9:00PM

Conference Registration

6:00PM – 7:00 PM

FASEB Opening Reception

7:00PM – 8:30 PM

Dinner

8:45PM – 10:00PM

Thomas V. O'Halloran, Northwestern University, USA
"Transition metals in control of microbial physiology and mammalian development"

Monday, June 2, 2014

7:30AM – 8:45AM

Breakfast

Session 1: 8:45AM – 12:30PM

Trace Element Acquisition and Trafficking in Microorganisms
Valeria Culotta, Johns Hopkins University, USA

8:45AM – 9:00AM

Welcome from FASEB

9:00AM – 9:15AM

Chair's Overview

9:15AM - 9:45AM

Dennis Winge, University of Utah, USA

“Assembly of succinate dehydrogenase: interplay between iron-sulfur cofactor insertion and subunit assembly”

9:45AM – 10:15AM

Andrew Dancis, University of Pennsylvania, USA
“Bypass suppressor of frataxin – how it works to regulate Fe-S cluster assembly and iron trafficking in mitochondria”

10:15AM – 10:30 AM

Short Talk Selected From Submitted Abstracts

10:30AM – 11:00AM

FASEB Sponsored Coffee Break

11:00AM – 11:30AM

James Imlay, University of Illinois at Urbana-Champaign, USA
“Oxidative stress is a metal-focused pathology”

11:30AM – 11:45PM

Short Talk Selected From Submitted Abstracts

11:45AM – 12:15PM

Mike Maroney, University of Massachusetts-Amherst, USA
“Is H. pylori HypA a nickel traffic cop?”

12:15PM – 12:30PM

Short Talk Selected From Submitted Abstracts

12:30PM – 1:30PM

Lunch

Free Afternoon

4:00PM – 6:00PM

Poster Session 1

6:00PM – 7:00PM

Dinner

Session 2: 7:00PM – 9:30PM

Trace Element Acquisition and Trafficking in Higher Eukaryotes
Caroline Philpott, NIDDK, USA

7:00PM - 7:15PM

Chair's Overview

7:15PM - 7:45PM

Barry Paw, Brigham & Women's Hospital and Boston Children's Hospital, USA
“The cell biology of intracellular iron and heme trafficking in erythropoiesis”

7:45PM – 8:15PM

Shannon Kelleher, Penn State University, USA
“Zinc trafficking in secretory tissues: Implications for breast health and disease”

8:15PM – 8:30PM

Break

8:30PM – 9:00PM

Jaekwon Lee, University of Nebraska-Lincoln, USA
“Title of talk”

9:00PM – 9:30PM

Vadim Gladyshev, Harvard Medical School, USA
“Genomics of trace elements”

**Tuesday,
June 3, 2014**

7:30AM – 8:45AM	Breakfast
Session 3 8:45AM – 12:15PM	Trace Element Metabolism in Plants Elizabeth Pilon-Smits , Colorado State University, USA
8:45AM – 9:00AM	Chair's Overview
9:00AM - 9:30AM	Ute Kraemer , Ruhr University Bochum, Germany <i>"Environmental adaptation of the plant metal homeostasis network"</i>
9:30AM –10:00AM	Mary Lou Guerinot , Dartmouth College, USA <i>"Integrating metal uptake and distribution in plants"</i>
10:00AM – 10:15AM	Short Talk Selected From Submitted Abstracts
10:15AM – 10:45AM	Group Photo & FASEB Sponsored Coffee Break
10:45AM – 11:15AM	Manuel Gonzalez-Guerrero , Universidad Politécnica de Madrid, Spain <i>"Metal transport in the legume-rhizobia interface"</i>
11:15AM – 11:30AM	Short Talk Selected From Submitted Abstracts
11:30AM – 12:00PM	Terri Long , North Carolina State University, USA <i>"Molecular mechanisms for iron sensing and response in plants"</i>
12:00PM – 12:15PM	Short Talk Selected From Submitted Abstracts
12:15PM – 1:15PM	Lunch
1:15PM – 2:15PM	Meet the Expert
	Free Afternoon
4:00PM – 6:00PM	Poster Session 2
6:00PM – 7:00PM	Dinner
Session 4: 7:00PM – 9:30PM	Metal Cofactor Assembly and Trafficking William Walden , University of Illinois-Chicago, USA
7:00PM - 7:15PM	Chair's Overview
7:15PM - 7:45PM	Ralf Mendel , Braunschweig University of Technology, Germany <i>"The molybdenum cofactor - assembly and medical implications"</i>
7:45PM – 8:15PM	F. Wayne Outten , University of South Carolina, USA <i>"Iron and sulfur mobilization for stress-responsive Fe-S cluster assembly by the Suf pathway"</i>
8:15PM – 8:30PM	Break
8:30PM – 9:00PM	Iqbal Hamza , University of Maryland-College Park, USA <i>"Hrgs, worms, and heme"</i>

9:00PM – 9:30PM

Tracey Rouault, NICHD, USA

“Motifs that facilitate specific transfer of nascent Fe-S clusters to recipient proteins by the ISCU, chaperone-co-chaperone complex”

**Wednesday,
June 4, 2014**

7:30AM – 9:00AM

Breakfast

Session 5

8:45AM – 12:15PM

Regulation of Trace Element Homeostasis

David Eide, University of Wisconsin-Madison, USA

8:45AM – 9:00AM

Chair’s Overview

9:00AM - 9:30AM

Betty Leibold, University of Utah, USA

“Mechanisms of iron metabolism in C. elegans”

9:30AM –10:00AM

Sarah Michel, University of Maryland-Baltimore, USA

“New families of zinc finger proteins involved in RNA regulation and neuronal development”

10:00AM – 10:15AM

Short Talk Selected From Submitted Abstracts

10:15AM – 10:45AM

FASEB Sponsored Coffee Break

10:45AM – 11:15AM

Sabeeha Merchant, UCLA, USA

“Visualization of dynamic sites of Cu(I) accumulation in Chlamydomonas”

11:15AM – 11:30AM

Short Talk Selected From Submitted Abstracts

11:30AM – 12:00PM

Scot Leary, University of Saskatchewan, Canada

“Towards a mechanistic understanding of the SCO1-dependent mitochondrial regulation of cellular copper homeostasis”

12:00PM – 12:15PM

Short Talk Selected From Submitted Abstracts

12:15PM – 1:15PM

Lunch

Free Afternoon

4:00PM – 6:00PM

Poster Session 3

6:00PM – 7:00PM

Dinner

Session 6:

7:00PM – 9:30PM

Session 6: Trace Elements and Disease

Jonathan Gitlin, Woods Hole Marine Biological Laboratory, USA

7:00PM - 7:15PM

Chair’s Overview

7:15PM - 7:45PM

Svetlana Lutsenko, Johns Hopkins University Medical School, USA

“The role of copper in lipid metabolism”

7:45PM – 8:15PM

Marla Berry, University of Hawaii, USA

“Targeted deletion of selenium transport and recycling pathways in mice: neurological and metabolic consequences”

8:15PM – 8:30PM

Break

8:30PM – 9:00PM

Larisa Nonn, University of Illinois at Chicago, USA
“Regulation of prostatic zinc homeostasis by the miR-183 family cluster”

9:00PM – 9:30PM

Matam Vijay-Kumar, Penn State University, USA
“The role of lipocalin 2 in inflammatory bowel disease”

**Thursday,
June 5, 2014**

7:30AM – 8:45AM

Breakfast

**Session 7
8:45AM – 12:15PM**

Trace Elements and Immunity
Dennis Thiele, Duke University Medical School, USA

8:45AM – 9:00AM

Chair’s Overview

9:00AM - 9:30AM

Heran Darwin, NYU Langone Medical Center, USA
“Copper control of Mycobacterium tuberculosis”

9:30AM –10:00AM

Roland Strong, Fred Hutchinson Cancer Research Center, USA
“The role of siderocalins in anti-bacterial iron sequestration and endogenous cellular functions”

10:00AM – 10:15AM

Short Talk Selected From Submitted Abstracts

10:15AM – 10:45AM

FASEB Sponsored Coffee Break

10:45AM – 11:15AM

Jeffrey Henderson, Washington University School of Medicine, USA
“Functional diversity among pathogen-associated siderophores”

11:15AM – 11:30AM

Short Talk Selected From Submitted Abstracts

11:30AM – 12:00PM

Thomas Kehl-Fie, University of Illinois, USA
“Title of talk”

12:00PM – 12:15PM

Short Talk Selected From Submitted Abstracts

12:15PM – 12:45PM

Business Meeting

12:45PM – 1:45PM

Lunch

Free Afternoon

**Session 8:
4:00PM – 6:00PM**

Novel Approaches for Monitoring Trace Elements in Cells
Amy Palmer, University of Colorado-Boulder, USA

4:00PM – 4:15PM

Chair’s Overview

4:15PM - 4:45PM

Lucia Banci, University of Florence, Italy
"Cellular pathways for metal trafficking: a molecular level description through in-cell NMR"

4:45PM – 5:15PM

Michael Adams, University of Georgia, USA
"Microbial metalloproteomics"

5:15PM – 5:45PM

Lydia Finney, Argonne National Laboratory, USA
"Tuning the 'lens' of x-ray fluorescence imaging: in pursuit of chemical speciation"

6:30PM

Closing of Meeting and Banquet

**Friday,
June 6, 2014**

7:30AM – 9:00AM

Breakfast

9:00AM

Departures

END OF CONFERENCE

For additional information contact:

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www.faseb.org/src