



Online seminars on “Iron-sulfur protein biogenesis” 2021/2



Organizers: Roland **Lill**, Philipps-Universität Marburg; Frederic **Barras**, Institute Pasteur, Paris

Time: Thursdays at 5 pm (CET; Paris), 11 am (EST; Boston), 8 am (PST; Los Angeles).

Format: Two speakers per date; each with a 30 min talk + 10 min discussion.

This seminar series is a continuation of the well-received events during the first half of 2021. We are confident of continued interest and look forward to interesting talks and discussions.

Online meeting link:

<https://uni-marburg.webex.com/uni-marburg/j.php?MTID=mc93b643a890d1e8f9884c1158720441b>

Website: https://www.uni-marburg.de/en/fb20/departments/cyto/copy_of_bilder/bilder-lill/fes-test

Programme

March 24, Chair: Caroline Philpott

Siavash Kurdistani, UCLA The histone H3 enzyme activity as a novel factor in iron-sulfur cluster homeostasis

Carsten Berndt, Düsseldorf Structure and function of FeS-coordinating redoxins

April 14, Chair: Beatrice Py

Limei Zhang, Lincoln, NE Structural basis for transcriptional regulation by WhiB-like proteins in Mycobacteria

Paul Lindahl, A&M Texas Iron Trafficking and Regulation in *Saccharomyces cerevisiae*

May 12, Chair: Jeff Boyd

Yilin Hu, Irvine CA Nitrogenase cofactor: From assembly to catalysis

Joey Braymer, U Marburg [2Fe-2S] protein maturation in the cytosol of eukaryotes

May 19, Chair: Nicolas Rouhier

Francesca Camponeschi Insights into the function of human GLRX3 in the maturation of cytosolic Fe-S proteins
Florence

Andrew Dancis, Philadelphia Biochemical reconstitution of Leu1 Fe/S cluster protein activity in the cytoplasm requires mitochondria

Previous talks

September 23, Chair: Frederic Barras

Caryn **Outten**, USC Life Without Glutathione: Bypassing the Essential Function of GSH in yeast FeS Cluster Biogenesis

Caroline **Philpott**, NIH Iron chaperones and the delivery of iron for [2Fe-2S] assembly

October 28, Chair: Roland Lill

Deborah **Perlstein**, Boston & Antonio **Pierik**, Kaiserslautern In vivo and in vitro recognition of C-termini of cytosolic and nuclear iron-sulfur proteins by the CIA targeting complex
Simone **Ciofi**, Florence Unraveling the mechanism of maturation of human mitochondrial [4Fe-4S] proteins

November 18, Chair: Patricia Kiley

Benoit **D'Autréaux** The roles of frataxins in FeS cluster assembly on the evolutionary point of view
Gif-sur-Yvette
Sandrine **Ollagnier**, Grenoble *E. coli* SUF machinery: the mysterious nature of SufBC2D FeS center

December 16, Chair: Helene Puccio

Nunziata **Maio**, NIH Newly identified iron-sulfur cofactors in the RNA-dependent RNA polymerase of SARS-CoV-2 are potential anti-viral targets
Dennis R. **Dean**, V Tech Specificity of assembly and trafficking of the complex nitrogenase iron-sulfur cofactors

January 20, Chair: Nick LeBrun

Eranthie **Weerapana** Monitoring iron-sulfur cluster occupancy using chemoproteomics
Boston College
Jaroslaw **Marszalek** & Protein-protein interactions critical for the assembly and function of complexes involved in the ISC pathway of FeS cluster biogenesis.
Rafal **Dutkiewicz**, Gdansk

February 24, Chair: David Barondeau

David **Britt**, UC Davis A proposed mechanism for the biosynthesis of the H-cluster of [Fe-Fe] hydrogenase
Wayne **Outten**, USC Interactions driving FeS cluster biogenesis by the Suf system in *E. coli*