



MEETING 2018

February 8-11 2018
ETH Zurich, Switzerland

MASTERCLASS

February 8, 2018



EFAPH Annual Meeting

Sunday, February 11.

PROGRAMME

We wish to acknowledge the generous financial support by these institutions and companies



Kanton Zürich

ETH zürich



Stadt Zürich

The Annual Meeting of the European Iron Club, EIC 2018, is supported by Unrestricted Educational Grants from *Vifor Pharma* and *Sight and life*.

CONTENTS

Welcome	4
Committees	6
Masterclass programme Thursday, February 8, 2018	7
EIC 2018 Annual Meeting Friday, February 9, 2018	10
EIC 2018 Annual Meeting Saturday, February 10, 2018	16
EFAPH Annual Meeting Sunday, February 11, 2018	23
Poster Sessions	25
Reaching ETH Zürich	36
Registration information	38

WELCOME

Dear Friends and Colleagues,

It is with great pleasure that we welcome the European Iron Club 2018 to Zürich, Switzerland, the city built between two glacier moraines, the heart of Swiss industrialization in the 1800's and the first city in Switzerland to host a "Politechnikum". Founded in 1855 with federal government funds, the original mission of the *Eidgenössische Technische Hochschule (ETH)*, or Swiss Federal Institute of Technology, was to support technological development and engineering sciences. Today, ETH has nearly 19'000 students in a wide array of scientific disciplines and employs more than 500 professors and 5000 scientific staff.

The EIC will be held in the main hall of the school, the Auditorium Maximum, providing the opportunity to many young researchers to present their results in a prominent and renowned setting. The program of this year's EIC reflects past successful meetings with an educational session (Masterclass, 8th February), a scientific meeting and poster session featuring newer developments and results (9th-10th February), and a patient organization gathering (11th February).

This year's educational session is also accredited by the Swiss Society of General and Internal Medicine and will allow MDs practicing in Switzerland to qualify for 6 credit points. The Masterclass will focus on iron metabolism principles, from the chemistry of iron sulphur proteins to practical clinical questions and decisions. The scientific meeting will host, for the first time, a session dedicated to iron in international health, and this is reflected in the participation from the meeting of delegates from Kenya, India, South Africa and the United States, joining more than 260 participants this year. To host more than 125 submitted abstracts, we have organized two poster sessions during lunchtime.

The social program includes the reception on the 8th of February and the gala dinner on the 10th of February, in one of the traditional "Zunft Häuser", in the old town of Zürich.

Last but not the least, we would like to express our gratitude to ETH, and all our

WELCOME

generous sponsors, without which the organization of this meeting would not have been possible.

We wish you, dear friends and colleagues, a productive, stimulating, fun and relaxing EIC 2018 at ETH Zürich.

For the organizing team,

A handwritten signature in black ink, appearing to read 'D. Moretti'.

Diego Moretti

A handwritten signature in black ink, appearing to read 'M. Zimmermann'.

Michael B. Zimmermann

SCIENTIFIC COMMITTEES

ORGANIZING COMMITTEE

Dr. Diego Moretti

Prof. Dr. med. Michael Zimmermann, MD

Verena Jäger Chavez

SCIENTIFIC COMMITTEE

Dr. Diego Moretti

Prof. Dr. med. Michael Zimmermann, MD

Dr. med. Pierre-Alexandre Krayenbühl, MD

Prof. Dr. Ioav Cabantchick, MD

Prof. Dr. Domenico Girelli, MD

Prof. Dr. Günther Weiss, MD

Prof. Dr. Dorine Swinkel, MD

Dr. med. Beat Frey, MD

Prof. Dr. Hal Drakesmith

Prof. Dr. Max Gassmann, DVT

Dr. Mayka Sanchez

Dr. Olivier Loréal

Prof. Dr. Graça Porto

Dr. Delphine Meynard, IRSD

PROGRAM OF THE MASTERCLASS

THURSDAY, 8 FEBRUARY 2018

08:00-09:55 Registration and coffee

09:55-10:00 ***Opening of the Masterclass: Iron metabolism and iron disorders***

Prof. Michael B. Zimmermann, ETH Zürich

Session 1

Chairs: Prof. Michael B. Zimmermann, ETH Zürich; Prof. IOAV Cabantchik, Hebrew University of Jerusalem

10:00-10:30 ***Basic aspects of iron in biological systems: iron sulphur proteins***

Prof. Roland Lill, Philipps-Universität Marburg

10:30-11:00 ***Systemic and cellular iron metabolism***

Prof. Martina Muckenthaler, Universitätsklinikum Heidelberg

11:00-11:30 ***The pioneering role of Rennes in haemochromatosis: the HLA discovery and more...***

Prof. Pierre Brissot, University of Rennes

11:30-12:00 ***Diagnosis of atypical iron overload disorders by next generation sequencing***

Prof. Domenico Girelli, University of Verona

12:00-13:00 Lunch

Session 2

Chairs: Prof. Pierre Kravenbühl, Spital Linth, Uznach; Prof. Andrea Steinbicker, Universitätsklinikum Münster

13:00-13:30 ***How to define the need of iron supplementation in anaemia of inflammation and chronic kidney disease***

Prof. Igor Theurl, University Hospital, Innsbruck

PROGRAM OF THE MASTERCLASS

THURSDAY, 8 FEBRUARY 2018

- 13:30-14:00 ***Intravenous iron for non-anaemic patients—the heart failure clinical story 2000-2018***
Prof. Stefan Anker, Deutsches Zentrum für Herz-Kreislauf-Forschung (DZHK) Berlin; Charité Universitätsmedizin
- 14:00-14:30 ***Treatment of iron loading anaemias***
Prof. John Porter, University College Hospitals, London
- 14:20-15:00 ***Iron, metabolic syndrome and non-alcoholic fatty liver disorder/steatohepatitis***
Prof. Heinz Zoller, University Hospital Innsbruck/Technische Universität München
- 15:00-15:30 ***Anemia and inflammatory bowel disease***
Prof. Gerhard Rogler, University Hospital Zürich
- 15:30-16:00 Coffee break**
- Session 3***
Chairs: Prof. Reinhard Henschler, Blood donation services of the Swiss Red Cross; Prof. Dorine Swinkels, University of Nijmegen Medical Center
- 16:00-16:30 ***Anticipating loss: iron in the perioperative period/critical care***
Prof. Donat Spahn, University Hospital Zürich
- 16:30-17:00 ***Iron during early childhood—its importance for brain development and other long term health outcomes***
Prof. Magnus Domellöf, Umeå University, Sweden
- 17:00-17:30 ***Iron biology and medicine: open questions in search for answers***
Prof. Hal Drakesmith, Weatherall Institute of Molecular Medicine, Oxford University

PROGRAM OF THE MASTERCLASS

THURSDAY, 8 FEBRUARY 2018

17:30-18:30

Round table: When do I prefer to administer oral iron, when do I prefer intravenous iron

Prof. Irene Hösl, Women's Clinic, University Hospital Basel;

Prof. Pierre-Yves Martin, Head of the Nephrology Service,
University Hospital Geneva;

Moderation: Prof. Günter Weiss, Medical University Inns-
bruck, Austria

Reception: HG ETHZ main hall, Rämistrasse 101, 8092 Zürich

The Masterclass of the European Iron Club meeting 2018 is registered as continuing education with the Swiss Society of General and Internal Medicine (SGAIM, 6 Credits) and the Swiss society of dietitians (SVDE/ ASDD, 2 Credits).



2 Punkte | points | punti
SVDE ASDD



EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

08:30-09:55 Cellular Iron Metabolism

08:30-09:00 ***State of the art***

Dr. Bruno Galy, German Cancer Research Center, Heidelberg

09:00-09:55 ***Paper session***

Chairs Dr. Bruno Galy, Dr. Mayka Sanchez, Josep Carreras Leukemia Research Institute, Badalona

09:00-09:18 ***The role of mTOR signalling in macrophages for iron homeostasis***

Nyamdelger Sukhbaatar, University of Vienna

09:18-09:28 ***Transferrin-bound and non-transferrin-bound iron handling and Nrf2-mediated toxicity in proximal tubular epithelial cells during iron overload***

Sanne van Raaij, Radboud University Medical Centre, Nijmegen

09:28-09:45 ***Unexpected roles for Drosophila IRP1***

Prof. Kirst King-Jones, University of Alberta

09:45-09:55 ***The endolysosomal vacuolar-ATPase complex controls hypoxia signalling by restricting iron availability***

Anna Miles, University of Cambridge

09:55-10:15 ***Iron metabolism in exotic animals: from lemurs to elephants***

Dr.med.vet Maja Rütten, PathoVet AG, Tagelswangen

10:15-10:45 Coffee break

EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

10:45-12:20 Hepcidin and systemic iron metabolism, part I

10:45-11:10 ***State of the art***

Prof. Clara Camaschella, Vita-Salute San Raffaele University, Milan

11:10-12:20 ***Paper session***

Chairs: Prof. Clara Camaschella; Dr. Beat Frey, Blood donation service of the Swiss Red Cross, Zürich

11:10-11:30 ***Nrf2 links cellular and systemic iron homeostasis via BMP6 and hepcidin, and regulates hemochromatosis***

Prof. Hal Drakesmith, University of Oxford

11:30-11:40 ***Role of kidneys in heme detoxification and heme-derive iron recirculation during neonatal jaundice in mice***

Aleksandra Bednarz, Jagiellonian University Kraków

11:40-11:50 ***Tubular iron deposition, iron handling and injury in human healthy kidney and chronic kidney disease***

Sanne van Raaij, Radboud University Medical Centre, Nijmegen

11:50-12:00 ***Metabolic signature of high iron overload in a mouse model***

Chiara Volani, Medizinische Universität Innsbruck

12:00-12:10 ***Metabolic dysfunction drives immune complications in the Lysinuric Protein Intolerance mouse model***

Susanna Bodoy, Institute for Research in Biomedicine, Barcelona

EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

12:10-12:20 ***Transgenic flies with an insertion of mKate2 into the open reading frame of Drosophila melanogaster Fer2LCH***
Fanis Missirilis, Centro de Investigación y de Estudios Avanzados, Ciudad de México

12:20-13:20 Lunch

13:20-14:20 ***Poster session 1***

14:20-15:20 Hepcidin and systemic iron metabolism, part II

14:20-15:20 ***Paper session***

Chairs: Dr. Delphine Meynard IRSD Inserm Toulouse; Dr. Laura Silvestri, San Raffaele Scientific Institute, Milan

14:20-14:40 ***Apoptosis caused by 24p3R-mediated haemoglobin uptake in the distal nephron is prevented by endogenous hepcidin synthesis***
Dr. Rachel van Swelm, Radboud University Medical Centre Nijmegen

14:40-14:50 ***High expression of BMP-SMAD signalling genes in liver sinusoidal endothelial cells***
Silvia Colucci, University of Heidelberg

14:50-15:00 ***Liver iron content determines hepcidin levels***
Dr. Sandro Altamura, University of Heidelberg

15:00-15:20 ***Understanding determinants of hepcidin and iron status during the first year of life through longitudinal studies in Gambian infants***
Dr. Andrew Armitage, University of Oxford

EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

15:20-16:40 Iron erythropoiesis and the red cell

15:20-15:50 *State of the art*

Dr. Léon Kautz, IRSD Inserm, Toulouse

15:50-16:40 *Paper session*

Chairs: Dr. Léon Kautz, IRSD Inserm, Toulouse; Prof. Max Gassmann, University of Zürich

15:50-16:00 *Ferritinography in macrophages prevents iron-deficiency anaemia*

Dr. Antonella Nai, Ospedale San Raffaele, Milan

16:00-16:10 *Red blood cells as redox protectors*

Prof. Eitan Fibach, Hadassah Medical Center, Jerusalem

16:10-16:20 *Investigating the Tfr2-Epo receptor interaction*

Alessia Pagani, Vita Salute San Raffaele University, Milan

16:20-16:30 *ERFE-independent repression of hepcidin during the recovery from haemorrhage-induced anaemia*

Ugo Sardo, IRSD Inserm, Toulouse

16:30-16:40 *Erythropoietin stimulates transient reduction of transferrin saturation to provide the optimal condition for ERFE-dependent hepcidin inhibition*

Dr. Laura Silvestri, San Raffaele Scientific Institute, Milan

16:40-17:10 Coffee break

EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

17:10-18:30 Iron and the immune system

17:10-18:30 *Paper session*

Chairs: Prof. Hal Drakesmith, University of Oxford; Prof. Günter Weiss, Medical University Innsbruck

- 17:10-17:25 ***Serum iron controls the adaptive immune response***
Joe Frost, University of Oxford
- 17:25-17:35 ***Different iron sources shape macrophages towards opposing functional phenotypes and differentially affect the response to infectious cues***
Dr. Francesca Vinchi, University of Heidelberg & European Molecular Biology Laboratory (EMBL)
- 17:35-17:45 ***The interplay between iron homeostasis and infection in the male reproductive tract***
Prof. Esther Meyron Holz, Technion-Israel Institute of Technology
- 17:45-17:55 ***Sex-specific differences in hepcidin and siderophilic bacterial infection in Kenyan infants***
Wanjiku Gichohi, KEMRI-Wellcome Trust
- 17:55-18:10 ***Iron fortification during infancy reduces efficacy of oral antibiotics against enteropathogens: a controlled open-label trial in Kenya***
Daniela Paganini, ETH Zürich
- 18:10-18:20 ***Non-transferrin-bound iron serves as iron source for Aspergillus fumigatus growth***
Verena Petzer, Medical University Innsbruck

EUROPEAN IRON CLUB MEETING 2018

FRIDAY, 9 FEBRUARY 2018

18:20-18:30 ***Cell-type specific expression of Hfe determines the course of Salmonella enterica serovar Typhimurium infection in mice***
Dr. Manfred Nairz, Medical University Innsbruck

18:30-19:30 Iron and Cancer

18:30-19:30 ***Paper session***
Chairs: Prof. Shana Sturla, ETH Zürich; Prof. Ioav Cabanchik,

18:30-18:40 ***Loss of the heme exporter FLVCR1a impairs mitochondrial functionality: a new approach against colorectal cancer***
Dr. Veronica Fiorito, Molecular Biotechnology Center, University of Torino

18:40-19:00 ***Repurposing deferoxamine: mitochondrial targeting results in substantial enhancement of its anti-cancer activity***
Dr. Jaroslav Truksa, Czech Academy of Sciences

19:00-19:10 ***EDTA compounds including Fe-EDTA aggravate inflammation and drive tumorigenesis in a mouse model of inflammatory bowel disease***
Dr. Rayko Evstatiev, Medical University of Vienna

19:10-19:20 ***Iron increases the efficacy of standard Multiple Myeloma therapy in transgenic VK*MYC model***
Jessica Bordini, San Raffaele Scientific Institute, Milan

19:20-19:30 ***Light-Activated Caged Iron Chelators (CICs) for Skin Photo-protection***
Annabel Hampshire, University of Bath

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

08:30-09:30 Fe in the Brain: Development and Neurodegeneration

08:30-08:55 *State of the art*

Dr. Raffaella Gozzelino, Inflammation and Neurodegeneration Laboratory, Chronic Diseases Research Centre, Lisbon

08:55-09:25 *Paper session*

Chairs: Dr. R Gozzelino; Prof. Ioav Cabanich, Hebrew University of Jerusalem; Dr. Roberta Ward, University Louvain la Neuve

08:55-09:05 *Targeting mitochondrial iron in Friedrich's ataxia skin cells protects them from ultraviolet A-induced cell death*

Dr. Charareh Pourzand, University of Bath

09:05-09:15 *Iron/calcium mishandling characterizes brain and iPSC-derived neurons from pantothenate kinase-associated neurodegeneration patients*

Prof. Sonia Levi, Università Vita - Salute San Raffaele, Milan

09:15-09:25 *Mitochondrial iron: the culprit of Parkinson's Disease*

Dr. Kosha Mehta, University of Bedfordshire, UK

09:25-09:45 *Tissue-specific deletion of hepcidin highlights its dual role in systemic iron homeostasis (liver) and immune functions (skin)*

Dr. Carole Peyssonnaud, Institut Cochin, Paris

09:45-10:15 Coffee break

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

10:15-11:40 Iron metabolism and the liver

10:15-10:40 *State of the art*

Prof. A. Pietrangelo, University of Modena and Reggio Emilia, Modena

10:40-11:45 *Paper session*

Chairs: Prof. A. Pietrangelo, University of Modena and Reggio Emilia, Modena; Dr. Isabelle Aeberli, ETH Zürich

10:40-10:50 *ER stress controls hepcidin expression through TMPRSS6 repression and mRNA stabilization*

Dr. Delphine Meynard, Inserm, IRSD Toulouse

10:50-11:00 *Oral ferroportin inhibitor prevents iron overload in the HFE C282Y mouse model of hereditary hemochromatosis*

Dr. Naja Nyffenegger, Vifor (International) Ltd., St. Gallen

11:00-11:10 *Treatment of iron overload following allogenic hematopoietic transplants: long-term outcomes*

Prof. Rammurti Kamble, Baylor College of Medicine and Houston Methodist Hospital, Houston

11:10-11:20 *In Italian NAFLD patients, rare ceruloplasmin variants associate with hyperferritinemia and increases hepatic iron stores: a NGS study*

Prof. Elena Corradini, University of Modena and Reggio Emilia

11:20-11:30 *Therapeutic targets of iron-chelators in the myelodysplastic syndromes*

Prof. Eitan Fibach, Hadassah Medical Center, Jerusalem

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

11:30-11:40 ***Imbalance between hepatocyte and macrophage iron distribution confirms the singularity of aceruloplasminemia in a new knockout rat model***
Moussa Kenawi, INSERM, Rennes

11:40-12:05 ***Long-term studies with stable isotopes of iron***
Prof. Gary Brittenham, Columbia University and ETH Zürich

12:05-13:15 Lunch (ETH main building)

12:25-13:15 ***Poster session 2***

13:15-13:45 ***EIC Business meeting***

13:45-14:25 Iron deficiency and supplementation

Chairs: Dr. Diego Moretti, ETH Zürich; Dr. Colin Cercamondi, ETH Zürich

13:45-13:55 ***Pre- and postnatal iron deficiency negatively affects bone development in rats with irreversible effect in combination with n-3 fatty acid deficiency***
Dr. Jeannine Baumgartner, North West University, Potchefstroom

13:55-14:05 ***In anaemic women, daily oral iron supplementation increases hepcidin and decreases iron absorption compared to alternate day dosing***
Nicole Stoffel, ETH Zürich

14:05-14:15 ***Oral sucrosomial iron in iron deficiency anaemia due to gastrointestinal bleeding: multicentric randomized study***
Dr. Giulio Giordano, Regional Hospital Antonio Cardarelli, Capobasso

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

14:15-14:25 ***In iron deficient women, iron absorption and plasma NTBI, after 65mg Fe added to a breakfast, is higher from NaFe(III) EDTA than from Fe(II)SO₄***

Prof. Joannes Marx, University Medical Centre Utrecht, Utrecht

14:25-15:35 Iron and international nutrition

Chairs: Prof. Michael Zimmermann, ETH Zürich; Dr. Diego Moretti, ETH Zürich

14:25-14:35 ***Anaemia in tuberculosis cases and household controls from Tanzania: understanding the role of hepcidin, tuberculosis and co-infections***

Jerry Hella, Swiss Tropical and Public Health Institute, Basel

14:25-14:45 ***Iron absorption and systemic utilization in tuberculosis: a human stable isotope study***

Dr. Colin Cercamondi, ETH Zürich

14:45-14:55 ***Malaria is causally associated with iron deficiency in African children***

John Muriuki, KEMRI-Wellcome Trust Research Programme

14:55-15:05 ***The effect of prebiotic galacto-oligosaccharides on iron absorption in Kenyan infants***

Nadja Mikulic, ETH Zürich

15:05-15:15 ***The impact of iron on the function and composition of the human gut microbiota***

Bhavika Parmanand, Quadram Institute and University of East Anglia

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

15:15-15:25 ***Asymptomatic H.pylori infection does not predict non-heme iron absorption in women and in preschool children: a pooled analysis of five stable iron isotope studies in low-income countries***

Simone Bürkli, ETH Zürich

15:25-15:35 ***Low vitamin D levels are associated with iron deficiency in African children***

Regan Mogire, KEMRI-Wellcome Trust Research Programme

15:35-16:00 Coffee break

16:00-17:10 Hemochromatosis

Chairs: Dr. Olivier Loréal, Université de Rennes, France; Dr. Graça Porto, University of Porto, Portugal

16:00-16:10 ***Contribution of next generation sequencing in iron metabolism disorders: detection of new variants and highlighting of the multifactorial nature of these pathologies***

Dr. Houda Hamdi-Rozé, Centre Hospitalier Universitaire Rennes

16:10-16:20 ***A SNP in the NRF2 promoter associates with increased total body iron in a well-characterized cohort of HFE-linked hemochromatosis patients***

Dr. Tiago Duarte, University of Porto

16:20-16:40 ***Regression of fibrosis stage after treatment in patients with HFE hemochromatosis and severe fibrosis at diagnosis: relevance to hepatocellular carcinoma***

Prof. Edouard Bardou-Jacquet, Centre Hospitalier Universitaire Rennes

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

- 16:40-16:50 ***Iron-induced Cartilage Degradation - an Ex vivo model of Arthropathy in hereditary hemochromatosis***
Anaïsa Ferreira, University of Porto
- 16:50-17:00 ***Free iron species in asymptomatic subjects with hereditary hemochromatosis: interim analysis of a randomized study of bloodletting treatment***
Dr. Laura Infanti, Swiss Red Cross blood donation services, Basel
- 17:00-17:10 ***Variable expressivity of HFE2 related hemochromatosis***
Dr. Houda Hamdi-Rozé, Centre Hospitalier Universitaire Rennes

17:10-18:20 Iron dyshomeostasis and novel therapies

Chairs: Prof. Dorine Swinkels, Radboud University Medical Centre, the Netherlands; Prof. Domenico Girelli, University of Verona

- 17:10-17:25 ***Establishment of a traceability chain to SI units for serum hepcidin allows standardization of serum hepcidin assay***
Laura Diepeveen, Radboud University Medical Centre
- 17:25-17:35 ***A simple clinical and biological score to promote and enhance Ferroportin Disease screening***
Prof. Edouard Bardou-Jacquet, Centre Hospitalier Universitaire Rennes
- 17:35-17:45 ***Targeted next generation sequencing in iron disorders***
Prof. Elena Corradini, University of Modena and Reggio Emilia

EUROPEAN IRON CLUB MEETING 2018

SATURDAY, 10 FEBRUARY 2018

17:45-17:55 ***Intestinal DMT1 regulates iron-59 absorption and quantitative tissue distribution from radiolabelled iron nanocompounds after oral application in mice***

Dr. Hans Winkler, ETH Zürich

17:55-18:10 ***Inhibition of the BMP-SMAD signalling improves the phenotype of IRIDA***

Dr. Delphine Meynard, INSERM and IRSD, Toulouse

18:10-18:20 ***Peritoneal permeability test characteristics suggest serum hepcidin is freely circulating***

Laura Diepeveen, Radboud University Medical Centre

**19:45 Gala Dinner: Zunfthaus zum Schmieden,
Marktgasse 20, 8001 Zürich**

ANNUAL EFAPH MEETING 2018

SUNDAY, 11 FEBRUARY 2018



14th ANNUAL GENERAL MEETING

Zürich, Switzerland

Venue: ETH Zürich, Rämistrasse 101, 8092 Zürich

Room HG E 41 (flexible Auditorium) in the Main Building

Time: 08:30-14:00

Preliminary Agenda

08:30	WELCOME	Dr. Barbara Butzeck , EFAPH President
09:00	Activity Report 2017-2018 , approval by voting	Dr. Françoise Courtois , EFAPH Gen Secretary
09:20	Financial Report 2017 , approval by voting	Dag Erling Stakvik , EFAPH Treasurer
09:40	What is new in HH? Report from the EIC	Prof. Graça Porto , EFAPH Scientific Board Pres.
10:00	Haemochromatosis Research in Oxford: Looking to the Horizon	Dr. John Ryan , University Oxford UK
10:10	Update on the registry on Non-HFE Haemochromatosis	(Speaker to be confirmed)
10:25	Haemochromatosis Arthropathy-Update on HARI-Projects	Dr. Stephanie Finzel , University Erlangen Germ

ANNUAL EFAPH MEETING 2018

SUNDAY, 11 FEBRUARY 2018

10:45-11:15

COFFEE BREAK

11:15

New member Associations

Sweden

The Netherlands (HVN)

Romania

Ketil Toska, EFAPH Vice-President,
NHF Pres.

Prof. Dorine Swinkels, HVN Scientific Committee

Dr. Françoise Courtois, EFAPH General Secretary

11:45

Relevant activities of National Associations (member representatives)

Getting health professionals to come to the fore: not a pie in the sky

Brigitte Pineau, FFAMH President, France

Hungarian HH patients allowed to donate blood

Maria Abe, HBE President, Hungary

Healthy Eating and Haemochromatosis: a new booklet Discussions and other projects?

David Head, UK

12:45

International HH Week June 2018—Plans of HI Joint actions with EFAPH

Prof. R. Evans, **H. Don**, **Dr. B. Butzeck**

13:30

GENERAL DISCUSSION AND LUNCH BREAK

14:00

END OF MEETING

POSTER SESSIONS

Friday, February 9, 2018 - 13:30 to 14:20

Authors should be present at their poster boards during the session

- P01 The effects of intravenous iron in COPD: Results from a randomized clinical trial**
Peter Santer (Oxford, England), Anne McGahey, Matthew Frise, Nayia Petousi, Nick Talbot, Mona Bafadhel, Richard Baskerville, Annabel Nickol, Peter Robbins
- P02 Iron absorption prevents hypoxia-associated inflammatory gene expression through the regulation of NF- κ B promoter binding activity**
Simona Simmen, Jesus Cosin-Roger, Hassam Melhem, Katharina Spanaus, Martin Hausmann, Michael Scharl, Cheryl de Vallière, Jonas Zeitz, Stephan R. Vavricka, Gerhard Rogler, Pedro A. Ruiz-Castro (Zürich, Switzerland)
- P03 Duodenal expression of HCP1 in iron deficiency and overload**
Marketa Dostalíková-Cimburova, Dr. Kamila Balusíková (Prague, Czech Republic), Karolina Kratka, Vaclav Hejda, Jan Hnaníček, Ilja Tacheci, Jiri Horak, Jan Kovar
- P04 A Unique 13-Amino-Acid Motif Inhibits Ferritin Secretion via Non-Classical Vesicular Pathways**
Lior Spektor (Haifa, Israel), Marianna Truman-Rosentsvit, Dina Berenbaum, Lena Lifshitz, Jing Ma, Wei Li, Kuanyu Li, Ella Kesselmann, Dganit Danino, Fabian Glaser, Esther G. Meyron-Holtz
- P05 Subcellular expression of ferroportin in Bmp6 knockout liver: Implication into zonal hepatic iron distribution in iron overload models**
Céline Besson, Alexandra Willemetz, Benjamin Billore, Chloé Latour, Lorene Robert, Hélène Coppin, Marie-Paule Roth, Dr. François Canonne-Hergaux (Toulouse, France)

POSTER SESSIONS

Friday, February 9, 2018 - 13:30 to 14:20

- P07 **Identification of Markers for Cardiac Iron Toxicity in Children with Beta-thalassaemia Major**
Yvonne Elliott, Juliana Modupeola Babawale, Hardip Sandhu and Sebastien Farnaud (Coventry, England)
- P08 **TMPRSS6 single nucleotide polymorphism RS855791, another variant modulating iron parameters, is not positively selected in French elite athletes**
Guillem F, Fumagalli G, Tores F, Van Lierde F, Noirez P, Hermine O, Prof. Dine G. (Troyes, France), Toussaint J-F
- P09 **First-degree relatedness explains variability of non-heme iron absorption corrected for iron status in humans: three stable iron isotope studies in mother-child pairs of varying ethnic background**
S Bürkli (Zürich, Switzerland), D Moretti, NF Ndiaye, I Herter-Aeberli, Michael B Zimmermann
- P10 **The Role of Hepcidin in Progression of Renal Fibrosis**
Ewa Mandziak (Wrocław, Poland), Yogesh M Scindia, Valentina Loi, Saleh Mohammad, Joseph Leeds and Sundararaman Swaminathan
- P11 **Systemic iron and hematological variation between C57BL/6N and C57BL/6J *Mus musculus* wild-type substrains**
Natalie K. Horvat (Heidelberg, Germany), Oriana Marques, Joana Neves and Martina Muckenthaler
- P12 **Identification of Guanosine 5'-diphosphate as potentially iron mobilizer: Preventing the hepcidin-ferroportin interaction and modulating the Interleukin-6/STAT-3 pathway**
Stanzin Angmo (Punjab, India), N K. Singhal

POSTER SESSIONS

Friday, February 9, 2018 - 13:30 to 14:20

- P13 **Conclusive in vivo evidence for the interaction between matriptase-2 and hemojuvelin**
Dr. Jan Krijt (Prague, Czech Republic), Jana Frýdlová, Jaroslav Truksa and Martin Vokurka
- P16 **Heme augments and iron chelation decreases toll-like receptor 4 mediated inflammation in monocytes from sickle cell patients**
P.K. Dagur, J.P. McCoy, J. Nichols, L. Mendelsohn, C. Seamon, Gregory J. Kato and Dr. E.J. van Beers (Utrecht, The Netherlands)
- P17 **In vivo continuous heme exposition confers resistance to the loss of Hmox1 activity in macrophages, in a tamoxifen inducible murine UBC Cre Hmox1flox/flox system**
Dr. Giada Ingoglia (Zürich, Switzerland), Dr. Kristyna Valkova, Prof.Dr. Dominik Schaer, Prof.Dr. Florence Vallelian
- P18 **Dopamine regulates iron homeostasis and innate immune responses of macrophages to *Salmonella* infection**
Stefanie Dichtl (Innsbruck, Austria), David Haschka, Egon Demetz, Manfred Nairz, Malte Aßhoff, Verena Petzer, Markus Seifert, Sylvia Berger, Günter Weiss
- P21 **Accumulation of iron in the lung attenuates the pulmonary inflammatory response to LPS**
Joana Neves (Heidelberg, Germany), Natalie Horvat, Oriana Marques, Sandro Altamura, Martina U. Muckenthaler
- P22 **Dissecting altered iron homeostasis in a mouse model of liver-stage *Plasmodium* infection**
Andreas Simmelbauer (Heidelberg, Germany), Kirsten Heiss, Anne-Kristin Mueller, Richard Sparla, Martina Muckenthaler and Francesca Vinchi

POSTER SESSIONS

Friday, February 9, 2018 - 13:30 to 14:20

- P23 **Hepcidin in severe malaria and non-typhoidal *Salmonella* bacteraemia**
Kelvin Mokaya, John Muriuki, Sophie Uyoga, Andrew Armitage, Hal Drakesmith, Thomas N Williams and Dr. Sarah H Atkinson (Oxford, England)
- P24 **Inconsistencies in the mechanisms believed to induce hepcidin expression in inflammation**
Céline Besson-Fournier (Toulouse, France), Chloé Latour, Delphine Meynard, Hélène Coppin, Marie-Paule Roth
- P25 **Modulation of cytosolic heme to control metabolism and survival of tumor endothelial cells**
Dr. Sara Petrillo (Torino, Italy), Genova Tullio, Silengo Lorenzo, Altruda Fiorella, Munaron Luca, Tolosano Emanuela
- P26 **Epo-resistant anemia in a spontaneously tumor-developing mouse model with iron deficiency**
N. Fabregas Bregolat (Zürich, Switzerland), M. Rütten, M. Costa da Silva, M. Muckenthaler, M. Gassmann, M. Thiersch
- P27 **Iron availability and recycling regulates cancer related skeletal muscle wasting**
Elisabeth Wyart (Torino, Italy), Myriam Hsu, Erica Mina, Laure Bindels and Paolo E Porporato
- P28 **Iron accumulation in TAMs marks an improved overall survival in patients with lung adenocarcinoma**
C. Maximilian Thielmann (Heidelberg, Germany), Milene Costa da Silva, T. Muley, M. Meister, M. Muckenthaler

POSTER SESSIONS

Friday, February 9, 2018 - 13:30 to 14:20

- P29 **Targeting ultraviolet A-induced labile iron release to improve the effectiveness of aminolevulinate-based photodynamic therapy (ALA-PDT) of skin cells**
Dana Beiki (Bath, England), Tina Radka, Olivier Reelfs, Ian Eggleston, Chareh Pourzand
- P30 **Folate and haem transport studies in mice**
Dr. G. O. Latunde-Dada (London, UK)
- P31 **Iron and cysteine-dependent ovarian clear cell carcinoma**
Wisna Novera and Prof. Lih-Wen Deng (Singapore)
- P32 **Temporal development of systemic and cardiac iron deficiency after myocardial infarction**
Chung B (Hannover, Germany), Rostami F, Wang Y, Korf-Klingebiel M, Guba-Quint A, Bauersachs J, Wollert K, Kempf T
- P33 **Chronic heart failure dysregulates mRNA expression of iron-related genes in rat hearts**
Krijt M. (Prague, Czech Republic), Behounek M., Vyoral D., Melenovsky V., Petrak J.
- P34 **Strain- and age-dependent differences in tissue magnetisation of normotensive and spontaneously hypertensive rats**
I. Bernatova (Bratislava, Slovakia), M. Skratek, A. Puzserova, P. Balis, P. Svoren, A. Cigan, J. Manka

POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

Authors should be present at their poster boards during the session

- P19 **Ferritin levels analysis of patients in an internal medicine department**
Dr. Maria Dolores Pulfer (Madrid, Spain), Dr. Eva Cervilla Muñoz, Dr. Alejandra García-García, Ana Lopez Aparicio, C González-Lluva, C Gallego-Díaz-Miguel, Alejandro Del Castillo Rueda
- P41 **The protective role of Haptoglobin/Hemopexin axis in Ankylosing Spondylitis-driven spinal cord injury**
A.C. Martins, I.S. Lima, I. Pereira, A. Kapitação, G. Martins, R. Gozzelino (Lisbon, Portugal)
- P42 **Iron overload associated osteoporosis could be favored by a low level of hepcidin and/or by an alteration of Mn or Mo metabolisms**
Dr. François Robin (Rennes, France), Dr. Thibault Cavey, Prof.Dr. Daniel Chappard, Dr. Martine Ropert, Moussa Kenawi, Patricia Leroyer, Marie Paule Roth, Prof.Dr. Pascal Guggenbuhl, Dr. Olivier Loréal
- P43 **Protective effects of flavonoids against ferroptotic cell death**
Tugba Kose (London, England), P.A Sharp and G. O. Latunde-Dada
- P44 **Anemia of inflammation maybe associated with low serum hepcidin levels in chronic liver disease**
Jithu James, Joe Varghese, Mathuravalli K, Kavita Rasalkar, Ramya Raghavan, CE Eapen and Prof. Molly Jacob (Vellore, India)
- P45 **Protective effect of histidine and vitamin E against iron-induced toxicity in kidney cells**
Mayra Vera-Aviles (London, England), Gladys Oluyemisi Latunde-Dada

POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

- P46 **Association between mixed hepatic iron deposition and NASH**
Dr. Elena Buzzetti (Modena, Italy), Salvatore Petta, Roberta Manuguerra, Tu Vinh Luong, Elena Corradini, Antonio Craxì, Emmanuel Tsochatzis, Antonello Pietrangelo
- P47 **Enhanced medullary iron storage explains the relative resistance of the kidney to iron overload injury**
Avital Weiss, Lior Spektor, Lyora A. Cohen, Dr. Lena Lifshitz (Haifa, Israel), Inbar Magid Gold, Deliang L. Zhang, Marianna Truman-Rosentsvit, Yael Leichtmann-Bardoogo, Abraham Nyska, Sefi Addadi, Tracey A. Rouault and Esther G. Meyron-Holtz
- P48 **Ferroportin Inhibitors compete with hepcidin for binding and ferroportin internalization**
Dr. Hanna Sundström (St. Gallen, Switzerland), Patrick Altermatt, Anna Flace, Vania Manolova and Franz Dürrenberger
- P49 **Pancreatic iron and fat, early indicators of impaired glucose metabolism?**
Dr. Regine Grosse, Dr. Ina Hainmann, Dr. Christoph Berliner (Hamburg, Germany), Dr. Marcela Weyhmler, Dr. Ellen Fung, Dr. Björn Schönnagel, Dr. Jin Yamamura, Prof.Dr. Peter Nielsen, Dr. Roland Fischer
- P50 **Population biomarker kinetics of iron status and hepcidin during iron fortification in Moroccan children: a double-blind, randomized controlled trial**
Valeria Galetti, Diego Moretti (Zürich, Switzerland), Raschida R Bouhouch, Prof Dorine W Swinkels, Maria Andersson, Prof Michael B Zimmermann
- P51 **Sucrosomal Iron absorption involve M cells interaction**
Dr. Elisa Brilli (Pisa, Italy), Ramon Barnadas, Mercedes Camacho, Giulio Giordano and Germano Tarantino

POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

- P52 **Effect of enteral iron supplementation on health outcomes in preterm and low birth weight infants: a systematic review**
Dr. Elaine McCarthy (Cork, Ireland) and Mairead E Kiely
- P53 **Mineral availability from fenugreek, baobab and moringa**
K. K. Khoja (London, England), P. A Sharp and G. O. Latunde-Dada
- P55 **Iron Induced Hypophosphatemia associated with Osteomalacia after Treatment with Intravenous Iron**
Dr. Benedikt Schaefer (Innsbruck, Austria), A. Viveiros, B. Glodny, H. Zoller
- P56 **Increasing micronutrient bioavailability from wheat**
Dr. Mohamad Aslam (London, England), Sarah Berry, Peter Ellis, Yemisi Latunde-Dada, Paul Sharp
- P57 **Stability and solubility of iron-containing nanoparticles**
Alina Blei, Andre Reich, Markus Schitegg, Brigitte Sturm, Hans Goldenberg and Dr. Barbara Scheiber-Mojdehkar (Vienna, Austria)
- P58 **The impact of iron and folic acid supplementation on iron status and selected parameters in deficient rats**
Dr. Joanna Suliburska (Poznan, Poland), Agata Chmurzynska, Anna Radziejewska, Katarzyna Skrypnik
- P59 **Determination of iron deficiency in reproductive-age women**
Dr. Joanna Suliburska (Poznan, Poland), Agata Chmurzynska, Anna Radziejewska, Katarzyna Skrypnik, Rafał Kocyłowski
- P60 **Oral iron absorption test and hepcidin measurement for the differential diagnosis of anaemia in elderly patients**
Fleur Wolff (Brussels, Belgium), Sandra De Breucker, Thierry Peppersack, Nathalie Compte, Béatrice Gulbis, Christian Melot, Frédéric Cotton

POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

- P61 **Exploring the functional role of FKBP12-ALK2 interaction and its disruption to restore hepcidin expression in hemochromatosis mice model**
Mariateresa Pettinato (Milan, Italy), Emanuele Sablich, Artuso Irene, Antonella Nai, Alessandro Dulja, Silvia Colucci, Alessia Pagani, Clara Camaschella, Laura Silvestri
- P62 **Splenic Iron Deficiency is Characteristic for HFE-associated Hemochromatosis**
Dr. André Viveiros (Innsbruck, Austria), Benedikt Schaefer, Moritz Tobiasch, Armin Finkenstedt, Christian Kremser, Michaela Plaikner, Benjamin Henninger, Herbert Tilg, Heinz Zoller
- P63 **GNPAT, PCSK-7, and TMPRSS-6 Polymorphisms in HFE Hemochromatosis**
Dr. Moritz Tobiasch (Innsbruck, Austria), Dr. Armin Finkenstedt, Dr. André Viveiros, Dr. Benedikt Schäfer, Prof.Dr. Herbert Tilg, Prof.Dr. Heinz Zoller
- P64 **Fifty meanings of grey: idiopathic brain calcification in a patient with hereditary hemochromatosis**
Dr. Stefania Scarlini (Modena, Italy), Massimo Fiorini, Francesco Cavallieri, Francesca Ferrara, Elisa Menozzi, Sara Contardi, Francesca Antonelli, Francesca Cavalleri, Mariangela Molinari, Franco Valzania, Antonello Pietrangelo, Elena Corradini
- P65 **Endurance training protects against cardiomyopathy in mice mutated for the HFE gene**
Haidar Djemai (Paris, France), Damien Vitiello, Rémi Thomasson, Lotfi Mhamdi, Marion Falabregue, Nathalie Mougenot, François Desgorges, Olivier Hermine, Zoubida Karim, Jean-François Toussaint, Philippe Noirez

POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

- P66 **Therapeutic recommendations in HFE hemochromatosis: Specialist-Patient knowledge transfer**
Paul Adams, Albert Altes, Pierre Brissot, Barbara Butzeck, Ioav Cabantchik, Rodolfo Cançado, Sonia Distante, Patricia Evans, Prof. Robert Evans (Porto, Portugal), Tomas Ganz, Domenico Girelli, Rolf Hultcrantz, Gordon Maclaren, Ben Marris, Nils Milman, Elisabeta Nemeth, Peter Nielsen, Brigitte Pineau, Alberto Piperno, Graça Porto, Dianne Prince, John Ryan, Mayka Sanchez, Paulo Santos, Dorine Swinkels, Emerência Teixeira, Ketil Toska, Annick Vanclooster, Desley White
- P67 **IRONgenes: a web server for rare genetic disorders of iron metabolism**
Dr. Acaynne Lira Zidanes (Verona, Italy), Suku Eda, Damre Mangesh, Marin Vargas Sergio, Giacomo Marchi, Fabiana Busti, Annalisa Castagna, Domenico Girelli, and Giorgetti Alejandro
- P68 **Clinical diagnosis by next generation sequencing of hereditary haematological diseases**
Sònia Sabaté-Soler, Josep Fita-Torró, Beatriz Cadenas-Sevilla, Clara Esteban-Jurado, David Beneitez-Pastor, Jose Luis Dapena, Adoración Blanco-Alvarez, Victor Marco Betes, José Luis Fuster, Mar Bermúdez-Cortés, Leonor Arenillas, Sara Montesdeoca, Laia Martínez, Carme Pedro, Salvador Payan-Pernia, Isabel Badell-Serra, Angel Remacha-Sevilla, Santiago Pérez-Montero, Inés Hernández-Rodríguez, Cristian Tornador-Antolín, Dr. Mayka Sanchez (Badalona, Spain)
- P69 **Genetic Architecture of Biomarkers of Iron Status in Health and Disease**
Dr. Clara Podmore, MD, MPhil, PhD (Cambridge, England) [on behalf of the Genetics of Iron Status Consortium (GISC)]

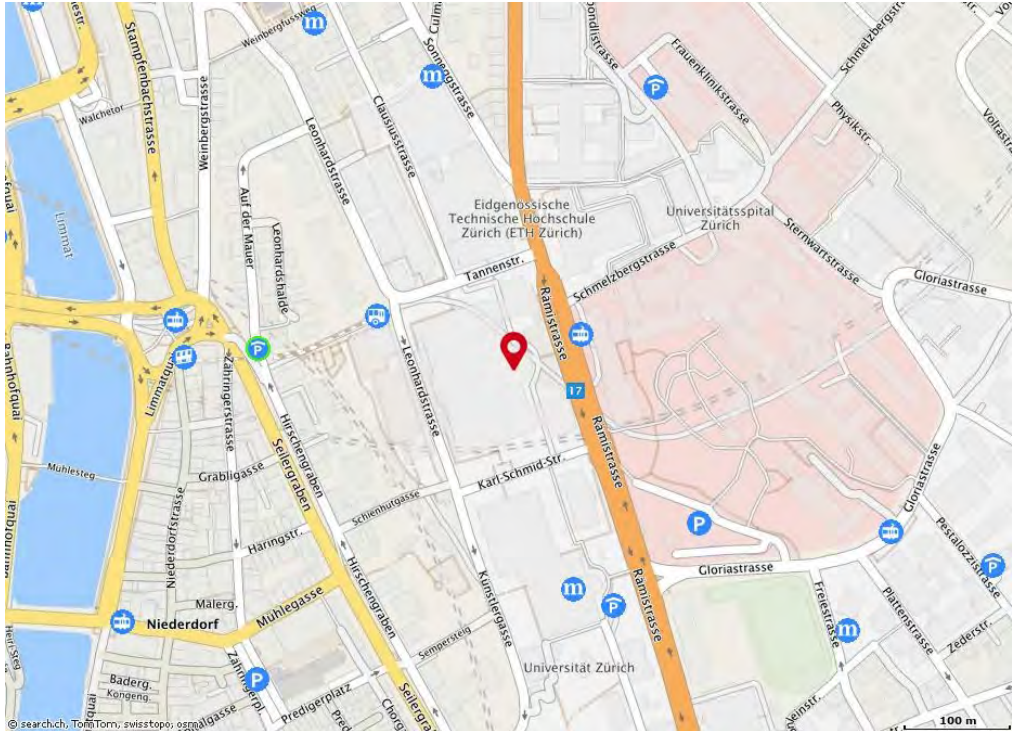
POSTER SESSIONS

Saturday, February 10, 2018 - 12:05 to 13:15

- P70 **Pharmacological inhibition of ferroportin: internalization and iron transport aspects**
Patrick Altermatt (Zürich, Switzerland), Hanna Sundström, Cédric Doucerain, Franz Dürrenberger and Vania Manolova
- P71 **Efficacy of oral Ferroportin Inhibitor in a mouse model of polycythemia vera**
L. Kubovcakova, Dr. Vania Manolova (Zürich, Switzerland), N. Nyffenegger, C. Doucerain, A. Flace, F. Dürrenberger and R. Skoda

GENERAL INFORMATION

REACHING ETH ZÜRICH



Travelling by public transport from Zürich Central Station

From the “Bahnhofstrasse/HB” stop: Tram no. 6 (towards the Zoo) as far as the “ETH/Universitätsspital” stop. Journey time: approx. 6 minutes

From the “Bahnhofplatz/HB” stop: Tram no. 10 (towards the Airport or Oerlikon station) as far as the “ETH/Universitätsspital” stop or Tram Nr. 3 (towards Klusplatz) as far as the “Central” stop (1 stop), from “Central” by Polybahn (departs every three minutes) to the Polyterrasse. Journey time: approx. 8 minutes

You will require a ticket that is valid for zone 110 (city of Zürich)

GENERAL INFORMATION

REACHING ETH ZÜRICH

From Zürich Airport

By tram

Tram no. 10 (towards Bahnhofplatz/HB) as far as the “ETH/Universitätsspital” stop. The tram runs every 7 to 15 minutes between 6 o’clock in the morning and 11 o’clock at night.

Journey time: 30 minutes

By rail

If you wish to travel from the airport to the city centre (Central Station), you are recommended to use the S-Bahn or mainline services. The trains depart from the “Zürich Airport” station

Journey time: approx. 10 minutes

You will require a ticket valid for 3 zones

Parking at ETH Zürich

Parking at ETH is chargeable. Please note that we cannot guarantee that free parking spaces will be available at any given time.

Currency

The official currency is the Swiss Franc. All major credit cards are accepted in most shops and restaurants. Automatic teller machines are also available throughout .

Congress documents and badges

Congress documents have to be collected on-site at the registration desk. Name badges must be worn visibly at all times during the conference, networking activities and in the exhibition area.

Certificate of attendance

A certificate of attendance will be available at the conference’s registration desk.

GENERAL INFORMATION

REGISTRATION INFORMATION

Information for speakers

- Speakers can upload their presentations under the website <https://polybox.ethz.ch/index.php/s/N0tnUL5eA8vkv7r> with a title using the following format: Firstname_Surname_TitleofPresentation
- If you have not uploaded the presentation prior to the session, please bring your presentation file with a title with the aforementioned format to the media technician in the Auditorium Maximum. This has to be done, at the latest, prior to your session, during the lunch or coffee break.
- The ideal format to present in the Auditorium Maximum is 16:9 aspect ratio.

Official language

The official language of the Congress is English. No simultaneous translation will be provided.

WLAN Access

Login: EICM2018

Password: IronClub

Photography during the conference

During the conference, photographs may be taken by the organizers. This will be used in the framework of the European Iron Club and for internal use (Conference website). Please talk to the organizers if you do not want to appear in photographs taken at the conference.

GENERAL INFORMATION

REGISTRATION INFORMATION

Category (all prices in CHF)	Early bird (until 30. Sept)	Full rate	On site
Regular	290	345	395
PhD Student*/Reduced**	185	220	275
Day ticket (only Thursday)	160	160	200
Accompanying person	90	115	165
Participation in Saturday sessions (only 10th February for EFAPH members)	N/A	85	115
Participation in the EFAPH Annual Meeting (only Sunday)	N/A	Free	Free

* Registered PhD students have to provide an official confirmation about their training status.

**Reduced fees for chairmen, state of the art lecturers, retired scientists and members of patients organizations.

EFAPH: European Federation of Associations of Patients with Haemochromatosis

GENERAL INFORMATION

REGISTRATION INFORMATION

Full registration fee includes:

(Regular participants and PhD students)

- Admission to all scientific sessions
- Admission to exhibition and posters
- Conference programme
- Coffee breaks and lunches
- Welcome reception on February 8th

Day registration fee for the day ticket on Thursday includes:

- Admission to all scientific sessions on Thursday
- Admission to exhibition
- Conference programme
- Coffee breaks and lunch on Thursday
- Welcome reception on February 8th

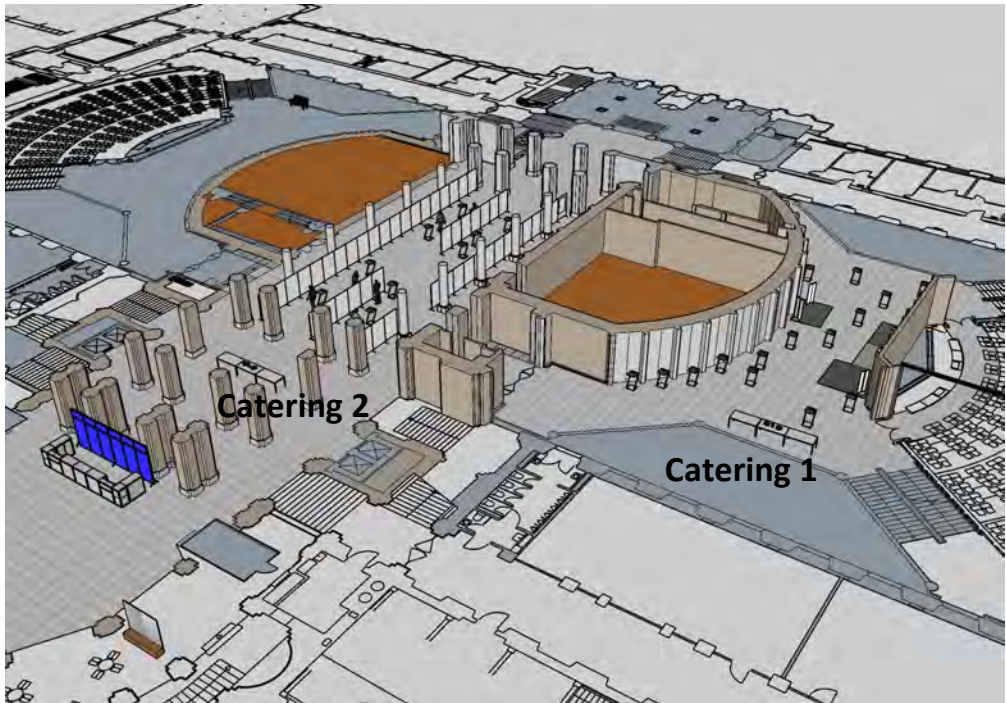
Accompanying persons registration includes:

- Venue lunches
- Venue coffee breaks
- Welcome reception on February 8th

GENERAL INFORMATION

REGISTRATION INFORMATION

Conference layout



NOTES



Chemgas is your reliable source for iron stable isotopes



$^{54}\text{Fe} > 99\%$

$^{57}\text{Fe} > 95\%$

$^{58}\text{Fe} > 99\%$

Don't hesitate to contact us for any quote

C H E M G A S

**31 Bis Avenue Robert Schuman
92100 Boulogne / France**

tel : +33 1 48 25 33 37

fax : +33 9 57 72 55 99

<http://www.chemgas.com>

Email : jdeflers@chemgas.com

NOTES