

2013 International Biolron Society Program Schedule

SUNDAY, APRIL 14, 2013

11:00 – 20:00 **Registration / Information Desk Open**
Location: South Cloisters; Wilkins Building

19:00 – 21:00 **Welcome Reception in Exhibit Hall**
Location: Cloisters; Wilkins Building

Introductory Course: Essentials of Biolron for Clinicians and Scientists

(Supported by an unrestricted educational grant from Novartis)

Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL Department of Chemistry

12:00 – 13:00 **Open Buffet Lunch**
Location: South Cloisters; Wilkins Building

13:00 – 13:15 **Introductory Remarks**
Clara Camaschella, MD
Ioav Cabantchik, MD, PhD

13:15 – 14:45 **Basic Aspects of Iron Control and Biology**
Moderators: Greg Anderson, BSc, MSc, PhD
Paolo Arosio, PhD

13:15 – 13:45 **Essentials of Iron Role in Biology**
Robert Crichton, BSc, PhD, FRSC

13:45 – 14:15 **Iron Homeostasis: From Cells to Organisms (I)**
Tracey Rouault, MD

14:15 – 14:45 **Iron Homeostasis: From Cells to Organisms (II)**
Martina Muckenthaler, PhD

14:45 – 16:15 **Clinical Aspects of Iron in Major Health Problems (I)**
Iron and Anemia
Moderators: Guenter Weiss, MD
Herbert Y. Lin, MD, PhD

14:45 – 15:15 **Nutritional Iron Deficiency—A Worldwide Problem**
Michael B. Zimmermann, MD, MSc

15:15 – 15:45 **Anemia of Cancer and Inflammation**
Tomas Ganz, MD, PhD

15:45 – 16:15 **Selecting Optimal Modes of Iron Supplementation**
Iain C. MacDougall, MD

16:15 – 16:45 **Coffee Break**
Location: Jeremy Bentham Room and Cloisters; Wilkins Building

Sunday, April 14, 2013

- 16:45 – 18:15** **Clinical Aspects of Iron in Major Health Problems (II)**
Systemic Iron Overload
Moderators: John Porter, MD, FRCP
 Pierre Brissot, MD
- 16:45 – 17:15** **Pathophysiology of Genetic Iron Overload**
Antonello Pietrangelo, MD, PhD
- 17:15 – 17:45** **Non-Invasive Assessment of Iron Overload**
Dudley Pennell, MD, FRCP, FACC, FESC
- 17:45 – 18:15** **Selecting Optimal Treatment for Iron Burden**
Maria D. Cappellini, MD
- 19:00 – 21:00** **Biolron Welcome Reception**
(Sponsored by Vifor Pharma)
Location: Cloisters; Wilkins Building

Monday, April 15, 2013

08:00 – 18:30 **Registration / Information Desk Open**
Location: South Cloister; Wilkins Building

08:00 – 15:00 **Exhibit Hours**
Location: Cloisters; Wilkins Building

08:30 – 09:00 **Opening Ceremony**
Welcome Address
Location: Bloomsbury Theatre
Prof. Sir John Tooke, FRCP, PMedSci
Kaila S. Srai, BSc, MSc, PhD
Clara Camaschella, MD

09:00 – 10:30 **Plenary Session I: Iron and Malarial Infection**
Chairs: Alexander H. Drakesmith, PhD
 Michael B. Zimmermann, MD, MSc

09:00 – 09:20 **Iron and Infection: Malaria, Hookworm and the Gut Microbiome**
Michael Zimmermann, MD, MSc

09:20 **#1** **HOST IRON STATUS AND IRON SUPPLEMENTATION INFLUENCE HOST SUSCEPTIBILITY TO ERYTHROCYTIC STAGE OF PLASMODIUM FALCIPARUM BY ALTERING THE STRUCTURE OF THE HOST RBC POPULATION**
Martha Clark, BS², Raj Kasthuri, MD², Anthony Fulford, PhD³, Andrew Prentice, PhD³, Steve Taylor, MD⁴ and Carla Cerami Hand, MD, PhD¹
¹University of North Carolina-School of Public Health; ²University of North Carolina; ³London School of Hygiene and Tropical Medicine; ⁴Duke University Medical Center
(Presented By: Carla Cerami Hand)

09:35 **#2** **METABOLIC ADAPTATION TO TISSUE IRON OVERLOAD CONFERS TOLERANCE TO MALARIA**
Raffaella Gozzelino, PhD¹, Bruno Bezerril Andrade², Rasmus Larsen³, Nivea F. Luz⁴, Liviu Vanoaica⁵, Antonio Coutinho³, Silvia Cardoso³, Sofia Rebelo³, Maura Poli⁶, Manoel Barral-Netto⁷, Deepak Darshan⁵, Lukas Kühn⁵ and Miguel P. Soares³
¹Instituto Gulbenkian de Ciencia; ²Immunobiology Section, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD, USA; ³Inflammation Laboratory, Instituto Gulbenkian de Ciência, Oeiras, Portugal; ⁴Centro de Pesquisas Gonçalo Moniz, Fundação Oswaldo Cruz (FIOCRUZ), Salvador, Bahia, Brazil; ⁵Ecole Polytechnique Fédérale de Lausanne (EPFL), Swiss Institute for Experimental Cancer Research (ISREC), Switzerland; ⁶Dipartimento Materno Infantile e Tecnologia Biomediche, University of Brescia, Italy; ⁷Faculdade de Medicina, Universidade Federal da Bahia, Salvador, Bahia, Brazil
(Presented By: Raffaella Gozzelino)

09:50 **#3** **HEPCIDIN REGULATION IN MALARIA INFECTION**
Natasha Spottiswoode, BSc, MSc¹, Andrew Williams², Andrew Armitage³, Lucy Eddowes³, Chris Newbold⁴, Bob Pinches⁴, Simon Draper², Alain Townsend³, Patrick Duffy⁵ and Hal Drakesmith³
¹Oxford University and the National Institutes of Health; ²The Jenner Institute, Old Road Campus Research Building, Roosevelt Drive, Oxford UK; ³Molecular Immunology Group, Weatherall Institute of Molecular Medicine, Oxford, UK; ⁴Molecular Parasitology Group, Weatherall Institute of Molecular Medicine, Oxford, UK; ⁵Laboratory of Malaria Immunology & Vaccinology, NIAID, NIH, Bethesda, MD
(Presented By: Natasha Spottiswoode)

10:05 – 10:30 **Iron and Malaria Infection, Superinfections and Co-Infections**
Maria M. Mota, MSc, PhD

Monday, April 15, 2013

- 10:30 – 11:00** **Coffee Break**
Location: Jeremy Bentham Room and Cloisters; Wilkins Building
- 11:00 – 12:30** **Plenary Session II: Iron in Translational Medicine**
Chairs: Kaila S. Srai, BSc, MSc, PhD
 Peter A. Robbins, PhD
- 11:00 – 11:30** **Hepcidin Target for Atherosclerotic Treatment**
Aloke V. Finn, MD
- 11:30 – 12:00** **Atheroprotective Macrophage Subset: Role of Heme and Hemoglobin**
Joseph J. Boyle, PhD (Cantab), FRCPath
- 12:00 – 12:30** **Iron and Pulmonary Circulation**
Peter A. Robbins, PhD
- 12:30 – 14:00** **Lunch**
Location: Cloisters; Wilkins Building
- 14:00 – 15:30** **Concurrent Session I: Systemic Iron Regulation**
Location: Bloomsbury Theatre
Chairs: Martina Muckenthaler, PhD
 Karin Finberg, MD, PhD
- 14:00 – 14:15** **Introductory Remarks**
Martina Muckenthaler, PhD
Karin Finberg, MD, PhD
- 14:15** **#4** **IRON MODULATES BMP6 IN HEPATOCYTES AND LIVER SINUSOIDAL ENDOTHELIAL CELLS**
Laura Silvestri, PhD¹, Antonella Nai, PhD student², Marco Rausa, PhD student², Alessia Pagani, PhD² and Clara Camaschella, MD²
¹Vita-Salute University and San Raffaele Scientific Institute; ²Vita-Salute University and San Raffaele Scientific Institute, Milan, Italy
(Presented By: Laura Silvestri)
- 14:30** **#5** **MICRORNA-130A DOWNREGULATES HEPcidIN EXPRESSION DURING IRON DEFICIENCY BY TARGETING ALK2**
Kimberly Zumbrennen-Bullough, PhD, Qifang Wu, PhD, Wenjie Chen, PhD and Jodie Babitt, MD
Division of Nephrology, Program in Membrane Biology, and Center for Systems Biology, Massachusetts General Hospital, Harvard Medical School
(Presented By: Kimberly Zumbrennen-Bullough)
- 14:45** **#6** **TESTOSTERONE PERTURBS SYSTEMIC IRON BALANCE THROUGH ACTIVATION OF EGFR SIGNALING AND REPRESSION OF HEPcidIN**
Chloe Latour¹, Leon Kautz, PhD², Celine Besson-Fournier¹, Marie-Laure Isard, PhD¹, Tomas Ganz, MD PhD², Olivier Loreal, MD PhD¹, Helene Coppin, PhD¹ and Marie-Paule Roth, MD¹
¹Inserm; ²UCLA
(Presented By: Marie-Paule Roth)

Monday, April 15, 2013

15:00 #7 IN VIVO DISRUPTION OF THE HEPCIDIN-FERROPORTIN REGULATORY CIRCUITRY CAUSES FATAL SYSTEMIC AND EXOCRINE PANCREATIC IRON OVERLOAD
Sandro Altamura¹, Hermann-Josef Groene², Regina Kessler¹, Bruno Galy^{3,4}, Matthias Hentze^{1,3,4} and Martina Muckenthaler^{1,4}
¹MMPU – Molecular Medicine Partnership Unit, Heidelberg; ²DKFZ – Deutsches Krebsforschungszentrum, Heidelberg; ³EMBL - European Molecular Biology Laboratory, Heidelberg; ⁴Equal contribution
(Presented By: Sandro Altamura)

15:15 #8 ZIP14 KNOCKOUT MICE EXHIBIT ALTERED IRON METABOLISM AND MARKEDLY IMPAIRED HEPATIC AND PANCREATIC UPTAKE OF INTRAVENOUSLY ADMINISTERED NON-TRANSFERRIN-BOUND IRON
Supak Jenkitkasemwong, MS¹, Chia-Yu Wang, PhD¹, Shintaro Hojyo, PhD², Toshiyuki Fukada, PhD² and Mitchell Knutson, PhD¹
¹University of Florida; ²RIKEN Research Center for Allergy and Immunology, Yokohama, Japan
(Presented By: Supak Jenkitkasemwong)

14:00 – 15:30 Concurrent Session II: Intravenous versus Oral Iron Therapy: Benefits and Risks

Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL Department of Chemistry

Chairs: Toby Richards, MD, FRCS
Chaim Hershko, MD

14:00 – 14:05 Introductory Remarks
Toby Richards, MD, FRCS

14:05 #9 HEPCIDIN ASSAY AND IV IRON THERAPY ARE SUPERIOR TO FERRITIN AND ORAL IRON THERAPY IN IDENTIFYING PATIENTS WITH IRON DEFICIENCY ANEMIA (IDA)
Lawrence Goodnough, MD, David Morris, Todd Koch, Andy He and David Bregman
Stanford University
(Presented By: Lawrence Goodnough)

14:20 #10 EVOLUTION OF SIMPLE ERYTHROCYTE INDICES TOWARDS AN IRON DEFICIENT PICTURE PREDICTS WORSENING MYOCARDIAL SYSTOLIC FUNCTION AND PROGNOSIS IN CHRONIC HEART FAILURE
Hazel Turner, MBBS, Klio Konstantinou, MBBS, Karl Norrington, MBBS, Mihir Kelshikir, BSc, Mohamad Barakat, MBBS, Richard Jabbour, MBBS, Nelson Amaral, MD, Hua Zen Ling, MBBS, Suneil Aggarwal, MBBS, Julia Flint, MBBS, Nay Aung, MBBS, Simon Woldman, MBBS, Surjit K. Srail, PhD and Darlington Okonko, PhD
Imperial College London
(Presented By: Hazel Turner)

14:35 – 15:15 DEBATE:
Benefits
Iain C. MacDougal, MD
Risks
Guenter Weiss, MD

15:15 – 15:25 Discussion
15:25 – 15:30 Concluding Remarks
(Chaim Hershko, MD)

Monday, April 15, 2013

- 15:30 – 17:00** **Concurrent Session III: Structure and Function of Iron-Related Proteins**
Location: Bloomsbury Theatre
Chairs: Caroline Enns, PhD
 Robert W. Evans, BA, PhD
- 15:30 – 16:00** **Iron-Sulfur Protein Biogenesis: Mechanisms, Diseases and Role in Genome Maintenance**
Roland Lill, PhD
- 16:00** **#11** **TRANSFERRIN RECEPTOR 1 (TFR1) IS REQUIRED FOR MAINTENANCE OF THE INTESTINAL EPITHELIUM**
Alan Chen¹, Renee M. Ned, PhD², Adriana Donovan, PhD³ and Nancy C. Andrews, MD, PhD¹
¹Duke University; ²CDC; ³Children's Hospital
(Presented By: Alan Chen)
- 16:15** **#12** **HOW FERRITIN PROTEIN CAGES LINK ION CHANNEL FE²⁺ TRANSPORT TO THE ACTIVE SITES: MORE SOPHISTICATED IN FERRITIN FUNCTION**
Elizabeth Theil, PhD and Rabindra Behera, PhD
CHORI
(Presented By: Elizabeth Theil)
- 16:30** **#13** **REGULATION OF PLANT IRON RESPONSE AND ACCUMULATION BY IRON-BINDING REGULATORS**
Takanori Kobayashi, PhD¹, Seiji Nagasaka, PhD², Takeshi Senoura, PhD³, Reiko Nakanishi Itai², Hiromi Nakanishi, PhD² and Naoko K. Nishizawa, PhD²
¹JST, PRESTO; ²The University of Tokyo; ³Ishikawa Prefectural University
(Presented By: Takanori Kobayashi)
- 16:45** **#14** **STRUCTURAL BASIS FOR IRON PIRACY BY PATHOGENIC NEISSERIA**
Susan Buchanan¹, Nicholas Noinaj, PhD¹, Nicole Easley, BS¹, Muse Oke, PhD¹, Naoko Mizuno, PhD², James Gumbart, PhD³, Evzen Boura, PhD¹, Ashley Steele, PhD⁴, Olga Zak, PhD⁵, Philip Aisen, PhD⁵, Emad Tajkhorshid, PhD³, Robert Evans, PhD⁶, Andrew Gorringe, PhD⁷, Anne Mason, PhD⁴ and Alasdair Steven, PhD²
¹NIDDK / NIH; ²NIS / NIH; ³U. IL Urbana; ⁴U. Vermont; ⁵Albert Einstein College of Medicine; ⁶Brunel U.; ⁷Health Protection Agency, Porton Down
(Presented By: Susan Buchanan)
- 15:30 – 17:00** **Concurrent Session IV: Round Table: Iron in Transfusion Independent Thalassemias: Insights from Clinical and Animal Models**
Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL Department of Chemistry
Chairs: John Porter, MD, FRCP
 Vip Viprakasit, MD
- 15:30 – 15:50** **Iron Toxicity and Iron Distribution in Transfusion Dependent and Non-Transfusion Dependent Thalassemias**
Ali Taher, MD
- 15:50 – 16:10** **Contrasting Clinical Relationships of Plasma Non Transferrin Bound Iron to Iron Overload and to Plasma Heparin in Thalassemia and Sickle Disorders**
John Porter, MD, FRCP
- 16:10 – 16:30** **Interaction of Erythropoiesis and Iron Metabolism; Insights from Animal Models of Thalassemia**
Yelena Ginzburg, MD

Monday, April 15, 2013

16:30 – 16:50 **Potential Therapeutic Applications of Hepcidin and Transferrin in Thalassaemia and Iron Overload**
Stefano Rivella, PhD

16:50 – 17:00 **General Discussion**

17:00 – 19:00 **POSTER WALK I – with wine and beer**
Location: Cloisters, Old Refectory and Jeremy Bentham Room; Wilkins Building

- Poster# 1** **THE ROLES OF HEPCIDIN AND FERROPORTIN IN AUTOCRINE REGULATION OF IRON LEVELS**
Samira Lakhal-Littleton, BSc, DPhil, Daniel Biggs, BSc, MSc, Rebecca Diaz, BSc, PhD, Ana Santos, BSc, PhD, Chris Preece, BSc, PhD, Benjamin Davies, BSc, PhD, Peter Robbins, MA, DPhil, BM, BCh
Oxford University
(Presented By: Samira Lakhal-Littleton)
- Poster# 2** **SEX DIFFERENCES IN HEPATIC HEPCIDIN SIGNALING IN THE HEMOJUVELIN KNOCKOUT MOUSE**
Casey Brewer, BSc; Maya Otto-Duessel, PhD; Ruth Wood, PhD; John Wood, MD, PhD
Children's Hospital Los Angeles
(Presented By: Casey Brewer)
- Poster# 3** **HEPATOCTE GROWTH FACTOR ACTIVATOR INHIBITOR TYPE 2 (HAI-2) MODULATES HEPCIDIN EXPRESSION BY INHIBITING CELL SURFACE PROTEASE MATRIPTASE-2**
Eva Maurer, MSc; Michael Gütschow, Prof.; Marit Stirnberg, PhD
University of Bonn
(Presented By: Eva Maurer)
- Poster# 4** **THE CELL SURFACE PROTEASE MATRIPTASE-2 CLEAVES AHSG (FETUIN A): A NEW LINK BETWEEN IRON HOMEOSTASIS AND DIABETES**
Marit Stirnberg, PhD; Eva Maurer, MSc; Katharina Arenz; Verena Lülsdorff; Michael Gütschow, Prof
University of Bonn
(Presented By: Marit Stirnberg)
- Poster# 5** **DEFINING THE MECHANISM OF HEPCIDIN-INDUCED FERROPORTIN ENDOCYTOSIS**
Sharraya Aschemeyer, Bo Qiao, Tomas Ganz, PhD, MD; Elizabeta Nemeth, PhD
University of California, Los Angeles, Center for Iron Disorders
(Presented By: Sharraya Aschemeyer)
- Poster# 6** **REGULATION OF HEPCIDIN TRANSCRIPTION BY REACTIVE OXYGEN SPECIES AND HYPOXIA**
Duygu Dee Harrison-Findik, DVM, PhD; Sizhao Lu, MD; Emily Zmijewski, BSc
University of Nebraska Medical Center
(Presented By: Duygu Dee Harrison-Findik)
- Poster# 7** **DIFFERENTIAL RESPONSE OF THE HEPCIDIN REGULATORY PATHWAY TO ORAL VERSUS PERENTERAL IRON IN MICE LACKING HFE AND TFR2**
Cameron McDonald, Daniel Wallace, Lesa Ostini, Nathan Subramaniam
Queensland Institute of Medical Research
(Presented By: Cameron McDonald)

Monday, April 15, 2013

- Poster# 8** **ATOH8 REGULATES HEPCIDIN TRANSCRIPTION, CELLULAR PSMAD1,5,8 LEVELS AND IS SUPPRESSED BY ERYTHROPOIETIC ACTIVITY**
Andrew McKie, BSc, PhD¹; Neeta Patel, BSc²; Joe Varghese, MD, PhD³; Patarabutr Masaratana, MD, PhD⁴; Molly Jacob, MD, PhD³; Oluyemisi Latunde-Dada, BSc, PhD²; Robert J. Simpon, BSc, PhD²
¹Kings College London; ²Kings College London, UK, Division of Diabetes and Nutritional Sciences; ³Christian Medical College Vellore, India, Department of Biochemistry; ⁴Faculty of Medicine Siriraj Hospital, Bangkok, Thailand, Department of Biochemistry
(Presented By: Andrew McKie)
- Poster# 9** **FERROPORTIN1 IS ESSENTIAL FOR IRON ABSORPTION IN SUCKLING MICE BUT IS NOT DOWN-REGULATED BY HEPCIDIN**
Sarah Wilkins, Deepak Darshan, David Frazer, Greg Anderson
Queensland Institute of Medical Research
(Presented By: Sarah Wilkins)
- Poster# 10** **CHARACTERIZATION OF FERRITIN IN THE HEPATIC CIRCULATION**
Jeffrey Cooper, MD², Feng Qi, MD, Abdul Waheed, PhD and Robert Fleming¹
¹Saint Louis University School of Medicine; ²Saint Louis University/Pediatrics
(Presented By: Robert Fleming)
- Poster# 11** **IRON ACTIVATION OF HEPCIDIN IN HEMOJUVELIN KNOCKOUT MICE PREFERENTIALLY TARGETS SPLENIC BUT NOT INTESTINAL FERROPORTIN**
Konstantinos Gkouvatsos, MD, PhD; Carine Fillebeen, PhD; Alina Daba, MD, PhD; John Wagner, MSc; Giada Sebastiani, MD; Kostas Pantopoulos
Lady Davis Institute for Medical Research and McGill University
(Presented By: Kostas Pantopoulos)
- Poster# 12** **HEPCIDIN TRANSCRIPTION AND PEPTIDE SECRETION ARE GOVERNED BY DIFFERENT REGULATORY MECHANISMS**
Kosha Mehta, PhD²; Vinood Patel, PhD²; Mark Busbridge, PhD³; Derek Renshaw, PhD²; Mohammed Zariwala, PhD²; Robert Evans, PhD⁴; Sebastien Farnaud, PhD¹
¹University of Bedfordshire; ²University of Westminster; ³Imperial College; ⁴University of Brunel
(Presented By: Sebastien Farnaud)
- Poster# 13** **IMPROVED MASS SPECTROMETRY ASSAY FOR PLASMA HEPCIDIN: DETECTION OF A NOVEL HEPCIDIN ISOFORM AND ITS CLINICAL CONSEQUENCES**
Coby Laarakkers, BSc¹; Erwin Wiegerinck, BSc¹; Siem Klaver, BSc¹; Maria Kolodziejczyk, PhD²; Hendrik Gille, PhD²; Andreas Hohlbaum, PhD²; Harold Tjalsma, PhD¹; Dorine Swinkels, MD PhD¹
¹Radboud University Medical Center; ²Pieris AG, Freising, Germany
(Presented By: Dorine Swinkels)
- Poster# 14** **NEOGENIN INTERACTS WITH MATRIPTASE-2 TO FACILITATE HEMOJUVELIN CLEAVAGE**
Caroline Enns, Riffat Ahmed, An-Sheng Zhang
Oregon Health & Science University
(Presented By: An-Sheng Zhang)
- Poster# 15** **DIFFERENCES IN ACTIVATION OF MOUSE HEPCIDIN BY DIETARY IRON AND PARENTERALLY ADMINISTERED IRON DEXTRAN: COMPARTMENTALIZATION IS CRITICAL FOR IRON SENSING**
Alina Daba, MD, PhD; Konstantinos Gkouvatsos, MD, PhD; Giada Sebastiani, MD; Kostas Pantopoulos
Lady Davis Institute for Medical Research and McGill University
(Presented By: Kostas Pantopoulos)

Monday, April 15, 2013

- Poster# 16** **EFFECT ON HFE GENOTYPE ON NATIVE CIRCULATING HEPCIDIN-25 IN MEN AGED 30-52 YEARS**
Palle Lyngje Pedersen, MSc, PhD¹; Dick Nelson, MSc²; Pal B. Szecsi, MD, DMSci³; Jacob Larsen, MSc, PhD⁴ and Nils Milman, MD⁵
¹Department of Clinical Biochemistry, Hospital of Naestved; ²Clinical Chemistry, Laboratory Medicine of Skåne, Sweden; ³Dept. of Clinical Biochemistry, Gentofte Hospital, Denmark; ⁴Dept. of Pathology, Naestved Hospital, Denmark; ⁵Dept. of Clinical Biochemistry, Hospital of Naestved, Denmark
(Presented By: Palle Lyngje Pedersen)
- Poster# 17** **ENHANCED HEPCIDIN EXPRESSION IN THE RAT DUODENUM AND THE ROLE OF IRON IN EXPERIMENTAL DUODENAL ULCERATION**
Gordon McLaren, MD; Tetyana Khomenko, PhD; Khushin N. Patel, BS; Xiaoming Deng, MD; Sandor Szabo, MD, PhD, MPH
Department of Veterans Affairs Long Beach Healthcare System
(Presented By: Gordon McLaren)
- Poster# 18** **THE HEPCIDIN/FERROPORTIN REGULATORY CIRCUITRY IN LUNG (PATHO)PHYSIOLOGY**
Joana Neves, Sandro Altamura, Bruno Galy, Matthias W. Hentze, Marcus A. Mall, Martina U. Muckenthaler
Molecular Medicine Partnership Unit (MMPU), Heidelberg, Germany
(Presented By: Joana Neves)
- Poster# 19** **SEX HORMONES DIFFERENTLY REGULATE HEPCIDIN EXPRESSION AND IRON HOMEOSTASIS IN VIVO**
Cinzia Garuti, PhD²; Giuliana Montosi, PhD²; Samuele Barelli²; Antonello Pietrangelo, MD, PhD²; Elena Corradini, MD¹
¹University Hospital of Modena; ²"Mario Coppo" Liver Research Center and Center for Hemochromatosis, University Hospital of Modena, Modena, Italy
(Presented By: Elena Corradini)
- Poster# 20** **IDENTIFICATION AND CHARACTERIZATION OF A NOVEL MURINE ALLELE OF TMPRSS6**
Tom Bartnikas, MD, PhD¹; Andrea Steinbicker, MD²; Dean Campagna³; Sherika Blevins³; Lanette Woodward⁴; Carolina Herrera¹; Kenneth Bloch, MD⁵; Monica Justice, PhD⁴; Mark Fleming, MD, DPhil³
¹Brown University; ²University of Muenster; ³Boston Children's Hospital; ⁴Baylor College of Medicine; ⁵Massachusetts General Hospital
(Presented By: Tom Bartnikas)
- Poster# 21** **ISOLATED HEPATIC IRON DEFICIENCY DESPITE ABUNDANT SYSTEMIC IRON IN MDR2-/- MICE: INTEGRITY OF THE BILIARY TRANSPORT SYSTEM IS IMPORTANT IN LIVER IRON HOMEOSTASIS**
Amy Sobbe^{1,2}, David Frazer, Kim Bridle, Lesley Jaskowski, Lesa Ostini, Erika de Guzman, Nishreen Santrampurwala, Gregory Anderson, V. Nathan Subramaniam, Darrell Crawford
¹School of Medicine University of Queensland; ²Gallipoli Medical Research Foundation, Brisbane Australia
(Presented By: Amy Sobbe)
- Poster# 22** **INCREASED HEPCIDIN MRNA LEVELS AND REDUCTION OF MEMBRANE HEMOJUVELIN IN TMPRSS6 -/- PRIMARY HEPATOCYTES**
Anne Lenoir, Alexandra Willemetz, Jean-Christophe Deschemin, Pavle Matak, Carlos Lopez-Otin, Andrew J. Ramsay, Sophie Vaulont, Gael Nicolas
Institut Cochin, INSERM U1016, CNRS U8104, Université Paris Descartes, PRES Sorbonne-Paris Cité
(Presented By: Anne Lenoir)
- Poster# 23** **LIVER HEMOJUVELIN AND TRANSFERRIN RECEPTOR 2 PROTEIN CONTENT IN MATRIPTASE-2-DEFICIENT MASK MICE**
Jan Krijt, Jana Frydlova, Yuzo Fujikura, Martin Vokurka and Emanuel Necas
Institute of Pathophysiology, Charles University in Prague, First Faculty of Medicine
(Presented By: Jan Krijt)

Monday, April 15, 2013

- Poster# 24** **IMPLICATION OF THE TRANSCRIPTION FACTOR NRF2 IN THE IRON MEDIATED UPREGULATION OF THE IRON EXPORTER FERROPORTIN IN LIPID RAFT FROM MACROPHAGES**
Canonne-Hergaux François, PhD, Auriac Anne, Willemetz Alexandra, Robert Lorenne, Leduc Marjorie, Federici Christian, Camoin Luc
INSERM U1043
(Presented By: Canonne-Hergaux François)
- Poster# 25** **SYSTEMIC INTERACTION OF IRON WITH ESTROGEN IN POSTMENOPAUSAL WOMEN**
Xi Huang, PhD, Qing Yang, PhD; Jinlong Jian, PhD; Stuart Katz, MD; Steven B. Abramson, MD
NYU School of Medicine
(Presented By: Xi Huang)
- Poster# 26** **NOVEL MUTATIONS IN THE FERRITIN-L IRON-RESPONSIVE ELEMENT THAT ONLY MILDLY IMPAIR IRP BINDING CAUSE HEREDITARY HYPERFERRITINAEMIA CATARACT SYNDROME**
Sara Lusciati, Ms¹; Gabrielle Tolle, Ms²; Jessica Aranda, Ms¹; Carmen Benet-Campos, MD³; Frank Risse, MD⁴; Erica Morán, PhD¹; Martina U. Muckenthaler, PhD²; Mayka Sanchez, PhD¹
¹IMPPC; ²MMPU-EMBL, University Hospital of Heidelberg; ³Hospital Arnau de Vilanova, Valencia, Spain; ⁴Praxis für Hämatologie- Onkologie Rhein Ahr, Remagen, Germany
(Presented By: Mayka Sanchez)
- Poster# 27** **HOW FE2+ ACTIVATES IRE-MRNA: A DUET WITH IRP AND EIF4F**
Elizabeth Theil, PhD¹; Jia Ma, BS²; Suranjana Haldar, PhD¹; Mateen Khan, PhD²; Dixie Goss, PhD²
¹CHORI; ²Hunter-CUNY
(Presented By: Elizabeth Theil)
- Poster# 28** **SEX DIFFERENCES IN THE REGULATION OF CARDIAC IRON TRANSPORTERS**
Casey Brewer, BSc; Maya Otto-Duessel, PhD; Ruth Wood, PhD; John Wood, MD, PhD
Children's Hospital Los Angeles
(Presented By: Casey Brewer)
- Poster# 29** **CELLULAR IRON HOMEOSTASIS IN LEUKEMIA: EXPERIMENTAL AND MODELING APPROACHES**
Emmanuel Pourcelot, PhD student¹; Nicolas Mobilia²; Alexandre Donzé³; Fiona Louis⁴; Oded Maler⁵, Pascal Mossuz¹, Eric Fanchon² and Jean Marc Moulis⁴
¹Laboratoire d'Hématologie, Institut de Biologie et Pathologie, CHU Grenoble, France; ²TIMC – Imag, Grenoble, France; ³EECS Department, University of California Berkeley, USA; ⁴CEA – IRTSV, Grenoble - France; ⁵VERIMAG - UJF Gières, France
(Presented By: Emmanuel Pourcelot)
- Poster# 30** **HYPERFERRITINEMIA-CATARACT SYNDROME: GENOTYPE/PHENOTYPE CORRELATIONS**
Silvia Majore, Francesca Clementina Radio, Ilaria Cosentino, Gianfranco Biolcati, Caterina Aurizi, Francesco Brancati, Alfredo Dragani, Francesca Spina, Marco Castori, Rosanna Rinaldi, Carmelilia De Bernardo and Paola Grammatico
Medical Genetics, Molecular Medicine Department, Sapienza University of Rome, San Camillo-Forlanini Hospital - Rome - Italy
(Presented By: Silvia Majore)
- Poster# 31** ***MOVED TO PODIUM 38***
- Poster# 32** **DEFECTIVE GLUCOSE METABOLISM IN IRP1-/- MICE**
Nicole Wilkinson and Kostas Pantopoulos, PhD
Lady Davis Institute for Medical Research and McGill University
(Presented By: Nicole Wilkinson)

Monday, April 15, 2013

- Poster# 34** **MITOCHONDRIAL PROTEIN, FRATAXIN, IS DOWNREGULATED IN HEMODIALYSIS PATIENTS**
Takeshi Nakanishi, MD, PhD; Yukiko Hasuike, MD, PhD; Soshi Yorifuji, MD; Ayako Matsumoto, MD; Mana Yahiro, MD, PhD; Aritoshi Kida, MD; Yasuyuki Nagasawa, MD, PhD; Takahiro Kuragano, MD, PhD
Hyogo College of Medicine
(Presented By: Takeshi Nakanishi)
- Poster# 35** **FRATAXIN IS A REGULATOR OF THE FE-S BIOGENESIS**
Salvatore Adinolfi, biologist
NIMR
(Presented By: Salvatore Adinolfi)
- Poster# 37** **IRON-DEPENDENT BINDING OF BOVINE MILK ALPHA-CASEIN WITH HOLO-LACTOFERRITIN, BUT NOT HOLO-TRANSFERRITIN**
Koichi Orino, DVM, PhD; Kiyootaka Watanabe, DVM, PhD
Kitasato University
(Presented By: Koichi Orino)
- Poster# 38** **NOVEL PRO-CHELATORS OF IRON AND THEIR ROLE IN PROTECTION AGAINST OXIDATIVE STRESS-INDUCED CARDIOMYOCYTE DAMAGE**
Hana Jansova, Miloslav Machacek, Pavlina Haskova, Eliska Mackova, Tomas Simunek
Charles University in Prague, Faculty of Pharmacy in Hradec Kralove
(Presented By: Hana Jansova)
- Poster# 39** **MITOCHONDRIA-TARGETED IRON CHELATORS FOR THE MONITORING AND ADJUSTMENT OF CELLULAR LABILE IRON POOLS**
Vincenzo Abbate, PhD¹; Robert Hider, PhD¹; Charareh Pourzand, PhD²; Olivier Reelfs, PhD²
¹King's College London; ²University of Bath
(Presented By: Vincenzo Abbate)
- Poster# 40** **NEW TRANSGENIC RICE TOLERANT TO LOW IRON AVAILABILITY IN A CALCAREOUS SOIL**
Naoko Nishizawa, PhD¹; Erika Shimochi²; Hiroshi Masuda²; Tastuo Hamada²; Takanori Kobayashi²
¹The University of Tokyo; ²Ishikawa Prefectural University
(Presented By: Naoko Nishizawa)
- Poster# 41** **COMPUTATIONAL PREDICTION FOR CRITICAL RESIDUAL PAIRS IN COMPLEXATION BETWEEN DIFFERENT TF AND TFR2**
Tetsuya Sakajiri, Dr¹; Katsuya Ikuta, PhD²; Hirofumi Yajima, PhD³ and Takaki Yamamura, PhD¹
¹The University of Morioka; ²Asahikawa Medical College; ³Tokyo University of Science
(Presented By: Tetsuya Sakajiri)
- Poster# 42** **ROLE OF FREE IRON IONS IN CATECHOLAMINE CARDIOTOXICITY AND THEIR CHELATION AS A POSSIBILITY OF PHARMACOLOGICAL CARDIOPROTECTION**
Pavlina Haskova, Petra Kovarikova, Miloslav Machacek, Hana Jansova, Lucie Tichotova, Eliska Mackova, Tomas Simunek
Charles University in Prague, Faculty of Pharmacy in Hradec Kralove
(Presented By: Pavlina Haskova)

Monday, April 15, 2013

- Poster# 43** **EFFICIENT AND FACILE OXIDATION OF CYCLIC MOUSE HEPICIDIN ANALOG TO BIOLOGICALLY ACTIVE CONFORMATION WITH THE HELP OF FE(III)**
Marie-Agnes SARI¹, Sunanda Chatterjee, PhD¹, Erwan Galardon, PhD¹, Isabelle Artaud, PhD¹; Jean-Christophe Deschemins, Bsc², Marjorie Leduc, Bsc³, Luc Camoin, PhD⁴ and Sophie Vaultont, PhD²
¹Universite PARISDESCARTES.UMR8601CNRS; ²Universite PARISDESCARTES, UMR8604CNRS, INSERM U1016; ³Universite PARISDESCARTES.3P5; ⁴Inserm U1068 Marseille
(Presented By: Marie-Agnes SARI)
- Poster# 44** **WITHDRAWN**
- Poster# 45** **BOTH HUMAN FERREDOXINS EQUALLY EFFICIENTLY RESCUE FERREDOXIN DEFICIENCY IN TRYPANOSOMA BRUCEI**
Piya Changmai, MSc, Eva Horáková, Shaojun Long, Eva Stribrná, Lindsay McDonald, Esteban Bontempi, Julius Lukeš
University of South Bohemia
(Presented By: Piya Changmai)
- Poster# 46** **IDENTIFICATION OF HEMOJUVELIN RESIDUES AS PUTATIVE TARGETS OF Tmprss6**
Marco Rausa, Antonella Nai, Alessia Pagani, Alessandro Campanella, Clara Camaschella, Laura Silvestri
San Raffaele Scientific Institute, Vita-Salute University, Milan, Italy
(Presented By: Marco Rausa)
- Poster# 47** **THE HUMAN P-LOOP NTPASE CFD1 (NUBP2) IS A CYTOSOLIC IRON-SULFUR PROTEIN ASSEMBLY (CIA) FACTOR AND ESSENTIAL FOR IRON HOMEOSTASIS**
Oliver Stehling, Brigitte Niggemeyer, Ralf Rösser, Roland Lill
Philipps-Universität Marburg, Institut für Zytobiologie
(Presented By: Oliver Stehling)
- Poster# 48** **DUODENAL CYTOCHROME B AND HEPHAESTIN EXPRESSION IS REGULATED BY THE SOLUBLE HFE ISOFORM**
Bruno Silva, Rute Martins, Daniela Proença, Paula Faustino
Departamento de Genética Humana, Instituto Nacional de Saúde Dr. Ricardo Jorge, Lisboa, Portugal
(Presented By: Bruno Silva)
- Poster# 49** **A MUTATION IN THE IRON-SULFUR CLUSTER BIOGENESIS FACTOR IBA57 CAUSES A FATAL MITOCHONDRIAL DISEASE WITH RESPIRATORY INSUFFICIENCY, AND HYPERGLYCEMIA**
Claudia Wilbrecht, Diploma¹, Arnaud V. Vanlander², Nikhita Ajit Bolar³, Bart Loeys³, Lut Van Laer³, Rudy Van Coster², Roland Lill⁴
¹Institute of Cell Biology; ²Department of Pediatrics, Division of Pediatric Neurology and Metabolism, University Hospital Ghent, 9000 Ghent, Belgium; ³Department of Medical Genetics, Faculty of Medicine and Health Sciences, Antwerp University Hospital and University of Antwerp, 2650 Antwerp, Belgium; ⁴Institute of Cell Biology, Philipps University Marburg, Robert-Koch-Straße 6, 35037 Marburg, Germany
(Presented By: Claudia Wilbrecht)
- Poster# 50** **WITHDRAWN**

Monday, April 15, 2013

- Poster# 51** **SYNTHESIS OF DESFERRIOXAMINE-PEPTIDE CONJUGATES FOR MITOCHONDRIAL LABILE IRON CHELATION**
Roxana Pastrana¹ and Breno Pannia Espósito, POS-DOC²
¹University of São Paulo-Institute of Chemistry; ²Instituto De Quimica
(Presented By: Roxana Pastrana)
- Poster# 52** **LACTOFERRIN-CISPLATIN-EMBEDDED BIODEGRADABLE POLYMERIC THIN FILMS WITH ANTITUMORAL ACTIVITY IN VITRO**
Paula Florian, MSc²; Valentina Dinca, PhD³; Livia Sima, PhD²; Laurentiu Rusen, PhD³; Maria Dinescu, PhD³; Robert Evans, BA, PhD¹; Anca Roseanu, PhD²
¹Brunel University; ²Institute of Biochemistry of the Romanian Academy, Bucharest, Romania; ³National Institute for Lasers, Plasma and Radiation Physics, Bucharest, Romania
(Presented By: Robert Evans)
- Poster# 53** **IDENTIFICATION OF TRANSCRIPTION FACTORS THAT REGULATE MITOCHONDRIAL FERRITIN EXPRESSION**
Paolo Santambrogio, PhD¹; Michela Guaraldo, PhD¹; Elisabetta Rovelli, PhD¹; Anna Cozzi, PhD¹; Sonia Levi, PhD²
¹San Raffaele Scientific Institute; ²Vita-Salute San Raffaele University
(Presented By: Paolo Santambrogio)
- Poster# 54** **NON-TRANSFERRIN-BOUND IRON (NTBI) AND APOTRANSFERRIN STIMULATE THE EXPRESSION OF L-TYPE VOLTAGE-GATED CALCIUM CHANNELS OF CARDIOMYOCYTES**
Edith Wiener, MD, FRCPATH¹; George Chennell, BSc²; Maciej Garbowski, MD¹; John Porter, MA, MD, FRCP, FRCPATH¹
¹Department of Haematology, University College London; ²University College London
(Presented By: Edith Wiener)
- Poster# 55** **NEET IS A NOVEL CLASS OF 2FE-2S PROTEINS WITH A UNIQUE NEET-FOLD AND A LABILE CLUSTER – LESSONS FROM STRUCTURE**
Rachel Nechushtai, PhD¹, Sagiv Tami, MSc², Yael Harir, PhD³, Dorit Michaeli, MSc³, Yuri Domovich, BSc³, Oded Livna, PhD³, F Morcos, PhD⁴, Jose Onuchic, PhD⁴, Luma Song, PhD⁵, Ron Mittler, PhD⁵, CH Lipper, PhD⁶, A Conlon, PhD⁶, Ioav Cabantchik, MD PhD³ and Patricia Jennings, PhD⁶
¹Hebrew University of Jerusalem; ²Alexander Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Israel; ³Alexander Silberman The Institute of Life Sciences, Hebrew University of Jerusalem, Israel; ⁴Dept. of Chemistry, Rice University Texas; ⁵Dept. of Biological Sciences, University of North Texas, TX; ⁶Departments of Chemistry, Biochemistry and Physics, University of California at San Diego, La Jolla, CA
(Presented By: Rachel Nechushtai)
- Poster# 56** **MITOFERRIN IS ESSENTIAL FOR NORMAL DEVELOPMENT IN DROSOPHILA**
Christoph Metzendorf, PhD² and Maria Lind, PhD¹
¹Comparative Physiology, Uppsala University; ²Department of Pediatric Hematology, Oncology, and Immunology and Molecular Medicine Partnership Unit, University of Heidelberg, Heidelberg, Germany
(Presented By: Maria Lind)
- Poster# 57** **DIVALENT METAL TRANSPORTER 1 (DMT1) IS FOUND IN MITOCHONDRIA**
Frank Thévenod, MD PhD¹, Michael D Garrick, PhD², Laura M Garrick, PhD², Lin Zhao, BS², Andy Ghio, MD³, Robert A Fenton, PhD⁴ and Natascha A Wolff, PhD¹
¹University of Witten/Herdecke; ²University at Buffalo; ³US-EPA; ⁴Aarhus University
(Presented By: Frank Thévenod)
- Poster# 58** **FURTHER EVIDENCE FOR A ROLE OF IRON IN DROSOPHILA SPERMATOGENESIS**
Tharse Pathmanathan and Fanis Missirlis, PhD
CINVESTAV-IPN
(Presented By: Tharse Pathmanathan)

Monday, April 15, 2013

- Poster# 60** **WITHDRAWN**
- Poster# 61** **IDENTIFICATION OF A SOLUBLE FORM OF TRANSFERRIN RECEPTOR 2 (TFR2)**
Laura Silvestri, PhD; Alessia Pagani, PhD; Antonella Nai, PhD student; Marco Rausa, PhD student;
Clara Camaschella, MD
Vita-Salute University and San Raffaele Scientific Institute
(Presented By: Laura Silvestri)
- Poster# 62** **DOWN REGULATION OF RESPIRATORY ENZYMES IN FRATAXIN DEFICIENT YEAST IS MEDIATED BY THE METABOLIC REGULATORS ADR1 AND CTH2**
David Alsina, Armando Moreno-Cermeño, Elia Obis, Joaquim Ros and Jordi Tamarit
Universitat de Lleida
(Presented By: David Alsina)
- Poster# 63** **IN VITRO STUDIES ON THE TRANSFER OF IRON BETWEEN CERULOPLASMIN AND TRANSFERRINS**
Robert Evans, BA, PhD¹ and Kenneth White, BA, DPhil²
¹Brunel University; ²Institute of Health Research and Policy, London Metropolitan University, London
(Presented By: Robert Evans)
- Poster# 64** **DEFINING THE ARCHITECTURE OF THE MITOCHODRIAL IRON-SULFUR CLUSTER ASSEMBLY MACHINERY**
Belinda Galeano¹, Oleksandr Gakh¹, Christopher Soderberg², Douglas Smith IV¹, James Thompson¹, Salam Al-Kardaghi² and Grazia Isaya¹
¹Mayo Clinic; ²Lund University
(Presented By: Belinda Galeano)
- Poster# 65** **THE ROLE OF Tmprss6 CAUSING IRIDA DURING FETAL AND NEONATAL LIFE**
Luigia De Falco¹, Mariasole Bruno, Dr², Ebru Yilmaz Keskin, Dr³, Idil Yenicesu, Dr⁴, Francesco Vitiello, MD² and Achille Iolascon, MD,PhD⁵
¹Ceinge, Advanced Biotechnology; ²Ceinge, Advanced Biotechnology via G.Salvatore Naples 80145 Italy; ³Pediatric Hematology, Department, Gazi University Faculty of Medicine, Ankara; ⁴Pediatric Hematology, Department, Gazi University Faculty of Medicine, Ankara; ⁵Dept. of Molecular Medicine and Medical Biotechnologies University Federico II of Naples CEINGE-Advanced Biotechnologies Via Gaetano Salvatore 486 80145 Naples- Italy
(Presented By: Luigia De Falco)
- Poster# 66** **MOLECULAR ANALYSIS OF GROWTH DIFFERENTIATION FACTOR 15 IN ANEMIA OF PREGNANCY**
Rekha Athiyarath¹, Kalaiselvi Shaktivel, BScNursing¹, Daisy Singh, MBBS, DNB², Vinod Joseph Abraham, MD, MPH²; Alok Srivastava, MD, FRACP, FRCPA, FRCP¹ and Eunice Sindhuvi Edison, PhD¹
¹Department of Haematology, CMC, Vellore; ²Department of Community Health,CMC,Vellore
(Presented By: Rekha Athiyarath)
- Poster# 67** **ASSOCIATION OF SINGLE NUCLEOTIDE POLYMORPHISMS WITH TIBC AND ERYTHROCYTE COUNT IN IRON DEFICIENCY ANEMIA OF PREGNANCY IN INDIAN POPULATION**
Rekha Athiyarath¹, Kalaiselvi Shaktivel, BScNursing¹, Daisy Singh, MBBS,DNB², Vinod Joseph Abraham, MD,MPH², Alok Srivastava, MD,FRACP,FRCPA,FRCP¹ and Eunice Sindhuvi Edison, PhD¹
¹Department of Haematology, CMC, Vellore; ²Department of Community Health,CMC,Vellore
(Presented By: Rekha Athiyarath)

Monday, April 15, 2013

- Poster# 68** **IRON PROPHYLAXIS IN PREGNANCY: FERROUS BISGLYCINATE 25 MG IRON MATCHES FERROUS SULPHATE 50 MG IRON**
Nils Milman, MD¹, Lisbeth Jønsson, MD², Pernille Dyre, Midwife² and Palle Pedersen, MSci³
¹Næstved Hospital, University of Copenhagen; ²Næstved Hospital, Department of Gynecology/Obstetrics; ³Næstved Hospital, Department of Clinical Biochemistry
(Presented By: Nils Milman)
- Poster# 69** **ROLE OF TRANSFERRIN IN RECOVERY FROM PHLEBOTOMY IN IRON REplete AND IRON DEFICIENT MICE**
Huihui Li, MS¹, Jayesh Shah¹, Charles Hall, PhD² and Yelena Ginzburg, MD¹
¹New York Blood Center; ²Albert Einstein College of Medicine
(Presented By: Yelena Ginzburg)
- Poster# 70** **CLINICALLY IDENTIFIED TMPRSS6 MUTATIONS RESULT IN EITHER TRAFFICKING DEFECTS OR INABILITY TO CLEAVE HEMOJUVELIN**
Nigel C. Bennett, Cameron J. McDonald, Daniel F. Wallace, John D. Hooper, Carlos Lopez-Otin and V. Nathan Subramaniam
Queensland Institute of Medical Research
(Presented By: Nigel C. Bennett)
- Poster# 71** **STUDIES ON IN VITRO IRON AVAILABILITY FROM LIGAND-MODIFIED NANO FE(III) OXO-HYDROXIDE COMPOUNDS IN CULTURED HUMAN CELLS**
Xiaomin Luo, BSc¹, Bethan Tempest¹, Mohamad Aslam, BSc², Dora Pereira, PhD², Jonathan Powell, PhD² and Yemisi Latunde-Dada, PhD¹
¹Kings College London; ²MRC Cambridge
(Presented By: Yemisi Latunde-Dada)
- Poster# 72** **RESPONSIVENESS TO ORAL IRON THERAPY OF TWO IRIDA PATIENTS**
Luigia De Falco¹, Mariasole Bruno², Ebru Yilmaz Keskin³, Idil Yenicesu⁴, Mariateresa Falco² and Achille Iolascon⁵
¹CEINGE, Advanced Biotechnology; ²CEINGE, Advanced Biotechnology via G. Salvatore Naples 80145 Italy; ³Pediatric Hematology Department, Gazi University Faculty of Medicine, Ankara; ⁴Pediatric Hematology Department, Gazi University Faculty of Medicine, Ankara; ⁵Department of Molecular Medicine and Medical Biotechnologies, University of Naples Federico II, Naples, Italy and CEINGE, Advanced Biotechnology via G. Salvatore Naples 80145 Italy
(Presented By: Luigia De Falco)
- Poster# 73** **IS IRON DEFICIENCY THE MOST PROGNOSTICALLY ADVERSE CAUSE OF ANAEMIA IN PATIENTS UNDERGOING CORONARY ARTERY BYPASS SURGERY?**
Nelson Amaral, MD, Susanne Weissert, MD, Julia Flint, MBBS, Suneil Aggarwal, MBBS, Alistair Connell, MBBS, Francesco Papalia, MBBS, Girish Babu, MBBS, Hua Zen Ling, MBBS, Nay Aung, MBBS, Toby Richards, PhD, Surjit K. Srail, PhD and Darlington Okonko, PhD
Imperial College London
(Presented By: Nelson Amaral)
- Poster# 74** **ORIGINS OF ANAEMIA VARY WITH CHRONIC HEART FAILURE SEVERITY AND AN IMPROVED IRON STATUS RELATES TO IMPROVED SURVIVAL**
Mohamad Barakat, MBBS, Susanne Aggarwal, MBBS, Julia Flint, MBBS, Hua Zen Ling, MBBS, Nay Aung, MBBS, Adrian Cheng, MBBS, Simon Woldman, MD, Surjit K. Srail, PhD and Darlington Okonko, PhD
Imperial College London
(Presented By: Mohamad Barakat)
- Poster# 75** **SINGLE NUCLEOTIDE POLYMORPHISMS IN THE TMPRSS6 GENE AND IRON STATUS INDICATORS IN KENYAN SCHOOL CHILDREN.**
Alida Melse-Boonstra, PhD¹, Wanjiku Gichohi, MSc, Elise F. Talsma, MSc, Jan Harryvan, BSc, Mark Boekschoten, PhD, Wayne Towers, PhD² and Michael B. Zimmermann, MD³
¹Wageningen University; ²North-West University, South Africa; ³ETH Zurich, Switzerland
(Presented By: Alida Melse-Boonstra)

Monday, April 15, 2013

- Poster# 76** **DIETARY IRON SHIFTS GUT MICROBIAL METABOLISM TOWARDS A MORE TOXIC PROFILE**
Guus Kortman
Radboud University Medical Centre
(Presented By: Guus Kortman)
- Poster# 77** **DEVELOPMENT OF A NOVEL ORAL COMPLEX FOR IRON DELIVERY: ENCAPSULATION OF HEMIN IN POLYMERIC MICELLES AND ITS IN-VITRO ABSORPTION**
Kimberley Span, J.J.F. Verhoef, V. Brinks, H. Schellekens and W.E. Hennink
University of Utrecht
(Presented By: Kimberley Span)
- Poster# 78** **PREPARATION AND CHARACTERISATION OF SOLID LIPID PARTICLES FOR ORAL IRON DELIVERY**
Mohammed Gulrez Zariwala, PhD¹, Sebastien Farnaud, PhD², Satyanarayana Somavarapu, PhD³, Derek Renshaw, PhD⁴
¹School of Life Sciences, University of Westminster; ²University of Bedfordshire; ³UCL School of Pharmacy; ⁴University of Westminster
(Presented By: Mohammed Gulrez Zariwala)
- Poster# 79** **EXPLORING THE EFFECTS OF IRON DEFICIENCY ON SKELETAL MUSCLE METABOLISM AND FUNCTION**
M.K. Curtis, L.E. Cochlin, M.A. Cole, M.S. Dodd, D.J. Tyler, K. Clarke and P.A. Robbins
University of Oxford
(Presented By: M.K. Curtis)
- Poster# 80** **CONTINUOUS ERYTHROPOIETIN RECEPTOR ACTIVATOR (C.E.R.A.) PROMOTES IRON UTILIZATION FOR ERYTHROPOIESIS THROUGH INTENSIVE SUPPRESSION OF HEPCIDIN LEVELS IN MICE**
Yusuke Sasaki¹, Yuki Matsumoto-Omori, PhD², Mariko Noguchi-Sasaki, PhD², Mitsue Kurasawa², Keigo Yorozu, PhD², Yasushi Shimonaka², Katsuya Ikuta, MD, PhD³ and Yutaka Kohgo, MD, PhD³
¹Chugai Pharmaceutical Co., LTD.; ²Chugai Pharmaceutical Co., Ltd.; ³Asahikawa Medical College
(Presented By: Yusuke Sasaki)
- Poster# 81** **IRON SUPPLEMENTATION IN SUCKLING PIGLETS: HOW TO CORRECT IRON DEFICIENCY ANEMIA WITHOUT INCREASING PLASMA HEPCIDIN LEVELS**
Rafal R. Starzynski, PhD¹, Coby M.M. Laarakkers, PhD³, Harold Tjalsma, PhD³, Dorine W. Swinkels, PhD³, Marek Pieszka, PhD⁴, Agnieszka Stys, PhD¹, Michal Mickiewicz, PhD² and Pawel Lipinski, PhD¹
¹GAB PAS; ²Mifarmex Ltd.; ³Radboud University Nijmegen Medical Center; ⁴National Research Institute of Animal Production
(Presented By: Rafal R. Starzynski)
- Poster# 82** **MACROPHAGES HAVE AN IRON-INDEPENDENT ROLE IN THE REGULATION OF STRESS AND INEFFECTIVE ERYTHROPOIESIS AND CONTRIBUTE TO HEPCIDIN REGULATION**
Bart J. Crielgaard, MD, PhD, Carla Casu, PhD, Pedro Ramos, PhD, Sara Gardenghi, PhD, Laura Breda, PhD, Ross L. Levine, Omar Abdel-Wahab, PhD, Benjamin L. Ebert, Saghi Ghaffari, MD, PhD, Robert W. Grady, PhD, Patricia Giardina, MD and Stefano Rivella, PhD
Weill Cornell Medical College
(Presented By: Bart J. Crielgaard)
- Poster# 83** **ACE-536 CORRECTS INEFFECTIVE ERYTHROPOIESIS, ANEMIA, IRON OVERLOAD AND OTHER CO-MORBIDITIES IN B-THALASSEMIA SYNDROME**
Ravi Kumar, PhD
Acceleron Pharma
(Presented By: Ravi Kumar)
- Poster# 84** **TOXICITY STUDY OF A NOVEL ORAL IRON CHELATOR: 1-(N-ACETYL-6-AMINOHEXYL) 3-HYDROXYPYRIDIN-4-ONE (CM1) IN TRANSGENIC β -THALASSEMIA MICE**
Nittaya Chansiw, PhD student, Kanjana Pangjit, PhD, Pranee Fucharoen, PhD, Suthat Fucharoen, MD and Somdet Srichairatanakool, PhD
Chiang Mai University, Department of Biochemistry, Faculty of Medicine
(Presented By: Nittaya Chansiw)

Monday, April 15, 2013

- Poster# 85** **REDUCTION OF LABILE IRON AND REACTIVE OXYGEN SPECIES IN PRIMARY HEPATOCYTES BY A NOVEL SYNTHETIC IRON CHELATOR, 1-(N-ACETYL-6-AMINOHEXYL)-3-HYDROXYPYRIDIN-4-ONE (CM1)**
Kanokwan Kulprachakarn, PhD Student, Kanjana Pangjit, PhD, Suthat Fucharoen, MD and Somdet Srichairatanakool, PhD
Chiang Mai University
(Presented By: Kanokwan Kulprachakarn)
- Poster# 86** **IN VITRO FERROPORTIN EXPRESSION IN NON TRASFUSION DEPENDENT THALASSEMIA DURING ERYTHROID DIFFERENTIATION**
Laura Sonzogni¹, Luisa Ronzoni, MD, PhD², Giovanna Graziadei, MD², Alessia Marcon, MD², Ilaria Gandolfi, MD² and Maria D. Cappellini, MD²
¹University of Milan; ²Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, University of Milan
(Presented By: Laura Sonzogni)
- Poster# 87** **GROWTH DIFFERENTIATION FACTOR 15 EXPRESSION AND REGULATION DURING ERYTHROID DIFFERENTIATION IN NON TRANSFUSION DEPENDENT THALASSEMIA SYNDROMES**
Luisa Ronzoni, Laura Sonzogni, PhD, Lorena Duca, PhD, Giovanna Graziadei, MD, Claudia Cesaretti, MD, Alessia Marcon, MD and Maria D. Cappellini, MD
Fondazione IRCCS Cà Granda, Ospedale Maggiore Policlinico, University of Milan
(Presented By: Luisa Ronzoni)
- Poster# 88** **EVALUATION OF A NEW ORAL IRON CHELATOR 1-(N-ACETYL-6-HEXYL)-3-HYDROXYPYRIDIN-4-ONE (CM1) FOR TREATMENT OF IRON**
Kanjana Pangjit, PhD student, Chada Phisalaphong, PhD, Somdet Srichairatanakool, PhD and Suthat Fucharoen, MD
Chiang Mai University
(Presented By: Kanjana Pangjit)
- Poster# 89** **INNATE IMMUNE CELL EXPRESSION OF PATTERN RECOGNITION RECEPTORS FROM TRANSFUSED THALASSEMIA MAJOR PATIENTS DURING INTENSIVE COMBINATION CHELATION THERAPY**
Patrick Walter, PhD¹, Paul Harmatz, MD¹, Annie Higa, BS¹, Vivian Ng, BS¹, Marcela Weyhmiller, PhD¹, Patricia Evans, PhD², John Porter, MD², Nancy Sweeters, RN¹, Jackson Price, BSc³, Alisha Manji, BSc³, David Killilea, PhD¹, Ashutosh Lal, MD¹ and Elliott Vichinsky, MD¹
¹Children's Hospital & Research Center Oakland; ²University College London; ³University of Victoria
(Presented By: Patrick Walter)
- Poster# 90** **IRON DISTRIBUTION ASSESSED BY MRI IN SICKLE CELL DISEASE, THALASSEMIA AND DIAMOND BLACKFAN ANEMIA (MCSIO PILOT STUDY)**
Zhiyue J. Wang, PhD¹, John C. Wood, MD, PhD², Patrick B. Walter, PhD³, Bjoern P. Schoennagel, MD⁴, Patricia Evans, PhD⁵, Lynne D. Neumayr, MD³, Marcela G. Weyhmiller, PhD³, Paul Harmatz, MD³, James C. Moon, MD⁵, Quing Yuan, PhD¹, Jeffery L. Miller, MD⁶, Guenter Weiss, MD⁷, Regine Grosse, MD⁴, Joerg Meerpohl, MD⁸, Peter Nielsen, MD, PhD⁴, Elliott Vichinsky, MD³, John B. Porter, MD⁵ and Roland Fischer, PhD⁴
¹University of Texas Southwestern Medical Center Dallas; ²Children's Hospital Los Angeles; ³Children's Hospital & Research Center Oakland; ⁴University Medical Center Hamburg-Eppendorf; ⁵University College London; ⁶National Institute of Diabetes and Digestive and Kidney Diseases; ⁷Medical University of Innsbruck; ⁸University Medical Center Freiburg
(Presented By: Zhiyue J. Wang)

Monday, April 15, 2013

- Poster# 91** **PHARMACOGENETIC STUDY OF UGT1A1 AND UGT1A6 POLYMORPHISMS AND HAPLOTYPES IN TRANSFUSION DEPENDENT THALASSAEMIA PATIENTS REVEALED A COUNTERBALANCE EFFECT BETWEEN TWO UGT ISOFORMS ON DETERMINING CLINICAL RESPONSE TO ONCE DAILY DOSE OF DEFERASIROX THERAPY**
Vip Viprakasit, MD, DPhil¹, Sarayuth Rodmai, MD¹, Nipon Chalaow, BSc¹, Suchada Riolueang, BSc¹, Sirirat Wijit, BSc¹, Portep Tanyut, BSc¹, Julaporn Pooliam, MSc (Stat)² and Bunchoo Pongtanakul, MD³
¹Thalassaemia Center; ²Office for Research Development; ³Department of Pediatrics, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand
(Presented By: Sarayuth Rodmai)
- Poster# 92** **DETERMINATION OF UGT1A1 AND UGT1A6 GENETIC POLYMORPHISMS ON CLINICAL RESPONSE TO DEFERIPRONE MONOTHERAPY FROM A 1-YEAR MULTI-CENTRE PROSPECTIVE, SINGLE ARM, OPEN LABEL, DOSE ESCALATING PHASE III PEDIATRIC STUDY (GPO-L-ONE; A001) FROM THAILAND**
Vip Viprakasit, MD, DPhil², Suchada Riolueang, BSc (Microbiology)¹, Sirirat Wijit, BSc¹, Portep Tanyut, BSc¹, Sarayuth Rodmai, BSc¹, Nipon Chalaow, BSc¹, Julaporn Pooliam, MSc (Stat)³ and Bunchoo Pongtanakul, MD⁴
¹Thalassaemia Center; ²Department of Pediatrics & Thalassemia Center; ³Office for Research Development; ⁴Department of Pediatrics, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand
(Presented By: Suchada Riolueang)
- Poster# 93** **IRON CHELATION THERAPY IMPROVES OXIDATIVE DNA DAMAGE IN HEMATOPOIETIC CELLS DERIVED FROM TRANSFUSION-DEPENDENT MYELODYSPLASTIC SYNDROME**
Masayoshi Kobune, Shohei Kikuchi, MD, PhD, Satoshi Iyama, MD, PhD, Kohichi Takada, MD, PhD, Kazuyuki Murase, MD, PhD, Kaoru Ono, MD, Hiroto Horiguchi, MD, Yusuke Kamihara, MD, Tsuyoshi Hayashi, MD, PhD, Tsutomu Sato, MD, PhD, Koji Miyanishi, MD, PhD, Yasushi Sato, MD, PhD, Rishu Takimoto, MD, PhD and Junji Kato, MD, PhD
Sapporo Medical University
(Presented By: Masayoshi Kobune)
- Poster# 94** **A NOVEL, LONG ACTING, POLYMERIC IRON CHELATOR FOR THE TREATMENT OF SECONDARY IRON OVERLOAD**
J L. Hamilton, PhD Candidate¹, M I. Ul-Haq, PhD², B. Lai, MSc², A L. Creagh, PhD³ and J N. Kizhakkedathu, PhD⁴
¹Centre for Blood Research, Department of Pathology, University of British Columbia; ²Centre for Blood Research, UBC; ³Chemical and Biological Engineering, UBC; ⁴Centre for Blood Research, Department of Chemistry and Pathology, UBC
(Presented By: J L. Hamilton)
- Poster# 95** **ASCORBATE STATUS MODULATES RETICULOENDOTHELIAL IRON STORES AND RESPONSE TO DEFERASIROX IRON CHELATION IN ASCORBATE-DEFICIENT RATS**
Casey Brewer, BSc, Maya Otto-Duessel, PhD, Jens Lykkesfeldt, PhD, DSc, Hanspeter Nick, PhD and John Wood, MD, PhD
Children's Hospital Los Angeles
(Presented By: Casey Brewer)
- Poster# 96** **IRON OVERLOAD AND INDUCTION OF APOPTOSIS IN CULTIVATED PANCREATIC BETA CELLS NES2Y**
Kamila Balusikova, Jiri Nepozitek and Jan Kovar
Third Faculty of Medicine, Charles University in Prague
(Presented By: Kamila Balusikova)
- Poster# 97** **THE INFLUENCE OF STORAGE ON IRON STATUS, OXIDATIVE STRESS AND ANTIOXIDANT PROTECTION IN PAEDIATRIC PACKED RED BLOOD CELL UNITS**
Keith Collard, BSc MSc PhD¹, Desley White, BSc, PhD¹ and Adrian Copplestone, MBBCH²
¹University of Plymouth; ²Peninsula Medical School
(Presented By: Keith Collard)

Monday, April 15, 2013

- Poster# 98** **CHANGES OF THE EXPRESSIONS OF THE GENES INVOLVED IN IRON METABOLISM BY THE IRON CHELATION USING DEFERASIROX IN THE IRON OVERLOADED MOUSE MODEL**
Yasumichi Toki, MD, Katsuya Ikuta, MD, PhD, Lynda Addo, Mayumi Hatayama, MD, Satoshi Ito, MD, Junki Inamura, MD, PhD, Motohiro Shindo, MD, PhD, Hiroki Tanaka, PhD, Katsunori Sasaki, PhD, Yoshihiro Torimoto, MD, PhD and Yutaka Kohgo, MD, PhD
Asahikawa Medical University
(Presented By: Yasumichi Toki)
- Poster# 99** **CONTRASTING SYNERGIES OF PLASMA NON-TRANSFERRIN BOUND IRON (NTBI) REMOVAL BETWEEN DIFFERENT CHELATOR COMBINATIONS DEPEND ON KINETIC DIFFERENCES OF IRON ACCESS BY SHUTTLE MOLECULES**
Patricia Evans, BSc, PhD¹ and John Porter, MA, MD, FRCP, FRCPath²
¹Department of Haematology; ²Department of Haematology, UCL Cancer Institute
(Presented By: Patricia Evans)
- Poster# 100** **SUCCESSFUL TOLERANCE OF DEFERASIROX FOLLOWING DESENSITIZATION FOR SIGNIFICANT SKIN RASH**
Hatoon Ezzat, MD, FRCPC, ABIM, MSc, Robert Schulenburg, MD and Heather Leitch, MD, FRCPC, PhD
University of British Columbia
(Presented By: Hatoon Ezzat)
- Poster# 101** **VITAMIN D DEFICIENCY AND LIVER IRON CONCENTRATION IN TRANSFUSION DEPENDENT HEMOGLOBINOPATHIES IN BRITISH COLUMBIA**
Hatoon Ezzat, MD, FRCPC, ABIM, MSc, John Wu, MD, FRCPC and Heather Leitch, MD, FRCPC, PhD
University of British Columbia
(Presented By: Hatoon Ezzat)
- Poster# 102** **“TRANSFERRIN-IMMUNE COMPLEX DISEASE” IS AN UNDERDIAGNOSED ACQUIRED ALTERATION OF IRON METABOLISM REVEALED BY COEXISTENCE OF M-GUS AND HYPERSIDEREMIA**
Valeria Pinto¹, Marco Musso, PhD², Adriana Borriello, PhD³, Ilaria Caldarelli, PhD³, Maria Criscuolo, PhD³, Domenico Girelli, MD⁴, Fulvio Della Ragione, MD³ and Gian Luca Forni, MD²
¹Ematologia Ospedale Galliera; ²Ematologia, Ospedale Galliera Genoa; ³Dipartimento di Biochimica Seconda Università di Napoli; ⁴Dipartimento di Medicina Clinica e Sperimentale, Università di Verona
(Presented By: Valeria Pinto)
- Poster# 103** **PHYTATE AND DIISATIN-PROPYLENEDIIMINE: IRON BINDING AND ANTIOXIDANT ACTIVITY OF CANDIDATES TO DECREASE LABILE POOLS OF IRON**
Frederico Schleh, Ricardo Couto, Ana Maria Ferreira and Breno Esposito
Universidade de São Paulo – Instituto de Química
(Presented By: Breno Esposito)
- Poster# 104** **VARIABLE DEGREE OF MEAN CELL VOLUME (MCV) AND MEAN CORPUSCULAR HEMOGLOBIN (MCH) IN HEMOGLOBIN E CARRIERS IS DETERMINED BY A COMMON TMPRSS6 VARIANT (RS855791) IN THAI POPULATION**
Vip Viprakasit, MD, DPhil², Nipon Chalaow, BSc (Medical technology)¹, Sarayuth Rodmai, MD³, Suchada Riolveang, BSc³, Sirirat Wijit, BSc³, Portep Tanyut, BSc³, Waraporn Glomglao, BSc³, Kotpichon Chansing, BSc³, Kalaya Tachawanich, MSc³, Wiyakarn Utto, BSc³, Wilaslak Tanongsaksakul, MD⁴ and Somdet Srichairatanakool, PhD⁵
¹Thalassaemia Center; ²Department of Pediatrics, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand; ³Thalassaemia Center, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand; ⁴Awe Udom Hospital, Chonburi, Thailand; ⁵Department of Biochemistry, Chiang Mai University, Chiang Mai, Thailand
(Presented By: Nipon Chalaow)

Monday, April 15, 2013

- Poster# 105** **IN SILICO AND FUNCTIONAL ANALYSES OF GENES OF THE IRON METABOLIC PATHWAY**
Natalie Strickland¹, Ann Louw, PhD³ and Monique Zaahl, PhD²
¹University of Stellenbosch; ²University of Stellenbosch, Department of Genetics; ³University of Stellenbosch, Department of Biochemistry
(Presented By: Natalie Strickland)
- Poster# 106** **A VALIDATED ELISA FOR QUANTITATING HUMAN SERUM HEMOJUVELIN**
Chia Chi Sun, PhD¹, Wenjie Chen, PhD¹, Orlando Gutierrez, MD², Antonello Pietrangelo, MD³, Jodie Babitt, MD¹ and Herbert Lin, MD PhD¹
¹Program in Anemia Signaling Research, Division of Nephrology, Program in Membrane Biology, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA; ²Division of Nephrology, Department of Medicine, University of Alabama at Birmingham, Birmingham, AL, USA.; ³Laboratory of Hereditary and Metabolic Diseases of the Liver, "Mario Coppo" Liver Research Center, University Hospital of Modena and Reggio Emilia, Modena Italy
(Presented By: Chia Chi Sun)
- Poster# 107** **NOBEL QUANTIFICATION SYSTEM OF NON-TRANSFERRIN-BOUND IRON (NTBI) UTILIZING AUTOMATIC ANALYZER**
Katsuya Ikuta, MD, PhD, Satoshi Ito, MD, Lynda Addo, Mayumi Hatayama, MD, Yasumichi Toki, MD, Junki Inamura, MD, PhD, Motohiro Shindo, MD, PhD, Hiroki Tanaka, PhD, Katsunori Sasaki, PhD, Yoshihiro Torimoto, MD, PhD and Yutaka Kohgo, MD, PhD
Asahikawa Medical University
(Presented By: Katsuya Ikuta)
- Poster# 108** **DIAGNOSTIC ALGORITHM FOR HIGH LIVER IRON OVERLOAD**
José María Alústiza¹, Agustin Castiella, MD², Jose Ignacio Emparanza, PhD³, Iratxe Urreta, MD³, Camino Martinez, MD⁴, M. Dolores De Juan, MD³ and Elena Zavala, MD³
¹Osatek; ²Mendaro Hospital; ³Donostia hospital; ⁴Zarauz CS
(Presented By: José María Alústiza)
- Poster# 109** **EVALUATION OF FERRITIN >1000 CUTOFF POINT FOR DIAGNOSING TO DIAGNOSE LIVER IRON OVERLOAD**
Jose Ignacio Emparanza, PhD², José María Alústiza¹, Agustin Castiella, MD³, Iratxe Urreta, MD², Emma Salvador, MD¹, Elena Zubillaga, MD² and Arkaitz Azkuene, MD²
¹Osatek; ²Donostia Hospital; ³Mendaro Hospital
(Presented By: José María Alústiza)
- Poster# 110** **DIAGNOSTIC ALGORITHM FOR SIGNIFICATIVE LIVER IRON OVERLOAD**
José María Alústiza¹, Jose Ignacio Emparanza, PhD², Iratxe Urreta, MD², Agustin Castiella, MD³, Dolores De Juan, MD², Elena Zavala, MD², Camino Martinez, MD⁴ and Elena Zubillaga, MD²
¹Osatek; ²Donostia Hospital; ³Mendaro Hospital; ⁴Zarauz OZ
(Presented By: José María Alústiza)
- Poster# 111** **MR QUANTIFICATION OF HEPATIC IRON CONCENTRATION**
Jose Ignacio Emparanza, MD², Jose Artetxe, MD², José María Alústiza¹, Agustín Castiella, MD³, Pedro Otazua, MD⁴, Elena Zavala, MD² and Camino Martinez, PhD⁵
¹Osatek; ²Donostia Hospital; ³Mendaro Hospital; ⁴Alto Deba Hospital; ⁵Zarauz OZ
(Presented By: José María Alústiza)
- Poster# 112** **DIAGNOSIS OF IRON OVERLOAD IN THE LIVER BY MRI WITH IN-PHASE AND OPPOSED-PHASE T1 SEQUENCE**
José María Alústiza¹, Cristina Gonzalez, MD¹, Jose Ignacio Emparanza, PhD², Agustin Castiella, MD³, Iratxe Urreta, MD² and Elena Zavala, MD²
¹Osatek; ²Donostia Hospital; ³Mendaro Hospital
(Presented By: José María Alústiza)

Monday, April 15, 2013

- Poster# 113** **CALIBRATION OF THE QUANTIFICATION OF IRON CONCENTRATION IN THE LIVER BY MAGNETIC RESONANCE IMAGING**
Jose Ignacio Emparanza, PhD², Adolfo Garrido, MD², Manuel San Vicente, MD¹, José María Alústiza¹, Emma Salvador, MD¹, Pablo Aldazabal, MD², Nerea Gomez, MD², Ana Belen Asensio, MD² and Alfonso Casado, PhD³
¹Osatek; ²Donostia Hospital; ³Basque Country University
(Presented By: José María Alústiza)
- Poster# 114** **QUANTIFICATION OF LIVER IRON CONCENTRATION (LIC) BY MAGNETIC RESONANCE IMAGING (MRI) WITH 1 TESLA AND 1,5 TESLA MACHINES**
Agustin Castiella, MD², Eva Zapata, MD², Pedro Otazua, MD³, Dolores De Juan, MD⁴, Jose Ignacio Emparanza, PhD⁴ and José María Alústiza¹
¹Osatek; ²Mendaro Hospital; ³Alto Deba Hospital; ⁴Donostia Hospital
(Presented By: José María Alústiza)
- Poster# 115** **MEASUREMENT OF LIVER IRON CONCENTRATION BY MRI IS REPRODUCIBLE**
Jose Ignacio Emparanza, PhD², José María Alústiza¹, Agustin Castiella, MD³, Camino Martinez, MD⁴, Emma Salvador, MD¹, Elena Zubillaga, MD² and Arkaitz Azkuene, MD²
¹Osatek; ²Donostia Hospital; ³Mendaro Hospital; ⁴ZarauzOZ
(Presented By: José María Alústiza)
- Poster# 116** **LIVER IRON CONCENTRATION QUANTIFICATION BY MRI: ARE RECOMMENDED PROTOCOLS ACCURATE ENOUGH FOR CLINICAL PRACTICE?**
Agusrin Castiella, MD², José María Alústiza¹, Jose Ignacio Emparanza, PhD³, Eva Zapata, MD², Belen Costero, MD⁴ and Maria Díez, MD⁴
¹Osatek; ²Mendaro Hospital; ³Donostia Hospital; ⁴Alcala de Henares University
(Presented By: José María Alústiza)
- Poster# 117** **SINGLE BREATH-HOLD MULTIECHO MRI SEQUENCES (AT 1.5T) FOR THE SIMULTANEOUS LIPID QUANTIFICATION AND T2* MEASUREMENT IN PATIENTS WITH INCREASED SERUM FERRITIN LEVELS**
Alberto Piperno, MD, Paola Trombini, MD, PhD, Irene Redaelli, Master degree in Physics, Davide Paolo Bernasconi, PhD student, Nicoletta Paruccini, Master degree in Physics, Filiberto Di Gennaro, MD, Sara Pelucchi, Master degree in Biology, Nicola Zucchini, MD, Giorgio Bovo, MD and Stefania Galimberti, Associate Professor in Statistical Medicine
University of Milano-Bicocca, Monza, Italy
(Presented By: Alberto Piperno)
- Poster# 118** **WITHDRAWN**
- Poster# 119** **IRON BIOAVAILABILITY FROM INGESTED IRON OXIDE NANOPARTICLES**
S. Chamorro¹, A. Brenes¹, A. Viveros², C. Romero¹, L. Gutiérrez^{3, 4}, G. Salas^{3, 5}, Y. Luengo³, M.P. Morales³ and F. J. Teran⁵
¹Instituto de Ciencia y Tecnología de Alimentos y Nutrición – CSIC, Ciudad Universitaria, José Antonio Novais, 10, 28040 Madrid, Spain; ²Facultad de Veterinaria, Universidad Complutense de Madrid, Ciudad Universitaria, 28040 Madrid, Spain, ³Instituto de Ciencia de Materiales de Madrid – CSIC, Ciudad Universitaria de Cantoblanco, 28049 Madrid; ⁴School of Physics, The University of Western Australia; ⁵IMDEA Nanociencia, Ciudad Universitaria de Cantoblanco, 28049 Madrid
(Presented By: Francisco J. Teran)
- Poster# 120** **HEMODIALYSIS RESTORED IRON DISTRIBUTION WHICH WAS SEQUESTERED IN SPLEEN BY BILATERAL NEPHRECTOMY**
Takeshi Nakanishi, MD, PhD, Aritoshi Kida, MD, Yasuyuki Nagasawa, MD, PhD, Yukiko Hasuie, MD, PhD, Jyunko Yamashita, Nobuhide Akaike, Yukifumi Kokuba, PhD and Takahiro Kuragano, MD, PhD
Hyogo College of Medicine
(Presented By: Takeshi Nakanishi)

Monday, April 15, 2013

- Poster# 121** **RELATIONSHIP OF SERUM IRON MARKERS TO INFECTION AFTER LIVER TRANSPLANTATION**
Jennifer Chow, MD, MS¹, David Snyderman, MD, FACP¹, Mary A. Simpson, PhD², Mark Westerman, PhD³ and Tomas Ganz, MD, PhD⁴
¹Tufts Medical Center; ²Lahey Clinic; ³Intrinsic LifeSciences, LLC; ⁴UCLA, David Geffen School of Medicine
(Presented By: Jennifer Chow)
- Poster# 122** **EXPLORATIVE STUDIES TOWARD HEPCIDIN AS NOVEL TREATMENT FOR IRON-INDUCED KIDNEY INJURY**
Rachel van Swelm¹, Rosalinde Masereeuw¹, Jack Wetzels² and Dorine Swinkels³
¹Department of Pharmacology and Toxicology, Radboud University Nijmegen Medical Centre; ²Department of Nephrology, Radboud University Nijmegen Medical Centre; ³Department of Laboratory Medicine, Radboud University Nijmegen Medical Centre
(Presented By: Rachel van Swelm)
- Poster# 123** **MOLECULARLY IMPRINTED NANOPARTICLES FOR HEPCIDIN CAPTURE: A SYNTHETIC ALTERNATIVE TO NATURAL ANTIBODIES**
Alessandra Maria Bossi, PhD¹, Erika Andreetto, PhD², Ambra Vestri, PhD Student², Michele Bovi, PhD², Giacomo Musile, PhD Student³, Franco Tagliaro, Prof³, Claudio Baggiani, Prof⁴, Natascia Camprotrini, PhD⁵, Oliviero Olivieri, Prof⁵ and Domenico Girelli, Prof⁵
¹Dept. Biotechnology, University of Verona; ²Department of Biotechnology, University of Verona, Italy; ³Department of Public Health, University of Verona, Italy; ⁴Department of Analytical Chemistry, University of Torino, Italy; ⁵Department of Medicine University of Verona, Italy
(Presented By: Alessandra Maria Bossi)
- Poster# 124** **IS HEPCIDIN-25 PRODUCTION INCREASED IN PATIENTS WITH CHRONIC KIDNEY DISEASE?**
Adam Rumjon and Iain Macdougall, MB, ChB, BSc, MD, FRCP
King's College London
(Presented By: Adam Rumjon)
- Poster# 125** **SIGNIFICANCE OF HEPCIDIN LEVELS ASSESSMENT IN THE DIAGNOSIS OF SELECTED TYPES OF ANEMIA IN CHILDHOOD**
Dagmar Pospisilova, Dusan Holub, Zuzana Zidova, Jiri Houda, Lucie Sulovska, Renata Mojzikova, Pavla Pospisilova and Monika Horvathova
Faculty of Medicine and Dentistry, Palacky University and University Hospital, Olomouc
(Presented By: Dagmar Pospisilova)
- Poster# 126** **PLASMODIUM FALCIPARUM AND PLASMODIUM VIVAX GAMETOCYTE CLEARANCE IN MELANESIAN CHILDREN DETERMINED BY MAGNETIC FRACTIONATION ILLUSTRATES SPECIES-SPECIFIC DIFFERENCES IN MALARIA TRANSMISSION**
Stephan Karl, PhD¹, Tamarah Koleala², Moses Laman, MD¹, Clemencia Ibam², Brioni R. Moore, PhD¹, Anna Rosannas-Urgell, PhD³, Inoni Betuela, MD², Peter M. Siba, PhD², Robert C. Woodward, PhD¹, Ivo Mueller, PhD⁴, Laurens Manning, PhD, MD¹, Timothy G. St. Pierre, PhD¹ and Timothy M.E. Davis, PhD, MD¹
¹The University of Western Australia; ²Papua New Guinea Institute of Medical Research; ³Antwerp Institute of Tropical Medicine; ⁴Walter and Eliza Hall Institute
(Presented By: Stephan Karl)
- Poster# 127** **ANALYSIS OF IRON DISTRIBUTION AND MAGNETIC CHARACTERIZATION OF SCHISTOSOMA MANSONI AND SCHISTOSOMA JAPONICUM EGGS**
Stephan Karl, PhD¹, Lucia Gutierrez, PhD², Rafael Lucyk-Maurer³, Renata R. F. Candido³, Shu Qin Toh⁴, Roland Kerr¹, Martin Saunders, PhD¹, Alexandra Suvorova, PhD¹, Jeremy Shaw, PhD¹, Michael J. House, PhD¹, Robert C. Woodward, PhD¹, Carlos Graeff-Teixeira, PhD, MD³, Malcolm K. Jones, PhD⁴ and Timothy G. St.Pierre, PhD¹
¹The University of Western Australia; ²Instituto de Ciencia de Materiales de Madrid, Spain; ³Pontifícia Universidade Católica do Rio Grande do Sul, Brazil; ⁴The University of Queensland, Australia
(Presented By: Stephan Karl)

Monday, April 15, 2013

- Poster# 128** **COMPARATIVE CHARACTERIZATION OF IRON DEPOSITS IN SPLEENS AND LIVERS OF MALARIA AND SCHISTOSOMA INFECTED MICE**
Lucia Gutierrez, PhD¹, Stephan Karl, PhD¹, Rina P. M. Wong, PhD¹, Rafael Lucyk Maurer², Shu Q. Toh³, Renata R. F. Candido², Anita Chua, PhD¹, Robert C. Woodward, PhD¹, Martin Saunders, PhD¹, Jeremy Shaw, PhD¹, Michael House, PhD¹, Carlos Graeff-Teixera, PhD, MD², Malcolm K. Jones, PhD³, Timothy M.E. Davis, PhD MD¹ and Timothy G. St.Pierre, PhD¹
¹The University of Western Australia; ²Pontifícia Universidade Católica do Rio Grande do Sul, Brazil; ³The University of Queensland and Queensland Institute of Medical Research, Australia
(Presented By: Lucia Gutierrez)
- Poster# 129** **THE P38 HOMOLOGUE MAP KINASE HOG1 IS INVOLVED IN THE RESPONSE OF CANDIDA ALBICANS TO HIGH IRON CONCENTRATIONS**
Hani Kaba, Manfred Nimtz, PhD, Peter Mueller, PhD and Ursula Bilitewski, PhD
Helmholtz Centre for Infection Research
(Presented By: Hani Kaba)
- Poster# 130** **IRON ACQUISITION BY MYCOBACTERIUM TUBERCULOSIS RESIDING WITHIN MYELOID DENDRITIC CELLS**
Oyebode Olakanmi, PhD², Banu Kesavalu, BS², Maher Abdalla, PhD³ and Bradley Britigan¹
¹University of Nebraska Medical Center; ²University of Cincinnati; ³University of Nebraska Medical Center and VA Omaha
(Presented By: Bradley Britigan)
- Poster# 131** **GALLIUM EXHIBITS ANTIMICROBIAL ACTIVITY IN VITRO AND IN VIVO; ROLE OF INHIBITION OF CRITICAL IRON-DEPENDENT ENZYMES**
Oyebode Olakanmi, PhD², Rajamouli Pasula, PhD³, Banu Kesavalu, BS² and Bradley Britigan¹
¹University of Nebraska Medical Center; ²University of Cincinnati; ³University of Cincinnati and VA Cincinnati
(Presented By: Bradley Britigan)
- Poster# 132** **RHODAMINE LABELING OF 3-HYDROXY-4-PYRIDINONE IRON CHELATORS IS AN IMPORTANT CONTRIBUTION TO TARGET MYCOBACTERIUM AVIUM INFECTION**
Tania Moniz, Maria Salome Gomes, PhD and Maria Rangel, PhD
University of Porto
(Presented By: Tania Moniz)
- Poster# 133** **BIOAVAILABLE IRON CONTENT OF PLASMODIUM FALCIPARUM PARASITIZED ERYTHROCYTES INCREASES WITH PARASITE MATURATION AND IN RESPONSE TO EXTRACELLULAR IRON.**
Martha Clark, BS Biochemistry, Nancy Fisher, PhD, Raj Kasthuri, MD and Carla Cerami Hand, MD, PhD
University of North Carolina
(Presented By: Martha Clark)
- Poster# 134** **IRON STATUS AND IRON SUPPLEMENTATION MODULATE LOAD OF INFECTION AND SURVIVAL IN A MALARIA MURINE MODEL**
Daniel Carapau¹, Manuela Santos, PhD² and Maria Mota, PhD³
¹Instituto de Medicina Molecular; ²CRCHUM, Department of Medicine, University of Montréal, Canada; ³Instituto de Medicina Molecular, Malaria Unit, Portugal
(Presented By: Daniel Carapau)
- Poster# 135** **MALARIA-INDUCED ALTERATIONS IN MACROPHAGE IRON HANDLING: AN EXPLORATIVE IN VITRO STUDY**
Susanne van Santen, MD, Q. de Mast, MD, PhD, E.T. Wiegerinck, A.J.A.M. van der Ven, MD, PhD and D.W. Swinkels, MD, PhD
Radboud University Medical Center
(Presented By: Susanne van Santen)

Monday, April 15, 2013

- Poster# 136** **HIV-1 INFECTION AND IRON: ROLE OF HEME-OXYGENASE-1 AND FERROPORTIN**
Sergei Nekhai¹, Namita Kumari, PhD¹, Altreisha Foster, PhD¹, Sharmin Diaz, RN¹, Dmytro Kovalskyy, PhD², Victor R. Gordeuk, MD³ and Subhash Dhawan, PhD⁴
¹Howard University; ²National Taras Shvchenko University, Kiev Ukraine; ³University of Illinois at Chicago, Chicago, IL; ⁴Food and Drug Administration, Rockville, MD
(Presented By: Sergei Nekhai)
- Poster# 137** **β-CAROTENE AND VITAMIN A REVERSE ABNORMALITIES IN IRON METABOLISM IN INFLAMED CACO-2 CELL-LINE**
Oksana Katz, MSc¹, Ram Reifen, MD² and Aaron Lerner, MD³
¹The Hebrew University of Jerusalem; ²Institute of Biochemistry, Food Science and Nutrition, School of Nutritional Science, The Hebrew University of Jerusalem; ³Pediatric Gastroenterology and Nutrition Unit, Carmel Medical Center, B. Rappaport School of Medicine
(Presented By: Oksana Katz)
- Poster# 138** **INVESTIGATING THE ROLE OF CYTOKINES AND HEPICIDIN IN ANEMIA OF INFLAMMATION**
Sara Gardenghi¹, Carla Casu¹, Thomas M. Renaud², Alessandra Meloni¹, Keegan S. Cooke³, Barbra J. Sasu³ and Stefano Rivella¹
¹Weill Cornell Medical College; ²Memorial Sloan-Kettering Cancer Center; ³Amgen, Inc.
(Presented By: Sara Gardenghi)
- Poster# 139** **THE HEREDITARY HEMOCHROMATOSIS PROTEIN HFE INHIBITS MHC I ANTIGEN PRESENTATION**
Alexandre Reuben, Manuela M. Santos, PhD and Réjean Lapointe, PhD
CRCHUM
(Presented By: Alexandre Reuben)
- Poster# 140** **CHARACTERIZATION OF ERYTHROPOIESIS IN A MURINE MODEL OF ANEMIA OF INFLAMMATION DEVELOPED WITH HEAT-KILLED BRUCELLA ABORTUS TREATMENT**
Sara Gardenghi¹, Carla Casu¹, Thomas M. Renaud², Alessandra Meloni¹ and Stefano Rivella¹
¹Weill Cornell Medical College; ²Memorial Sloan-Kettering Cancer Center
(Presented By: Sara Gardenghi)
- Poster# 141** **SERUM HEPICIDIN IN INFLAMMATORY BOWEL DISEASES: BIOLOGICAL AND CLINICAL SIGNIFICANCE**
Nataschia Campostrini¹, Gaetano Bergamaschi², Antonio Di Sabatino², Riccardo Albertini³, Filippo Costanzo², Marco Guerci², Michela Masotti², Alessandra Pasini², Alessandro Massari², Michela Corbella¹, Domenico Girelli¹ and Gino Roberto Corazza²
¹University of Verona, Department of Medicine, Verona, Italy; ²Department of Internal Medicine, University of Pavia Medical School and Fondazione IRCCS Policlinico San Matteo, Pavia, Italy; ³Clinical Chemistry Laboratory, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy
(Presented By: Nataschia Campostrini)
- Poster# 142** **NITROGEN MONOXIDE INHIBITS HEME SYNTHESIS IN MOUSE ERYTHROID CELLS**
Marc Mikhael, PhD, Shan Soe-Lin, PhD, Sameer Apte, BSc and Prem Ponka, PhD, MD
McGill University – Dept. of Physiology
(Presented By: Marc Mikhael)
- Poster# 143** **ACTIVATION OF NATURAL KILLER T CELLS BY ALPHA-GALACTOSYLCERAMIDE AFFECTS IRON METABOLISM**
Hua Huang, Gabriela Fragoso, PhD and Manuela Santos, PhD
University of Montréal
(Presented By: Hua Huang)
- Poster# 144** **FRIEND OF GATA AND GATA-6 MODULATE THE TRANSCRIPTIONAL UP-REGULATION OF HEPICIDIN IN HEPATOCYTES DURING INFLAMMATION**
Edward Bagu, PhD, Antonio Layoun, PhD and Manuela Santos, PhD
University of Montreal
(Presented By: Edward Bagu)

Monday, April 15, 2013

- Poster# 145** **ROLE OF TOLL-LIKE RECEPTORS AND MYD88 ADAPTOR PROTEIN IN THE DEVELOPMENT OF HYPOFERREMIA AND THE REGULATION OF IRON HOMEOSTASIS**
Antonio Layoun, Gabriela Fragoso, PhD, Annie Calvé, MSc and Manuela M. Santos, PhD
Institut du cancer de Montréal (ICM), University of Montreal
(Presented By: Antonio Layoun)
- Poster# 146** **IDENTIFICATION OF NOVEL REGULATORS OF FERROPORTIN EXPRESSION**
Claudia Guida^{1,2,4}, Sandro Altamura^{1,4}, Felix Klein², Michael Boutros³, Matthias W. Hentze^{2,4} and Martina U. Muckenthaler^{1,4}
¹Department of Pediatric Hematology, Oncology and Immunology, University of Heidelberg, Germany; ²European Molecular Biology Laboratory, Heidelberg, Germany; ³DKFZ – Division of Signaling and Functional Genomics, Heidelberg, Germany; ⁴Molecular Medicine Partnership Unit, Heidelberg, Germany
(Presented By: Claudia Guida)
- Poster# 147** **IL-28 POLIMORPHISM AND IRON HOMEOSTASIS DISTURBANCES IN CHRONIC HEPATITIS C: PRELIMINARY POLISH SINGLE CENTER STUDY**
Katarzyna Sikorska¹, Anna Szpitter², Agnieszka Bernat², Piotr Stalke¹, Tomasz Smiatacz¹ and Krzysztof Bielawski²
¹Department of Infectious Diseases, Medical University of Gdansk; ²Intercollegiate Faculty of Biotechnology, Laboratory of Molecular Diagnostics, University of Gdansk-Medical University of Gdansk, Kladki 24, 80-822 Gdansk, Poland
(Presented By: Katarzyna Sikorska)
- Poster# 148** **PARENTERAL IRON ALONG WITH A HIGH FAT DIET RESULTS IN INCREASED HEPATIC IMMUNE CELL ACCUMULATION, INFLAMMATION, OXIDATIVE STRESS AND APOPTOSIS BUT DECREASED STEATOSIS IN AN OBESE, DIABETIC MOUSE MODEL OF NON-ALCOHOLIC FATTY LIVER DISEASE**
Priya Handa, PhD¹, James Nelson, PhD¹, Vicki Morgan-Stevenson, BS¹, Bryan Maliken, BS¹, Jilene Chua, BS², Matthew Yeh, MD² and Kris Kowdley, MD¹
¹Benaroya Research Institute, Seattle, WA; ²University of Washington
(Presented By: Priya Handa)
- Poster# 149** **NRF2 PARTICIPATES IN THE UP-REGULATION OF FERROPORTIN EXPRESSION BY NITRIC OXIDE**
Agnieszka Stys, PhD¹, Cendrine Seguin, PhD², Rafal R. Starzynski, PhD¹, Cedric Picot, PhD², Pawel Lipinski, PhD¹, Agnieszka Loboda, PhD³, Alicja Józkowicz, Prof³, Józef Dulak, Prof³ and Cecile Bouton, PhD²
¹GAB PAS; ²CSN CNRS; ³Jagiellonian University
(Presented By: Agnieszka Stys)
- Poster# 150** **FLUORESCENT IRON CHELATORS WITH ANTIMICROBIAL ACTIVITY: INSIGHT ON STRUCTURE-ACTIVITY RELATIONSHIPS FROM LIPOSOME PARTITION STUDIES**
Maria Rangel, Tania Moniz, MSc, Andreia Leite, PhD, Paula Gameiro, PhD and Galya Ivanova, PhD
ICBAS, University of Porto, Portugal
(Presented By: Maria Rangel)
- Poster# 151** **STRONG INDUCTION OF ACTIVIN B IN ESCHERICHIA COLI SEPSIS**
Céline Besson-Fournier², Chloé Latour², Patricia Martin, PhD², Nelly Rouquié², Eric Oswald, PhD², Marie-Paule Roth, MD² and Hélène Coppin, PhD¹
¹Inserm U1043; ²Inserm
(Presented By: Hélène Coppin)
- Poster# 152** **EFFECT OF NITRIC OXIDE ON IRON HOMEOSTASIS IN AN INTESTINAL EPITHELIAL CELL LINE**
Shirly Moshe-Belizowski, Orly Savion, Shaked Braun, Tom Haber, Marianna Truman-Rosentsvit and Esther Meyron-Holtz, PhD
Technion – Israel Institute of Technology
(Presented By: Shirly Moshe-Belizowski)

Monday, April 15, 2013

- Poster# 153** **ROLE OF HEPCIDIN IN THE SETTING OF HYPOFERREMIA DURING ACUTE INFLAMMATION**
Jean-Christophe Deschemin² and Sophie Vaulont¹
¹INSERM, U1016; ²INSERM U1016, Institut Cochin, Paris, France, CNRS, UMR8104, Paris, France, Université Paris Descartes, Sorbonne Paris Cité, Paris, France
(Presented By: Sophie Vaulont)
- Poster# 154** **DOES HELICOBACTER PYLORI INFECTION AFFECT DUODENAL MUCOSAL EXPRESSION OF IRON TRANSPORTERS?**
Shiny Prem, MD¹, Joe Varghese, MD¹, BS Ramakrishna, MD, DM, PhD² and Molly Jacob, MD, PhD¹
¹Department of Biochemistry, Christian Medical College, Vellore, India; ²Department of Gastroenterology, Christian Medical College, Vellore, India
(Presented By: Molly Jacob)
- Poster# 155** **NITRIC OXIDE-DEPENDENT REGULATION OF FERROPORTIN-1 CONTROLS MACROPHAGE IRON HOMEOSTASIS AND IMMUNE FUNCTION IN SALMONELLA INFECTION**
Manfred Nairz¹, Ulrike Schleicher², Andrea Schroll³, Thomas Sonnweber³, Igor Theurl³, Anna-Maria Mitterstill³, Sabine M. Mair³, Egon Demetz³, Heribert Talasz⁴, Gerald Brandacher⁵, Patrizia L. Moser⁶, Martina U. Muckenthaler⁷, Ferric C. Fang⁸, Christian Bogdan² and Günter Weiss³
¹Medical University of Innsbruck, Internal Medicine VI; ²Mikrobiologisches Institut – Klinische Mikrobiologie, Immunologie und Hygiene, Universitätsklinikum Erlangen und Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; ³Department of Internal Medicine VI, Medical University of Innsbruck, Austria; ⁴Biocenter, Division of Clinical Biochemistry, Medical University of Innsbruck, Austria; ⁵Department of Plastic and Reconstructive Surgery, Johns Hopkins University School of Medicine, Baltimore, MD, USA; ⁶Department of Pathology, Medical University of Innsbruck, Austria; ⁷Department of Pediatric Oncology, Hematology and Immunology, University of Heidelberg, Germany; ⁸Departments of Laboratory Medicine and Microbiology, University of Washington, Seattle, WA, USA
(Presented By: Manfred Nairz)
- Poster# 156** **UROPATHOGENIC ESCHERICHIA COLI DOWN-REGULATES HEPCIDIN EXPRESSION IN KIDNEY**
Dounia Houamel, PhD Student, Boualem Moulouel, PhD Student, Dimitri Tchernitchko, MD PhD, Sara Dion, MSc, Marcelle Bens, MSc, Alain Vandewalle, MD PhD, Hervé Puy, MD PhD, Laurent Gouya, MD PhD, Carole Beaumont, PhD, Erick Denamur, MD PhD and Zoubida Karim, PhD INSERM U773/ The doctoral school GC2ID Paris Diderot
(Presented By: Dounia Houamel)
- Poster# 157** **HEPCIDIN REGULATION DURING ACUTE INFECTIONS**
Andrew E. Armitage, DPhil, Uzi Gileadi, Andrea Stacey, Eleni Giannoulatou, Elizabeth Marshall, Pamela Sturges, Lucy Eddowes, Vincenzo Cerundolo, Alain Townsend, Craig Webster, Persephone Borrow and Hal Drakesmith
WIMM, University of Oxford
(Presented By: Andrew E. Armitage)
- Poster# 158** **IRON CHELATING PROPERTY OF DIETARY GRAPE POLYPHENOLS AND ITS ROLE IN THE PREVENTION OF LIPID OXIDATION**
Susana Chamorro², Agustín Viveros³, Ignacio Arija³, Carmen Centeno², Gorka Salas¹ and Agustín Brenes²
¹IMDEA NANOCIENCIA; ²ICTAN-CSIC; ³Facultad Veterinaria, UCM
(Presented By: Gorka Salas)
- Poster# 159** **EFFECT OF IRON CHELATION ON T CELL RESPONSES IN RHEUMATOID ARTHRITIS**
Damini Tewari, Katie Lloyd-Jones, PhD, Robert Hider, Prof, Yongmin Ma, PhD and Helen Collins, PhD
Kings College London
(Presented By: Damini Tewari)

Monday, April 15, 2013

- Poster# 160** **DETAILED CHARACTERIZATION OF THE MOUSE MODEL OF ANEMIA OF INFLAMMATION CAUSED BY HEAT-KILLED BRUCELLA ABORTUS REVEALS MULTIPLE CAUSES OF ANEMIA AND PARTIAL DEPENDENCE ON HEPCIDIN**
Airie Kim, MD¹, Eileen Fung, PhD², Sona Parikh², Victoria Gabayan, BS², Elizabeta Nemeth, PhD² and Tomas Ganz, PhD, MD²
¹University of California at Los Angeles; ²UCLA
(Presented By: Airie Kim)
- Poster# 161** **COMPARISON OF METHODS TO ASSESS THE INFLUENCE OF CHRONIC INFLAMMATION ON INTESTINAL IRON ABSORPTION IN MICE**
C. Becker, M. Buffler, K. Schümann, W. Windisch
TU Munich, Life Science Center Weihenstephan, Chair of Animal Nutrition
(Presented By: Christiane Becker)
- Poster# 162** **MACROPHAGE-HFE IS CRITICAL FOR LIPOPOLYSACCHARIDE (LPS)-CONTROLLED HEPATIC HEPCIDIN ACTIVATION**
Christoph Metzendorf, PhD, Maja Vujic Spasic, PhD, Katrin Eichelbaum, PhD, Tomi Baehr-Ivacevic, Richard Sparla, Jeroen Krijgsveld, PhD, Vladimir Benes, PhD, Matthias Hentze, MD and Martina Muckenthaler, PhD
University of Heidelberg
(Presented By: Christoph Metzendorf)
- Poster# 163** **EXPRESSION OF LACTOFERRIN-DERIVED PEPTIDES IN E.COLI AND STUDY OF THEIR ANTIMICROBIAL PEPTIDE ACTIVITY**
Kosha Mehta, PhD², Robert Evans, PhD³ and Sebastien Farnaud, PhD¹
¹University of Bedfordshire; ²University of Westminster; ³University of Brunel
(Presented By: Sebastien Farnaud)
- Poster# 322** **HEPCIDIN-DEPENDENT AND HEPCIDIN-INDEPENDENT REGULATION OF ERYTHROPOIESIS IN A MOUSE MODEL OF ANEMIA OF CHRONIC INFLAMMATION**
Jacqueline Langdon¹, Saiah Yates¹, Laurette Femnou¹, Bryan McCranor, PhD¹, Qian-Li Xue, PhD¹, Sophie Vaultont, PhD², Curt Civin, MD³, Jeremy Walston, MD¹ and Cindy Roy, PhD¹
¹Johns Hopkins University; ²INSERM; ³University of Maryland School of Medicine
(Presented By: Cindy Roy)

Tuesday, April 16, 2013

08:00 – 14:30 **Registration / Information Desk Open**
Location: South Cloister; Wilkins Building

07:30 – 12:00 **Exhibit Hours**
Location: Cloisters; Wilkins Building

07:15 – 08:30 **Meet the Expert Session I: How Do We Measure Iron Transport Mechanisms in Cells and Their Compartments?**

Location: Garden Room; Wilkins Building

Ioav Cabantchik, MD, PhD

Bryan MacKenzie, PhD

08:45 – 10:30 **Plenary Session III: Iron and Cancer**

Location: Bloomsbury Theatre

Chairs: Suzy Torti, PhD

 Des Richardson, PhD

- 08:45** #15 **IRP2 REGULATES TUMOR GROWTH IN BREAST CANCER**
Wei Wang, PhD², Zhiyong Deng, PhD¹, Heather Hatcher, PhD³, Lance Miller, PhD³, Xiumin Di, MS³, Lia Tesfay, MS¹, Ralph B. D'Agostino Jr., PhD⁴, Suzy Torti, PhD¹ and Frank Torti, MD⁵
¹Department of Molecular, Microbial and Structural Biology, University of Connecticut Health Center, Farmington, CT 06030 USA; ²Department of Pathology, Wake Forest School of Medicine; ³Department of Cancer Biology, Wake Forest School of Medicine, Winston-Salem, NC 27157 USA; ⁴Department of Biostatistics, Wake Forest School of Medicine, Winston-Salem, NC 27157 USA; ⁵Department of Medicine, University of Connecticut Health Center, Farmington, CT 06030 USA
(Presented By: Suzy Torti)
- 09:15** #16 **EXPRESSION OF THE NEET PROTEIN FAMILY MEMBERS MITONEET AND NAF-1 IS ESSENTIAL FOR CELL PROLIFERATION AND PLAYS A ROLE IN CANCER CELLS BY AFFECTING IRON METABOLIC PROPERTIES**
Sagiv Tamir, MSc², Yung-Sung Sohn, PhD², Yael Harir, MSc², Luma Song, PhD³, Ron Mittler, PhD³, Patrica Jennings, PhD⁴, Ioav Cabantchik, MD, PhD² and Rachel Nechushtai, PhD¹
¹Hebrew University of Jerusalem, Israel; ²The Alexander Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Israel; ³Department of Biological Sciences, University of North Texas, TX USA; ⁴Departments of Chemistry, Biochemistry and Physics, UCSD, La Jolla, CA, USA
(Presented By: Rachel Nechushtai)
- 09:30** #17 **EXPLOITING IRON TOXICITY IN MULTIPLE MYELOMA: A STRATEGY TO INCREASE THE EFFICACY OF PROTEASOME INHIBITION THERAPIES**
Alessandro Campanella, PhD¹, Sabrina Bertilaccio, PhD¹, Paolo Santambrogio, PhD¹, Magda Marcatti, MD¹, Roberto Sitia, MD, PhD², Giovanni Tonon, MD, PhD¹ and Clara Camaschella, MD²
¹San Raffaele Scientific Institute; ²Vita-Salute San Raffaele University
(Presented By: Alessandro Campanella)
- 09:45** #18 **EXTRACELLULAR FERRITIN IS A TUMORIGENIC FACTOR AND IS SECRETED BY TUMOR-ASSOCIATED MACROPHAGES: A FUNCTIONAL LINK BETWEEN INFLAMMATION AND TUMORIGENESIS**
Ahmed Alkhateeb, BS², B. Han, MD, PhD, Kim Leitzel, MS, A. Ali, MD, Allan Lipton, MD and James Connor, PhD¹
¹Pennsylvania State University College of Medicine; ²Pennsylvania State University
(Presented By: James Connor)

Tuesday, April 16, 2013

10:00 #19 **THE IRON CHELATOR DP44MT IS HIJACKING P-GLYCOPROTEIN IN THE LYSOSOMES TO OVERCOME DRUG RESISTANCE**
Patric Jansson, MSc, PhD, Tetsuo Yamagishi, Danae Sharp and Des Richardson
Department of Pathology and Bosch Institute, University of Sydney
(Presented By: Patric Jansson)

10:15 #20 **NOVEL THIOSEMICARBAZONE IRON CHELATORS INHIBIT EPITHELIAL TO MESENCHYMAL TRANSITION AND MIGRATION OF CANCER CELLS VIA THE IRON REGULATED METASTASIS SUPPRESSOR NDRG1**
Zaklina Kovacevic, Zhiqiang Chen, MD, PhD, Jing Sun, MD, Daohai Zhang, PhD and Des R. Richardson, BSc, MSc, PhD, DSc (UWA), FFS (RCPA)
University of Sydney
(Presented By: Zaklina Kovacevic)

10:30 – 11:00 **Coffee Break**
Jeremy Bentham Room and Cloisters; Wilkins Building

11:00 – 12:00 **Plenary Session IV: Keynote Lecture**
Chairs: Clara Camaschella, MD
Paul A. Sharp, BSc, PhD

Oxygen and Iron Homeostasis
Christopher J. Schofield, MD

12:00 – 12:15 **Selected Late Breaking Abstract**

#72 **THE NEUROTROPHIN SPAETZLE5 UPREGULATES HEME BIOSYNTHESIS VIA NITRIC OXIDE SIGNALING TO INCREASE STEROID HORMONE PRODUCTION IN DROSOPHILA**
Qiuxiang Ou and Kirst King-Jones
Department of Biological Sciences, University of Alberta, Edmonton, Canada
(Presented By: Krist King-Jones)

12:15 – 12:45 **Business Meeting (IBIS Members)**

Please enjoy the afternoon

Wednesday, April 17, 2013

- 08:00 – 18:15** **Registration / Information Desk Open**
Location: South Cloister; Wilkins Building
- 07:30 – 15:00** **Exhibit Hours**
Location: Cloisters; Wilkins Building
-
- 07:30 – 08:45** **Meet the Expert Session II: How Do We Search for New Genes of Iron Metabolism?**
Location: Garden Room; Wilkins Building
Mark D. Fleming, MD, DPhil
- 09:00 – 10:30** **Plenary Session V: Iron Transport Between and Within Cells**
Location: Bloomsbury Theatre
Chairs: Caroline Philpott, MD
 Nancy Andrews, MD, PhD
- 09:00 – 09:30** **The Secret Life of the Transferrin Receptor**
Nancy Andrews, MD, PhD
- 09:30** #21 **FLVCR1A MAINTAINS HEPATIC HEME AND IRON HOMEOSTASIS AND CONTROLS CYTOCHROME ACTIVITY BY REGULATING THE FREE HEME POOL**
Francesca Vinchi, PhD, Giada Ingoglia, PhD Student, Deborah Chiabrando, PhD, Emilia Turco, PhD, Lorenzo Silengo, MD, Fiorella Altruda, PhD and Emanuela Tolosano, PhD
Molecular Biotechnology Center, University of Turin
(Presented By: Francesca Vinchi)
- 09:45** #22 **A POTENTIAL ROLE OF THE HEME EXPORT PROTEIN FLVCR IN IRON HOMEOSTASIS**
Raymond Doty, PhD, Elizabeth Broussard, MD, Christopher Savard and Janis Abkowitz, MD
University of Washington
(Presented By: Raymond Doty)
- 10:00** #23 **EACH MEMBER OF THE PCBP FILY EXHIBITS IRON CHAPERONE ACTIVITY TOWARD FERRITIN**
Sebastien Leidgens, PhD¹, Kimberley Bullough, PhD¹, Haifeng Shi, PhD¹, Toshiki Yabe, PhD¹, Mino Shakoury-Elizeh, BA¹, Poorna Subramanian, BA², Emory Hsu, BS¹, Navin Natarayan, BS¹, Anjali Nandal, PhD¹, Timothy Stemmler, PhD² and Caroline Philpott¹
¹NIDDK, NIH; ²Wayne State University
(Presented By: Caroline Philpott)
- 10:15** #24 **SEVERE DEFECTS IN IRON METABOLISM IN MICE WITH DOUBLE KNOCKOUT OF THE MULTICOPPER FERROXIDASES HEPHAESTIN AND CERULOPLASMIN**
Brie Fuqua, Deepak Darshan, David Frazer, Sarah Wilkins, Chris Vulpe and Gregory Anderson
University of California, Berkeley, CA, USA, and the Queensland Institute of Medical Research, Brisbane, Australia
(Presented By: Brie Fuqua)
- 10:30 – 11:00** **Coffee Break**
Location: Jeremy Bentham Room and Cloisters; Wilkins Building

Wednesday, April 17, 2013

11:00 – 12:00 Plenary Session VI: Special Keynote Lecture

Location: Bloomsbury Theatre

Chairs: Kaila S. Srail, BSc, MSc, PhD
Greg Anderson, BSc, MSc, PhD

11:00 – 12:00 **Iron, Energy and Origin of Life**

Nick Lane, MD

12:00 – 14:00 **Lunch**

Location: Cloisters

14:00 – 16:00 **Poster Walk II – with tea and scones**

Location: Cloisters, Old Refectory and Jeremy Bentham Room; Wilkins Building

Poster# 165 **THE ROLE OF HYPOXIA INDUCIBLE FACTORS IN IRON TRANSPORTER EXPRESSION IN CACO-2 CELLS**

Katayoun Pourvali, PhD¹ and Paul Sharp, PhD²

¹King's College London, Faculty of Nutrition and Food Technology, Shaheed Beheshti Medical University, Tehran, Iran; ²King's College London

(Presented By: Katayoun Pourvali)

Poster# 166 **REGULATION OF INTRACELLULAR IRON HOMEOSTASIS UNDER HYPOXIA**

Qianqian Luo, Medicine Master, Chunming Cheng, Medicine Master in reading, Dan Wang, Medicine Master, Xian Cao, Medicine Master in reading and Li Zhu, PhD

Institute of Nautical Medicine/Nantong University

(Presented By: Li Zhu)

Poster# 167 **INCREMENTAL IRON AND ITS EFFECTS ON HYPOXIA PATHWAYS**

Nicole Bart, MBBS Bsc Med (Hons)¹ and Peter Robbins, DPHIL BA MA²

¹Oxford; ²Oxford University

(Presented By: Nicole Bart)

Poster# 168 **IRON AND HYPOXIA LINK: DOWNREGULATION OF LUCIFERASE ACTIVITY OF HEPcidIN PROMOTER BY HYPOXIC SERA IN HUH-7 CELLS**

Federico Greni¹, Giulia Ravasi, Master², Sara Pelucchi, Master², Laura Silvestri, PhD³, Marta Cappellini, Master², Donatella Barisani, MD², Clara Camaschella, PhD, MD³ and Alberto Piperno, MD²

¹University of Milano Bicocca; ²UNIMIB; ³San Raffaele Institute

(Presented By: Federico Greni)

Poster# 169 **IMPACT OF LABILE PLASMA IRON ON VIABILITY OF CULTURED MONONUCLEAR CELLS**

Flávio Naoum, MD, PhD, Idiberto Zotarelli, Breno Espósito, PhD, Ana Carolina Abreu and Oswaldo Grecco, MD, PhD

Academia de Ciência e Tecnologia

(Presented By: Flávio Naoum)

Poster# 170 **NOVEL HETEROZYGOUS MISSENSE MUTATIONS IN GLRX5 GENE OF A CHINESE PATIENT AFFECTED BY SIDEROBLASTIC ANEMIA**

Gang Liu, BS², Shanshan Guo, BS³, Bing Han, MD⁴ and Guangjun Nie¹

¹National Centre for Nanoscience and Technology, China; ²National Center for Nanoscience and Technology; ³National Center for Nanoscience and Technology; ⁴Department of Hematology, Peking Union Medical College Hospital

(Presented By: Guangjun Nie)

Poster# 171 **RENAL ERYTHROPOIETIN PRODUCTION IS IMPAIRED WITH IRON OVERLOAD AND HEPcidIN LOSS**

Boualem Mouloué¹, Dounia Houame², Joachim Fandrey³, Sophie Vaultant⁴, Hervé Puy², Laurent Gouya², Carole Beaumont² and Zoubida Karim²

¹Biomedical research center Bichat-Beaujon CRB3, Medical School, Paris-Diderot University, Paris; ²Biomedical research center Bichat-beaujon, Medical School, Paris Diderot University, Paris; ³Institut für Physiologie, Universität Duisburg-Essen, Essen, Germany; ⁴INSERM, U1016,

Institute Cochin, CNRS, UMR8104, Université Paris Descartes, Sorbonne Paris Cité, Paris, France

(Presented By: Boualem Mouloué)

Wednesday, April 17, 2013

- Poster# 172** **MUTATION SPECTRUM IN CHINESE PATIENTS AFFECTED BY CONGENITAL SIDEROBLASTIC ANEMIA AND A SEARCH FOR GENOTYPE-PHENOTYPE RELATIONSHIP**
Gang Liu¹ and Guangjun Nie, PhD²
¹CAS Key Laboratory for Biological Effects of Nanomaterials and Nanosafety; ²CAS Key Laboratory for Biological Effects of Nanomaterials and Nanosafety, National Center for Nanoscience and Technology
(Presented By: Gang Liu)
- Poster# 173** **FUNCTIONAL ANALYSIS OF FLVCR1 MUTANTS IN POSTERIOR COLUMN ATAXIA AND RETINITIS PIGMENTOSA**
Izumi Yanatori, DDS, PhD, Yumiko Yasui, PhD, Koshiro Miura, MD, PhD and Fumio Kishi, MD, PhD
Kawasaki Medical School
(Presented By: Izumi Yanatori)
- Poster# 174** **DISTINCT ROLES OF FLVCR1 ISOFORMS IN PRIMITIVE AND DEFINITIVE ERYTHROPOIESIS**
Sonia Mercurio, Sara Petrillo, PhD Student, Chiabrando Deborah, PhD, Giulio Valperga, Student, Lorenzo Silengo, Prof., Fiorella Altruda, Prof., Massimo Santoro, Assistant Prof. and Emanuela Tolosano, Prof.
Department of Molecular Biotechnology and Health Sciences and Molecular Biotechnology Center, University of Turin, Turin, Italy
(Presented By: Sonia Mercurio)
- Poster# 175** **HEME OXYGENASE 1 EXPRESSION REGULATES THE LEVEL OF HEME AVAILABLE FOR HEMOGLOBINIZATION OF ERYTHROID CELLS**
Daniel Garcia-Santos, PhD¹, Matthias Schranzhofer, PhD¹, Monika Horváthova, PhD², Mehrad Mojtabeh Jaber Jaber, BSc¹, Jose Artur Bogo Chies, PhD³, Alex Sheftel Sheftel, PhD⁴ and Prem Ponka, PhD, MD¹
¹Lady Davis Institute for Medical Research, Jewish General Hospital; ²Department of Biology, Palacky University; ³Department of Genetics, Federal University of Rio Grande do Sul; ⁴Heart Institute, University of Ottawa
(Presented By: Daniel Garcia-Santos)
- Poster# 176** **INHIBITION OF ERYTHROPOIESIS BY IRON OVERLOAD IS MEDIATED THROUGH TGF β SIGNALING**
Krishna Gundabolu, MD², Huihui Li, MS¹, Lohith Shakaladevanapura, MD², Tushar Bhagat², Nishant Vallumsetla², Yelena Ginzburg, MD¹ and Amit Verma, MD²
¹New York Blood Center; ²Albert Einstein College of Medicine
(Presented By: Yelena Ginzburg)
- Poster# 177** **SOTATERCEPT, AN ACTIVIN RIIA LIGAND TRAP, INCREASES HEMOGLOBIN AND IRON AVAILABILITY IN HEPCIDIN TRANSGENIC MICE**
Cindy Roy, PhD¹, Jacqueline Langdon, Alan Berger, PhD, Chris Cheadle, PhD, Victoria Sung, PhD² and Qian-Li Xue, PhD
¹Johns Hopkins University; ²Celgene Corporation
(Presented By: Cindy Roy)
- Poster# 178** **COMPLEX PATHOGENESIS OF ANEMIA IN PREGNANCY**
Valeriy Demikhov, MD, Elena Demikhova, Elena Zinovyeva, Olga Zhurina, PhD and Elena Morshchakova, MD
Federal Clinical Research Center for Pediatric Hematology, Oncology and Immunology Named D. Rogachev, Ryazan Branch
(Presented By: Valeriy Demikhov)
- Poster# 179** **LIVER IRON IS THE PRIMARY SIGNAL MODULATING HEPCIDIN EXPRESSION DURING CHRONICALLY ELEVATED ERYTHROPOIESIS**
Elena Gammella, PhD¹, Victor Diaz, PhD², Stefania Recalcati, MD, PhD¹, Paolo Santambrogio, PhD³, Arianne Monge-Naldi, MD², Johannes Vogel, MD², Max Gassmann, PhD² and Gaetano Cairo, PhD¹
¹University of Milan; ²University of Zurich; ³S Raffaele Hosp, Milan
(Presented By: Elena Gammella)

Wednesday, April 17, 2013

- Poster# 180** **THE EFFECT OF BONE MARROW TRANSPLANTATION TO IRRADIATED MICE ON HEPCIDIN EXPRESSION**
Jana Vavrova, MSc, Iuliia Gurieva, MD, Ludek Sefc, PhD, Jana Frydlova, PhD, Jan Krijt, PhD and Martin Vokurka, MD, PhD
Institute of Pathophysiology, First Faculty of Medicine, Charles University, Prague, Czech Republic
(Presented By: Martin Vokurka)
- Poster# 181** **GENE COMPARISON STUDIES OF ERYTHROBLASTS DERIVED FROM DIFFERENT HAEMATOPOIETIC SOURCES**
Alison Merryweather-Clarke, PhD, Abigail Lamikanra, PhD, Hoi Pat Tsang, MSc, Cheng Tao Yang, MSc, Anna French, BSc, Lee Carpenter, PhD, Suzanne Watt, PhD, FRCPath and Dave Roberts, DPhil, FRCP, FRCPath
University of Oxford and NHS Blood and Transplant
(Presented By: Alison Merryweather-Clarke)
- Poster# 182** **ANEMIA, HEMATOPOIESIS AND IRON METABOLISM IN TELEOST FISH**
João Neves, PhD and Pedro Rodrigues, PhD
Instituto de Biologia Molecular e Celular, Universidade do Porto
(Presented By: João Neves)
- Poster# 183** **IRP1-/- MICE EXHIBIT AN ABNORMAL ERYTHROPOIETIC PHENOTYPE**
Nicole Wilkinson and Kostas Pantopoulos, PhD
Lady Davis Institute for Medical Research and McGill University
(Presented By: Nicole Wilkinson)
- Poster# 184** **EDX-17, A SAFE PHYTOHORMONE THAT PROMISES A PHENOTYPIC CURE FOR SICKLE CELL DISEASE AND A BLOCKING TREATMENT FOR MALARIA - IN VIVO PROOF OF PRINCIPLE IN ANIMALS**
Robert Broyles, PhD^{1,2,3}, Austin Roth, BA^{1,2}, Robert Floyd, PhD^{1,2,4} and Sunil Joshi, PhD, DVM^{1,5},
¹Sickle Cell Cure Foundation; ²EpimedX; ³Biochemistry & Molecular Biology, University of Oklahoma Health Sciences Center; ⁴Experimental Therapeutics:Oklahoma Medical Research Foundation; ⁵Microbiology & Immunology, University of Oklahoma Health Sciences Center
(Presented By: Robert Broyles)
- Poster# 185** **ERYTHROPOIESIS AND IRON HOMEOSTASIS IN MICE AND HUMANS WITH MUTATED DMT1**
Zuzana Zidova, Katarina Kapralova, Dalibor Dolezal, Pavla Luzna, Vladimir Divoky and Monika Horvathova
Faculty of Medicine and Dentistry, Palacky University, Olomouc
(Presented By: Zuzana Zidova)
- Poster# 186** **HOLOTRANSFERRIN REGULATES TRANSFERRIN RECEPTOR 2 IN THE ERYTHROID LINEAGE**
Maud Vieillevoeye, Master¹, Mireille Lambert, PhD², Yael Zermati, PhD², CatherineLacombe, PhD, MD², Patrick Mayeux, PhD² and Frederique Verdier, PhD²
¹Institut Cochin; ²Institut Cochin, France
(Presented By: Maud Vieillevoeye)
- Poster# 187** **ABO AS POTENTIAL NOVEL LOCUS FOR HAEMATOLGICAL TRAITS IN EUROPEANS**
Stela McLachlan, Sonia Shah, Jon White, Jorgen Engmann, Ann Walker, Jackie Price, Andy Wong, Richard Morris, Tom Gaunt, Yoav Ben-Shlomo, Ian Day, Meena Kumari, Diana Kuh and Mika Kivimaki, on behalf of UCLEB Consortium
University of Edinburgh
(Presented By: Stela McLachlan)
- Poster# 188** **NUCLEAR FERRITIN: FROM DISCOVERY TO PROMISING TREATMENTS TO STOP SICKLE CELL DISEASE AND MALARIA**
Austin Roth, BA^{1,4}, Visar Belegu, PhD², Emily Curry, BS^{1,4}, Marie Trudel, DSc³, Robert Floyd, PhD^{4,5}, Sunil Joshi, PhD, DVM^{1,6} and Robert Broyles, PhD^{1,4,7}
¹Sickle Cell Cure Foundation; ²Kennedy Krieger Institute, Johns Hopkins University; ³IRCM; ⁴EpimedX; ⁵Experimental Therapeutics, Oklahoma Medical Research Foundation; ⁶Microbiology & Immunology, University of Oklahoma Health Sciences Center; ⁷Biochemistry & Molecular Biology, University of Oklahoma Health Sciences Center
(Presented By: Austin Roth)

Wednesday, April 17, 2013

- Poster# 189** **CONTRASTING RELATIONSHIPS OF SERUM NON-TRANSFERRIN BOUND IRON AND TRANSFERRIN SATURATION TO IRON OVERLOAD, INEFFECTIVE ERYTHROPOIESIS AND SERUM HEPcidIN IN SICKLE CELL AND THALASSAEMIA DISORDERS**
Patricia Evans, BSc, PhD¹, Farrukh Shah, MD², Farzana Sayani, MD³, Sukhvinder Bansal, PhD⁴, Maciej Garbowski, MD⁵, Aalim Weljie, PhD³, Patrick Walter, PhD⁶, Robert Hider, PhD⁴ and John Porter, MA, MD, FRCP, FRCPath⁵
¹Department of Haematology; ²Whittington Hospital, UK; ³University of Calgary, Canada; ⁴King's College, London, UK; ⁵University College, London, UK; ⁶Childrens' Hospital and Research Center, Oakland, USA
(Presented By: Patricia Evans)
- Poster# 190** **HEMOPEXIN THERAPY IMPROVES CARDIOVASCULAR FUNCTION IN MOUSE MODELS OF HEMOLYTIC DISORDERS BY CHELATING PLASMA FREE HEME AND REDISTRIBUTING HEME-IRON TO THE LIVER**
Francesca Vinchi, PhD¹, Lucia De Franceschi, MD², Alessandra Ghigo, PhD, Tim Townes, PhD³, James Cimino, BSc, Lorenzo Silengo, MD, Emilio Hirsch, PhD, Fiorella Altruda, PhD and Emanuela Tolosano, PhD
¹Molecular Biotechnology Center, University of Turin; ²Department of Medicine, University of Verona, Policlinico GB Rossi, Verona, Italy; ³Department of Biochemistry and Molecular Genetics, University of Alabama at Birmingham, Birmingham, AL, USA
(Presented By: Francesca Vinchi)
- Poster# 191** **CERULOPLASMIN OXIDATION, A FEATURE OF PARKINSON'S AND ALZHEIMER'S DISEASES CSF, INHIBITS FERROXIDASE ACTIVITY AND PROMOTES CELLULAR IRON RETENTION**
Marco Barbariga, Stefano Olivieri, Antonio Conti, Flavio Curnis, Annapaola Andolfo, Sandro Iannaccone, Alessandro Campanella, Franca Codazzi, Giuseppe Magnani, Angelo Corti and Massimo Alessio
Ospedale San Raffaele
(Presented By: Marco Barbariga)
- Poster# 192** **A LOW MOLECULAR WEIGHT FERROXIDASE IS INCREASED IN THE CSF OF SCJD CASES: CSF FERROXIDASE AND TRANSFERRIN AS DIAGNOSTIC BIOMARKERS FOR SCJD**
Neena Singh, Swati Haldar, Alim J. Beveridge, Joseph Wong and Christine Schmotzer
Departments of Pathology¹ AN, Case Western Reserve University
(Presented By: Neena Singh)
- Poster# 193** **IRON: KEY TO INDIVIDUAL DIFFERENCES IN SUSCEPTIBILITY TO PESTICIDE NEUROTOXICITY?**
Byron Jones, PhD¹, Erica Unger, PhD¹, Gelareh Alam, Pharm D², Lina Yin, PhD¹, Lu Lu, MD³, Robert Williams, PhD³, Diane Miller, PhD⁴ and James O'Callaghan, PhD⁵
¹Penn State University; ²Penn State University; ³U. Tennessee Health Sciences Center; ⁴CDC-National Institute for Occupational Safety and Health; ⁵CDC-National Institutional for Occupational Health and Safety
(Presented By: Byron Jones)
- Poster# 194** **A NOVEL MODEL FOR BRAIN IRON UPTAKE: INTRODUCING THE CONCEPT OF REGULATION**
Ian Simpson, PhD, Padmavathi Ponnuru, PhD, Marianne Klinger, BS, Roland Myers, BS, Kavi Deveraj, PhD, Christopher Coe, PhD, Gabriele Lubach, PhD, Anthony Carruthers, PhD and James Connor, PhD
Pennsylvania State University College of Medicine
(Presented By: James Connor)

Wednesday, April 17, 2013

Poster# 195

HEPCIDIN AND FERROPORTIN PARTICIPATE IN IRON CLEARANCE FROM BRAIN ENDOTHELIUM: FAILURE OF THIS PROCESS LEADS TO IRON ACCUMULATION IN ALZHEIMER'S DISEASE

Animesh Alexander Raha, BSc(Hons)², Adrian Bomford, MBBS, FRCP³ and Ruma Raha-Chowdhury, PhD¹

¹Cambridge Centre for Brain Repair, Department of Clinical Neuroscience, University of Cambridge; ²Cambridge Centre for Brain Repair, Department of Clinical Neuroscience, University of Cambridge; ³Institute of Liver Studies, King's College Hospital, London (Presented By: Ruma Raha-Chowdhury)

Poster# 196

ANIMAL MODELS OF NEUROFERRITINOPATHY

Federica Maccarinelli¹, Dr. Michela Asperti², Dr. Sara Capoccia³, Dr. Antonella Pagani⁴, Barbara Buffoli, PhD⁵, Franca Codazzi, PhD⁴, Dario Finazzi, MD², Ilaria Pelizzoni, PhD⁴, Anna Cozzi, PhD⁴, Dr. Maurizio Strippoli⁴, Letterio Politi, MD⁴, Ottavio Cremona, MD⁶, Fabio Grohovaz, PhD⁵, Sonia Levi, PhD⁶ and Paolo Arosio, PhD²

¹DMMT; ²DMMT, University of Brescia; ³Istituto Superiore Di Sanita', Rome; ⁴Institute H.San Raffaele, Milano; ⁵University of Brescia; ⁶University Vita-Salute, Milano (Presented By: federica Maccarinelli)

Poster# 197

DOES IRON HAVE CAUSAL ROLES IN NEURODEGENERATION WITH BRAIN IRON ACCUMULATION? - A NEW VIEW FROM A MOUSE MODEL OF HEMOCHROMATOSIS

Moones Heidari¹, Daniel Johnstone, PhD², Ross Graham, PhD³, Kristy Martin¹, John Olynyk, MD, PhD⁴, Debbie Trinder, PhD⁵, Roheeth Delima, BSc⁵, Anita Chua, PhD⁵, Michael House, PhD⁵ and Elizabeth Milward, PhD¹

¹The University of Newcastle; ²University of Sydney; ³Curtin University of Technology; ⁴Fremantle Hospital; ⁵University of Western Australia (Presented By: Moones Heidari)

Poster# 198

IRON UPTAKE IN RESTING AND REACTIVE ASTROCYTES: A POTENTIALLY NEUROPROTECTIVE CONTROL OF IRON BURDEN.

Ilaria Pelizzoni, PhD, Daniele Zacchetti, PhD, Alessandro Campanella, PhD, Romina Macco, PhD, Alessandra Consonni, PhD, Barbara Bettegazzi, PhD, Fabio Grohovaz, Prof and Franca Codazzi, PhD

San Raffaele Scientific Institute and San Raffaele University (Presented By: Franca Codazzi)

Poster# 199

DIVALENT METAL TRANSPORTER 1-DEPENDENT ISCHEMIC NEURODEGENERATION: STRATEGIES TO KNOCKDOWN FERROUS IRON UPTAKE

Rosaria Ingrassia¹, Francesca Fenaroli, PhD¹, Annamaria Lanzillotta, PhD¹, Laura Borgese, PhD², Laura Depero, PhD², Maurizio Memo, PhD¹, Marina Pizzi, PhD³, Pier Franco Spano, PhD³, Enzo Nisoli, MD, PhD⁴ and Alessandra Valerio, MD¹

¹Department of Molecular and Translational Medicine, University of Brescia, Italy; ²Laboratory of Chemistry for Technologies, University of Brescia, Brescia, Italy; ³Department of Molecular and Translational Medicine, National Institute of Neuroscience, University of Brescia, IRCCS S.Camillo Hospital, Venice, Italy; ⁴Department of Medical Biotechnology and Translational Medicine, University of Milan, Milan, Italy (Presented By: Rosaria Ingrassia)

Wednesday, April 17, 2013

- Poster# 200** **IRON RELATED GENE EXPRESSION AND BIOCHEMICAL PHENOTYPE SUPPORT IRON HOMEOSTASIS DYSREGULATION IN ALZHEIMER'S DISEASE**
Ângela Crespo⁴, Bruno Silva³, Liliana Marques^{2, 8}, Erica Marcelino¹, Carolina Maruta¹, Sónia Costa⁴, Ângela Timóteo⁴, Arminda Vilares², Frederico Couto¹, Paula Faustino³, Ana Correia⁵, Ana Verdelho¹, Graça Porto⁶, Manuela Guerreiro¹, Ana Herrero⁴, Cristina Costa⁴, Alexandre Mendonça¹, Madalena Martins^{1, 7} and Luciana Costa^{2, 8}
¹Neurological Clinical Research Unit, Instituto de Medicina Molecular, 1649-028 Lisboa, Portugal; ²Molecular and Cellular Immunology, Dept. of Health Promotion and Prevention of non-Transmissible Diseases, National Institute of Health Dr. Ricardo Jorge, Lisboa, Portugal; ³Departamento de Genética Humana, Instituto Nacional de Saúde Dr. Ricardo Jorge, Lisboa, Portugal; ⁴Neurology Service, Fernando Fonseca Hospital, Amadora, Portugal; ⁵Magalhães Lemos Hospital, Porto, Portugal; ⁶Center for Predictive and Preventive Genetics, IBMC, Porto, Portugal; ⁷Instituto Gulbenkian de Ciência, 2781-901 Oeiras, Portugal; ⁸Center for Biodiversity, Functional and Integrative Genomics, Lisboa, Portugal
(Presented By: Bruno Silva)
- Poster# 201** **NEW HUMAN NEURONAL MODELS OF PANTOTHENATE KINASE ASSOCIATED NEURODEGENERATION FOR THE STUDY OF OXIDATIVE STATUS AND MITOCHONDRIA FUNCTIONALITY**
Sonia Levi¹, Paolo Santambrogio, PhD², Anna Cozzi, PhD², Daniela Privitera, PhD¹, Ida Luisa Rotundo, PhD², Vania Broccoli, PhD² and Barbara Garavaglia, PhD³
¹Vita-Salute San Raffaele University; ²San Raffaele Scientific Institute; ³IRCCS Foundation Neurological Institute "C.Besta", Milan, Italy
(Presented By: Sonia Levi)
- Poster# 202** **MODELING HEME, IRON AND COPPER HOMEOSTASIS IN BRAIN INJURY**
Ann Smith, BS, PhD¹, Peter Hahl, BS², Taron Davis, BA², Preeti Thakor, PhD², Simon Kaja, PhD³, Cecilia Washburn, BS⁴ and Jack Rogers, PhD⁴
¹UMKC; ²School of Biological Sciences, University of Missouri – Kansas City, Kansas City, MO, USA; ³School of Medicine, University of Missouri – Kansas City, Kansas City, MO, USA; ⁴Psychiatry-Neuroscience Department, Massachusetts General Hospital, Boston, MA, USA
(Presented By: Ann Smith)
- Poster# 203** **DELIVERY OF IRON CHELATORS ACROSS THE BLOOD-BRAIN BARRIER**
Ferdinand Fuchs, Anna Preisner, Dr. Sourav Roy, Katharina Brandner, Ana Georgian, Dr. Gerd Wagner, Dr. Jane Preston and Robert Hider, Prof.
King's College London
(Presented By: Ferdinand Fuchs)
- Poster# 204** **DEXRAS1, A SMALL GTPASE, IS REQUIRED FOR GLUTAMATE-NMDA NEUROTOXICITY IN VIVO**
Yong Chen, PhD, Reas Khan, PhD, Alyssa Cwanger, BS, Ying Song, PhD, Catherine Steenstra, BS, Sookhee Bang, PhD, Joshua Dunaief, MD, PhD, Kenneth Shindler, MD, PhD and Sangwon Kim
University of Pennsylvania
(Presented By: Sangwon Kim)
- Poster# 205** **INTRACELLULAR NEURONAL IRON PLAYS A CRUCIAL ROLE IN REGULATING NMDA EXCITABILITY IN AREA CA1 OF THE HIPPOCAMPUS**
Anup Bhattacharya, BS, Rachel White, PhD, Yong Chen, PhD, Mary McMullen, BS, Catherine Steenstra, BS, Gregory Carlson, PhD and Sangwon Kim
University of Pennsylvania
(Presented By: Sangwon Kim)
- Poster# 206** **A DECREASE IN NEURONAL FERROPORTIN ACCOMPANIES CHRONIC BRAIN INFLAMMATION WITH IRON DEPOSITION**
Michelle V. Andersen, BSc, Pia R. Christoffersen, BSc, Malene D. Jensen, BSc, Jacek Lichota, MSc, PhD and Torben Moos
Aalborg University
(Presented By: Torben Moos)

Wednesday, April 17, 2013

- Poster# 207** **EVALUATION OF IRON LEVELS IN ALZHEIMER'S DISEASE USING MRI RELAXOMETRY**
Christos Michaelides¹, David J. Lythgoe¹, Harold G. Parkes², Claire Troakes¹, Istvan Bodi¹,
Tina Geraki³, Amy H. Herlihy⁴ and Po-Wah So¹
¹King's College London, London; ²Institute of Cancer Research, London; ³Diamond Light Source,
Oxford; ⁴Agilent Technologies, Oxford
(Presented By: Christos Michaelides)
- Poster# 208** **ALTERED BRAIN IRON HOMEOSTASIS IN PARKINSON'S DISEASE AND THE
POTENTIAL FOR IRON CHELATION THERAPY**
David Dexter, PhD², Roberta Ward, PhD², Robert Crichton, PhD³, Veronica Kallo, PhD¹ and
Surjit K. Srail, PhD¹
¹University College, London; ²Imperial College, London; ³University Catholique de Louvain
(Presented By: David Dexter)
- Poster# 209** **ANALYSIS OF IRON METABOLISM IN TFR2 TARGETED ANIMALS BRAIN**
Rosa Maria Pellegrino, Enrica Boda, Martina Boero, Francesac Montarolo, Alessandro
Volpengo, Giuseppe Saglio, Annalisa Buffo and Antonella Roetto
University of Torino – Dept. of Oncology
(Presented By: Antonella Roetto)
- Poster# 210** **C19ORF12 SILENCING IN NEUROBLASTOMA SH-SY5Y CELLS PERTURBS IRON
HOMEOSTASIS**
Dr. Paola Ruzzenenti, Maura Poli, PhD, Angela De Luca, PhD, Dr. Federica Maccarinelli,
Dr. Michela Asperti, Dr. Ilaria Uberti, Dr. Maria Regoni, Paolo Arosio, PhD and Dario Finazzi, MD
Univerity of Brescia
(Presented By: Paola Ruzzenenti)
- Poster# 211** **THE H63D HFE GENE VARIANT ACCELERATES DISEASE PROGRESSION IN
AMYOTROPHIC LATERAL SCLEROSIS (ALS)**
Wint Nandar, BS, Elizabeth Neely, BS, Zachary Simmons, MD and James Connor, PhD
Pennsylvania State University College of Medicine
(Presented By: James Connor)
- Poster# 212** **THE H63D HFE GENE VARIANT IMPACTS AMYOTROPHIC LATERAL SCLEROSIS VIA
MITOCHONDRIAL MECHANISMS**
Xiaowei Su, BS², Elizabeth Neely, BS, Wint Nandar, BS and James Connor, PhD¹
¹Pennsylvania State University College of Medicine; ²Pennsylvania State Univesity College of
Medicine
(Presented By: James Connor)
- Poster# 213** **PANK2 -/- MICE TISSUES SHOW SIGN OF OXIDATIVE DAMAGE**
Michela Guaraldo¹, Anna Cozzi, PhD², Paolo Santambrogio, PhD³, Dario Brunetti, PhD³, Valeria
Tiranti, PhD⁴ and Sonia Levi, PhD⁴
¹San Raffaele Scientific Institute; ²Raffaele Scientific Institute; ³San Raffaele Scientific Institute;
⁴RCCS Foundation Neurological Institute "C.Besta", Milano, Italy
(Presented By: Michela Guaraldo)
- Poster# 214** **A CELL MODEL FOR FRIEDREICH ATAXIA USING DORSAL ROOT GANGLIA NEURONS**
Stefka Mincheva-Tasheva, PhD, Elia Obis, Joaquim Ros, PhD and Jordi Tamarit, PhD
Universitat de LLeida
(Presented By: Jordi Tamarit)
- Poster# 216** **AN EXAMINATION OF THE EFFECT OF SEX AND IRON AND COPPER CONSUMPTION IN A
MOUSE MODEL OF ALZHEIMER'S DISEASE**
Caitlin Groeber, MA and Jane Flinn, PhD
George Mason University
(Presented By: Caitlin Groeber)

Wednesday, April 17, 2013

- Poster# 217** **IRON HOMEOSTASIS IN PATHOLOGICAL RETINA: TRANSFERRIN AS NEW THERAPEUTIC AGENT**
Picard Emilie, PhD¹, Vesvres Marie-Helene, Engineer², Sergeant Claire, PhD², Berdugo Marianne, PhD³, El Sanharawi Mohamed, MD³, Jeanny Jean-Claude, PhD³, Behar-Cohen Francine, MD, PhD⁴ and Courtois Yves, PhD³
¹INSERM/CRC UMRS872 team 17; ²CNRS UMR 5084, Nuclear and Bio-environmental Chemistry, Bordeaux-Gradignan, France; ³Université Pierre et Marie Curie et Université René Descartes, Paris, France/ INSERM UMRS872, Paris, France; ⁴Université Pierre et Marie Curie et Université René Descartes, Paris, France/ INSERM UMRS872, Paris, France / Ophtalmologie, Hôpital Hotel Dieu, Paris, France
(Presented By: Picard Emilie)
- Poster# 218** **THE QUANTITATIVE ASSESMENT OF COMBINATIONS OF THE NOVEL IRON CHELATOR (E)-N'-[1-(2-HYDROXY-5-NITROPHENYL)ETHYLIDEN] ISONICOTINOYLHYDRAZIDE AND THE ANTI-ESTROGEN TAMOXIFEN ON MCF-7 BREAST ADENOCARCINOMA CELL LINE**
Eliska Mackova, Hana Jansova, Pavlina Haskova, Lucie Tichotova and Tomas Simunek
Charles University in Prague, Faculty of Pharmacy in Hradec Kralove
(Presented By: Eliska Mackova)
- Poster# 219** **CANCER AS A FERROTOXIC DISEASE: WHAT WE HAVE LEARNED FROM ANIMAL STUDIES TOWARD ITS PREVENTION**
Shinya Toyokuni, MD, PhD, Li Jiang, MD, PhD, Yasumasa Okazaki, MD, PhD and Shinya Akatsuka, MD, PhD
Nagoya University Graduate School of Medicine
(Presented By: Shinya Toyokuni)
- Poster# 220** **THE INTERACTION OF NOVEL ANTI-CANCER IRON CHELATORS WITH ALBUMIN: MECHANISMS OF CELLULAR UPTAKE**
Danuta Kalinowski, BSc (Hons I), PhD, A. Merlot, N. Pantarat, S. Menezes, M. Doddareddy, D. Hibbs and D.R. Richardson
The University of Sydney
(Presented By: Danuta Kalinowski)
- Poster# 221** **A COMPARATIVE STUDY OF THE ANTIPROLIFRATIVE ACTIVITY OF THIOSEMICARBAZONE IRON CHELATORS IN SKIN CELLS**
Olivier Reelfs, PhD, DSc¹, Benjamin L. Young, MPharm¹, Asma Aroun, PhD¹, Magnus Hoffmann, BSc¹, Seyed Ali Miri, BSc¹, Des R. Richardson, PhD, DSc (UWA), FFSc (RCPA)², Ian M. Eggleston, PhD¹ and Charareh Pourzand, PhD,DSc¹
¹University of Bath; ²University of Sydney
(Presented By: Olivier Reelfs)
- Poster# 222** **IMPROVING THE EFFICIENCY OF AMINOLEVULINATE-PHOTODYNAMIC THERAPY OF SKIN CANCER BY COMBINING UVA IRRADIATION AND POTENT IRON CHELATING AGENTS**
Tina Radka, MPhil, Olivier Reelfs, PhD,DSc, Ruggero Dondi, PhD, Ian M. Eggleston, PhD and Charareh Pourzand, PhD,DSc
University of Bath
(Presented By: Tina Radka)
- Poster# 223** **THE DOWN-REGULATION OF FERRITIN HEAVY CHAIN AS AN ADJUVANT THERAPY IN HUMAN GLIOMA**
Min Pang, BS, Achuthamangalam Madhankumar, PhD, Becky Webb, BS, Xiaoli Liu, PhD and James Connor, PhD
Pennsylvania State University College of Medicine
(Presented By: James Connor)
- Poster# 224** **ASSESSMENT OF LABILE PLASMA IRON IN PATIENTS SUBMITTED TO HEMATOPOIETIC STEM CELL TRANSPLANTATION**
Flávio Naoum, MD, PhD, Breno Espósito, PhD, Lílian Ruiz, MD, Milton Ruiz, MD, PhD, Paula Tanaka, MD, PhD, Juliana Pereira, MD, Rodolfo Cançado, MD, PhD and José Barros, MD, PhD
Academia de Ciência e Tecnologia
(Presented By: Flávio Naoum)

Wednesday, April 17, 2013

- Poster# 225** **IRON REDUCTION THERAPY IMPROVES SERUM ALFA-FETOPROTEIN LEVELS IN PATIENTS WITH CHRONIC HEPATITIS C VIRUS INFECTION**
Fumiaki Kimura, MD¹, Yasuo Mishima, MD¹, Nobuyuki Shigeto¹, Tomoko Fukuda, MD¹, Shigehiro Yamahara, MD¹, Sanami Miyoshi¹, Ai Sahara¹, Tadashi Matsumura, MD², Shinji Fujii, MD³ and Mitsune Tanimoto, MD³
¹Tamano City Hospital; ²Himeji St. Mary's Hospital; ³Medical School Okayama University
(Presented By: Fumiaki Kimura)
- Poster# 226** **DEVELOPMENT AND EVALUATION OF A QUANTITATIVE LATERAL FLOW IMMUNOASSAY FOR THE DETECTION OF FERRITIN AS POINT-OF-CARE TESTING**
Fumiaki Kimura, MD¹, Sanami Miyoshi¹, Yasuo Mishima, MD¹, Nobuyuki Shigeto¹, Tomoko Fukuda, MD¹, Shigehiro Yamahara, MD¹, Tadashi Matsumura, MD², Shinji Fujii, MD³ and Mitsune Tanimoto, MD³
¹Tamano City Hospital; ²Himeji St. Mary's Hospital; ³Medical School Okayama University
(Presented By: Fumiaki Kimura)
- Poster# 227** **INCREASED HEPATIC OXIDATIVE DNA DAMAGE IN PATIENTS WITH NONALCOHOLIC STEATOHEPATITIS WHO DEVELOP HEPATOCELLULAR CARCINOMA**
Koji Miyanishi, MD, PhD, Shingo Tanaka, MD, Masayoshi Kobune, MD, PhD, Yutaka Kawano, MD, PhD and Junji Kato, MD, PhD
Sapporo Medical University
(Presented By: Koji Miyanishi)
- Poster# 228** **ANAEMIA IN INFLAMMATION-ASSOCIATED COLONIC TUMOURIGENESIS**
Anita Chua¹, Desiree Ho¹, Borut Klopčič¹, John Olynyk², Ian Lawrance³ and Debbie Trinder¹
¹University of Western Australia; ²Fremantle Hospital; ³Centre for Inflammatory Bowel Diseases, Fremantle Hospital
(Presented By: Anita Chua)
- Poster# 229** **A ROLE FOR THE HEPcidIN-FERROPORTIN AXIS IN BREAST CARCINOGENESIS?**
Oriana Marques, BSc, MSc¹, Alexandra Rêma, BSc¹, Fátima Faria, BSc¹, Berta Martins da Silva, PhD², Graça Porto, MD, PhD² and Carlos Lopes, MD, PhD¹
¹Institute of Biomedical Sciences Abel Salazar; ²Institute of Molecular and Cellular Biology (IBMC)
(Presented By: Oriana Marques)
- Poster# 230** **TUMORAL VECTORIZATION OF NEW IRON CHELATORS FOR ANTIPROLIFERATIVE ACTIVITY: BIOLOGICAL PROPERTIES OF POLYAMINOQUINOLINES**
Vincent Corcé¹, Stéphanie Renaud¹, Isabelle Cannie¹, Olivier Loréal¹, David Deniaud² and François Gaboriau¹
¹Inserm UMR991, CHU Pontchaillou, Rennes, France; ²CEISAM, CNRS UMR6230, Nantes, France
(Presented By: François Gaboriau)
- Poster# 231** **NOVEL LIGHT-ACTIVATED CAGED IRON CHELATORS: TARGETED PRODRUGS FOR IRON RELATED-DISORDERS**
Benjamin Young, MPharm, Olivier Reelfs, PhD,DSc, Asma Aroun, PhD, Seyed Ali Miri, BSc, Magnus Hoffmann, BSc, Charareh Pourzand, PhD,DSc and Ian Eggleston
University of Bath
(Presented By: Ian Eggleston)
- Poster# 232** **LIGHT-ACTIVATABLE AND PHOTO-CONTROLLED CAGED-NIH, A PROMISING PRO-IRON CHELATOR FOR THE TOPICAL THERAPY OF SKIN CANCER**
Benjamin L. Young, MPharm, Olivier Reelfs, PhD,DSc, Asma Aroun, PhD, Ian M. Eggleston, PhD and Charareh Pourzand, PhD,DSc
University of Bath
(Presented By: Benjamin L. Young)

Wednesday, April 17, 2013

- Poster# 233** **MEAT AND HEME IRON AND OESOPHAGEAL ADENOCARCINOMA IN THE EPIC-EURGAST STUDY**
Paula Jakszyn
Catalan Institute of Oncology
(Presented By: Paula Jakszyn)
- Poster# 234** **IRON AND CANCER RISK – A SYSTEMATIC REVIEW OF THE EPIDEMIOLOGICAL EVIDENCE**
Ana Fonseca, PhD student and Paula Jakszyn
Catalan Institute of Oncology
(Presented By: Paula Jakszyn)
- Poster# 235** **THE POLYAMINOQUINOLINE HQ1-44, A NEW IRON CHELATOR VECTORIZED BY POLYAMINE INHIBITS THE TUMOR GROWTH IN XENOGRAFTED IMMUNODEPRESSED MICE**
Stéphanie Renaud, PhD¹, Vincent Corcé¹, Isabelle Cannie¹, Olivier Loréal¹, David Deniaud² and François Gaboriau¹
¹Inserm UMR991, CHU Pontchaillou, Rennes, France; ²CEISAM, CNRS UMR6230, Nantes, France
(Presented By: Stéphanie Renaud)
- Poster# 236** **DO ALTERED CHOLESTEROL AND LIPID HOMEOSTASIS IN C282Y HFE MUTANT EXPRESSING CANCERS: IMPLICATIONS FOR CANCER THERAPY?**
Sang Lee, Fatima Ali-Rahmani, Michael Huang, Jong Yun, Cara-Lynne Schengrund and James Connor
Pennsylvania State University
(Presented By: Sang Lee)
- Poster# 237** **HEPCIDIN AND FERRITIN AS PREDICTORS OF BREAST TUMORS**
Rosaria Orlandi, Maida De Bortoli, Elena Vaghi, Paolo Verderio, Chiara Maura Ciniselli, Dario Caccia, Vito Garrisi, Silvia Veneroni, Maria Grazia Daidone, Elda Tagliabue, Laura Silvestri, Clara Camaschella and Italia Bongarzone, Biological Sciences
DOSMM, Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy
(Presented By: Italia Bongarzone)
- Poster# 238** **HFE GENOTYPE STUDY IN CANCERS**
Sang Lee, Michael Huang, Jong Yun and James Connor
Pennsylvania State University
(Presented By: Sang Lee)
- Poster# 239** **EPIGENETIC REGULATION OF HEPcidIN EXPRESSION IN NON-VIRAL HEPATOCELLULAR CARCINOMA: RESULTS OF A GENOME-WIDE STUDY**
Michela Corbella, Silvia Udali, Patrizia Guarini, Sara Moruzzi, Domenico Girelli, Patrizia Pattini, Andrea Ruzzenente, Alfredo Guglielmi, Alberto Ferrarini, Massimo Delledonne, Sang-Woon Choi and Simonetta Friso
University of Verona
(Presented By: Michela Corbella)
- Poster# 240** **DIFFERENTIAL EXPRESSION OF MULTI-COPPER FERROXIDASES IN INVASIVE DUCTAL CARCINOMA**
Zouhair Attieh, PhD¹, Rasha Al-Mismar, MS¹, Joe AbuMsalleh, MS², Pamela Nabhan, BS¹, Mheniah Bacouri-Haidar, PhD², Julnar Usta, PhD³ and Chris Vulpe, MD, PhD⁴
¹AUST; ²Lebanese University; ³American University of Beirut; ⁴University of California, Berkeley
(Presented By: Zouhair Attieh)
- Poster# 241** **A LINK BETWEEN PREMENOPAUSAL IRON DEFICIENCY AND BREAST CANCER MALIGNANCY**
Xi Huang, PhD, Jinlong Jian, PhD, Qing Yang, PhD, Yongzhao Shao, PhD, Deborah Axelrod, MD, Julia Smith, MD and Baljit Singh, MD
NYU School of Medicine
(Presented By: Xi Huang)

Wednesday, April 17, 2013

- Poster# 242** **BINDING OF LUMINAL IRON USING ALGINATES AS A THERAPY FOR BOWEL CANCER**
Richard Horniblow, MSci, Daniel Stones, MRes, Sorina Radulescu, PhD, Owen Sansom, PhD, Zoe Pikramenou, PhD and Chris Tselepis, PhD
University of Birmingham
(Presented By: Richard Horniblow)
- Poster# 243** **PRE-TREATMENT WITH THE ORAL CHELATING AGENT ICL670A MAY ENHANCE CHEMOTHERAPY RESPONSE IN OESOPHAGEAL ADEONCARCINOMA**
Matthew Bedford, Samuel Ford, Olga Tucker, Tariq Iqbal, Derek Alderson and Chris Tselepis
University of Birmingham
(Presented By: Chris Tselepis)
- Poster# 244** **TREATMENT WITH FERRIC IRON DOWNREGULATES E-CADHERIN IN A MODEL OF BREAST CANCER IN VITRO AND MAY PROMOTE EPITHELIAL TO MESENCHYMAL TRANSITION**
Cody Weston, BS, Ahmed Alkhateeb, BS and James Connor, PhD
Penn State College of Medicine
(Presented By: Cody Weston)
- Poster# 245** **THE ROLE OF IRON IN CANCER AND IN THE POLARIZATION OF TUMOR-ASSOCIATED MACROPHAGES**
Milene Costa da Silva, Adelheid Cerwenka and Martina U. Muckenthaler
Molecular Medicine Partnership Unit (MMPU), Heidelberg, Germany
(Presented By: Milene Costa da Silva)
- Poster# 246** **ABBERANT REGULATION OF CHECKPOINT RESPONSE IN MOUSE EMBRYONIC STEM CELLS TREATED WITH IRON CHELATOR DEFEROXAMINE MESYLATE**
Leona Raskova Kafkova, Lenka Calabkova and Vladimir Divoky
Department of Biology, Palacky University, Olomouc, Czech Republic
(Presented By: Leona Raskova Kafkova)
- Poster# 248** **PRION PROTEIN REGULATES IRON TRANSPORT BY FUNCTIONING AS A FERRIREDUCTASE**
Neena Singh, Ajay Singh, Swati Haldar, Katharine Horback and Cynthia Tom
Departments of ¹Pathology and ²Neurology and ³Case Medical School,
Case Western Reserve University, 2103
(Presented By: Neena Singh)
- Poster# 249** **THE HEME EXPORTER FLVCR1A LIMITS OXIDATIVE STRESS ASSOCIATED TO HEME BIOSYNTHESIS IN DUODENAL ENTEROCYTES**
Veronica Fiorito, Lorenzo Silengo, Fiorella Altruda and Emanuela Tolosano
University of Torino
(Presented By: Veronica Fiorito)
- Poster# 250** **NATURE OF CYTOSOLIC IRON POOL IN MAMMALIAN CELLS**
Xiaole Kong¹ and Robert Hider, Prof²
¹Kings college London; ²King's College London
(Presented By: Xiaole Kong)
- Poster# 251** **HAEM UPTAKE IN THE HUMAN BLOOD FLUKE SCHISTOSOMA MANSONI**
Shu Qin Toh, BSc (Hons)¹, Lucia Gutiérrez, PhD², Stephen Karl, PhD², Tim St. Pierre, PhD², Rob Woodward, PhD², David Malagon Martinez, PhD¹, Geoffrey Gobert, PhD¹ and Malcolm Jones, PhD¹
¹Queensland Institute of Medical Research; ²University of Western Australia
(Presented By: Shu Qin Toh)
- Poster# 252** **A POSSIBLE ROLE FOR LYSOSOMES IN IRON DISTRIBUTION THROUGH FERRITIN TRAFFICKING AND SECRETION**
Marianna Truman-Rosentsvit, Lyora A. Cohen and Esther G. Meyron-Holtz
Technion – Israel Institute of Technology
(Presented By: Marianna Truman-Rosentsvit)

Wednesday, April 17, 2013

- Poster# 253** **THE FERRITIN-HEAVY-POLYPEPTIDE-LIKE-17 (FTHL17) GENE ENCODES A FUNCTIONAL FERRITIN WITH PREFERENTIAL NUCLEAR LOCALIZATION**
Dr. Paola Ruzzenenti², Dr. Michela Asperti¹, Dr. Maria Regoni¹, Dr. Ilaria Uberti¹, Maura Poli, PhD¹, Stefania Mitola, PhD¹, Dr. Federica Maccarinelli¹, Dario Finazzi, MD¹ and Paolo Arosio, PhD¹
¹DMMT, University of Brescia; ²department MMT, University of Brescia
(Presented By: Paola Ruzzenenti)
- Poster# 254** **CHARACTERISATION OF A NOVEL IRON TRANSPORTER IN MALARIAL PARASITES**
Ksenija Slavic, PhD
Instituto de Medicina Molecular
(Presented By: Ksenija Slavic)
- Poster# 255** **FERRIC REDUCTION AND UPTAKE OF NON-TRANSFERRIN BOUND IRON BY K562 CELLS AND PRIMARY RODENT ASTROCYTES**
Darius J.R. Lane, PhD and Alfons Lawen, Dr. Rer. Nat
Monash University
(Presented By: Alfons Lawen)
- Poster# 256** **TRANSFERRIN IRON UPTAKE IS STIMULATED BY ASCORBATE VIA AN INTRACELLULAR REDUCTIVE MECHANISM**
Darius J.R. Lane, PhD, Sherin Chikhani, MSc, Vera Richardson, MSc and Des Richardson, PhD, DSc
The University of Sydney
(Presented By: Darius J.R. Lane)
- Poster# 257** **ROLE OF LYSOSOMES AND DMT1 IN MOBILIZATION OF FERRITIN IRON STORES**
Jessica Morgan, Undergraduate, Theodoros Z. Kidane, MS, Alice La, BS, Annie Nguyen, BS, Angelica Gonzalez, BS, Eric Sauble, MS and Maria C. Linder, PhD
California State University Fullerton
(Presented By: Jessica Morgan)
- Poster# 258** **THE ABSORPTION OF NANOPARTICULATE IRON HYDROXIDE IS FERROPORTIN-MEDIATED**
Mohamad Aslam¹, Dora Pereira¹, David Frazer², Nuno Faria¹, Sylvaine Bruggraber¹, Jonathan Powell¹ and Greg Anderson²
¹MRC Human Nutrition Research, Elsie Widdowson Laboratory, Cambridge, United Kingdom; ²Iron Metabolism Laboratory, Queensland Institute of Medical Research, Brisbane, Queensland, Australia
(Presented By: Mohamad Aslam)
- Poster# 259** **NEW DEVELOPMENTS IN MEASURING THE ENZYMATIC ACTIVITY OF AMYLOID- β PRECURSOR PROTEIN AND OTHER FERROXIDASES**
Bruce Wong, PhD², Linh Lam, BSc², Scott Ayton, PhD², Peng Lei, PhD², Adam Gunn, BSc², Ashley Bush, MD, PhD² and James Duce, PhD¹
¹University of Leeds; ²The Florey Institute of Neuroscience and Mental Health, The University of Melbourne
(Presented By: James Duce)
- Poster# 260** **THE EFFECT OF MATERNAL BODY MASS INDEX ON EXPRESSION OF GENES OF IRON METABOLISM IN THE HUMAN PLACENTA**
Modou Lamin Jobarteh
Rowett Institute of Nutrition and Health
(Presented By: Modou Lamin Jobarteh)
- Poster# 261** **STRUCTURAL MODEL OF HUMAN FERROPORTIN: INVESTIGATION OF IRON BINDING AND TRANSLOCATION**
Giovanna Cece¹, Maria Carmela Bonaccorsi di Patti, PhD³, Tiziana Persichini, PhD², Fabio Polticelli, PhD² and Giovanni Musci¹
¹University of Molise; ²University RomaTre; ³University of Rome La Sapienza
(Presented By: Giovanna Cece)

Wednesday, April 17, 2013

- Poster# 262** **CYTOSOLIC FERROXIDASE (CYTOFOX) ACTIVITY IN RODENT ENTEROCYTES IS INDEPENDENT OF CERULOPLASMIN AND AMYLOID PRECURSOR PROTEIN**
Yan Lu, PhD¹, Brie K. Fuqua, PhD², Chris D. Vulpe, PhD², Gregory J. Anderson, PhD³ and James F. Collins, PhD¹
¹University of Florida; ²University of California, Berkeley; ³Queensland Institute of Medical Research
(Presented By: Yan Lu)
- Poster# 263** **SPECIFIC INHIBITOR OF DMT1 FAILS TO PREVENT ENTEROCYTE COPPER UPTAKE, AS DETERMINED IN THE CACO2 CELL MODEL**
Colton Wheadon¹, S. Chowdhury², M. Grimwood², R. Namdari², M. Waldbrook², J. Cadieux², L. Ratkay², M. Eyers², A. Cutts², Y. Paul Goldberg² and Maria Linder, PhD¹
¹California State University Fullerton; ²Xenon Pharmaceuticals, Burnaby, BC Canada
(Presented By: Maria Linder)
- Poster# 264** **INTESTINAL DIVALENT METAL-ION TRANSPORTER-1 IS CRITICAL FOR IRON HOMEOSTASIS BUT IS NOT REQUIRED FOR MAINTENANCE OF CU OR ZN**
Ali Shawk¹, Sarah R. Anthony¹, Yasuhiro Nose², Eric J. Niespodzany¹, Avni A. Amratia¹, Tomasa Barrientos², Dennis J. Thiele² and Bryan Mackenzie¹
¹University of Cincinnati College of Medicine; ²Duke University Medical Center
(Presented By: Ali Shawk)
- Poster# 265** **QUERCETIN DECREASES IRON TRANSPORT ACROSS INTESTINAL CACO-2 CELL MONOLAYERS**
Rukshana Hoque and Paul Sharp, PhD
King's College London
(Presented By: Rukshana Hoque)
- Poster# 266** **MECHANISM FOR IRON DELIVERY TO HEME: ENDOSOME-MITOCHONDRIA INTERACTIONS AUGMENT FOLLOWING ERYTHROID DIFFERENTIATION**
Tariq Roshan¹, Daniel Garcia-Santos, PhD², Anne Mason, PhD³, Alex Sheftel, PhD⁴ and Prem Ponka, MD, PhD²
¹McGill University/Lady Davis Institute for Medical Research; ²Lady Davis Institute for Medical Research, McGill University; ³Department of Biochemistry, College of Medicine, University of Vermont; ⁴University of Ottawa Heart Institute
(Presented By: Tariq Roshan)
- Poster# 267** **CELL SPECIFIC EXPRESSION OF GENES INVOLVED IN IRON TRANSPORT AND THE EFFECTS OF HEPCIDIN**
Paul Sharp¹, Chiara Rapisarda¹, Tim Chaston¹, Bomee Chung¹ and Surjit K. Srail²
¹King's College London; ²University College London
(Presented By: Paul Sharp)
- Poster# 268** **INACTIVATION OF TRANSFERRIN RECEPTOR (TFR1) IN THE PANCREAS RESULTS IN PANCREATITIS AND DIABETES**
Alan Chen¹, Renee M. Ned, PhD², Adriana Donovan, PhD³ and Nancy C. Andrews, MD, PhD¹
¹Duke University; ²CDC; ³Children's Hospital
(Presented By: Alan Chen)
- Poster# 269** **ACTIVATION OF THE ESSENTIAL DIIRON ENZYME DEOXYHYPUSINE HYDROXYLASE BY THE IRON CHAPERONES PCBP1 AND PCBP2**
Anjali Nandal, PhD¹, Avery Frey, PhD¹, Jong-Hwan Park, PhD², Toshiki Yabe, PhD¹, Myung-Hee Park, PhD² and Caroline Philpott¹
¹NIDDK, NIH; ²NIDCR, NIH
(Presented By: Caroline Philpott)
- Poster# 270** **A LOOK AT LIVER IRON TRANSPORT BY FOLLOWING RADIOLABELED MONODISPERSE IRON OXIDE NANOPARTICLES IN VIVO**
Denise Bargheer¹, Barbara Freund, PhD¹, Artur Giemsa¹, Markus Heine, PhD¹, Jörg Heeren, PhD¹, Horst Weller, PhD², Rudolph Reimer, PhD³ and Peter Nielsen, PhD¹
¹University Medical Center Hamburg-Eppendorf; ²University Hamburg; ³HPI-Hamburg
(Presented By: Denise Bargheer)

Wednesday, April 17, 2013

- Poster# 271** **DUODENAL CYTOCHROME B PLAYS A ROLE IN COPPER UPTAKE**
Solomis Solomou, Katayoun Pourvali, Rukshana Hoque and Paul Sharp
King's College London
(Presented By: Solomis Solomou)
- Poster# 272** **DIETARY BERRY POLYPHENOLS MODULATE EXPRESSION AND FUNCTION OF
INTESTINAL IRON TRANSPORTERS**
Fawaz Alzaid, BSc, MSc, PhD, Victor R. Preedy, BSc, PhD, DSc, FIBiol, FRIPH, FRSH, FRCPath
and Paul Sharp, BSc, PhD
King's College London
(Presented By: Fawaz Alzaid)
- Poster# 273** **A PRIMARY CULTURE OF CARDIOMYOCYTES WITH FRATAXIN DEFICIENCY EXHIBITS A
METABOLIC SWITCH BEFORE IRON DISARRANGEMENTS**
Elia Obis, David Alsina, Joaquim Ros and Jordi Tamarit
Universitat de Lleida – Institut de Recerca Biomèdica de Lleida
(Presented By: Elia Obis)
- Poster# 274** **REGULATION OF IRON TRANSPORTERS AND REGULATORY PROTEINS IN DEVELOPING
WILD TYPE (HFE+/+) AND KNOCK OUT (HFE-/-) NEONATE MICE**
Sara Balesaria, PhD, Mohamed Salama, PhD, Rumeza Hanif, PhD, Frances Hundley, Harry
McArdle, PhD and Kaila Srail, PhD
University College London
(Presented By: Sara Balesaria)
- Poster# 275** **TRACING IRON BALANCE FROM MOUSE TO HUMAN**
Fudi Wang
Department of Nutrition, School of Public Health, Zhejiang University
(Presented By: Fudi Wang)
- Poster# 276** **ROLE OF QUERCETIN ON IRON HOMEOSTASIS**
Marija Lesjak, Sara Balesaria, Vernon Skinner, Edward Debnam and Kaila Srail
University College London
(Presented By: Marija Lesjak)
- Poster# 277** **CHARACTERISATION OF FERROXIDASES IN HUMAN LEUKAEMIC K562 CELLS**
Kenneth White, BA, DPhil¹, Phillip Goff, BSc¹ and Robert Evans, BA, PhD²
¹London Metropolitan University; ²Brunel University
(Presented By: Kenneth White)
- Poster# 278** **IRON EXCHANGE PROPERTIES OF DIFERRIC TRANSFERRIN**
Robert Woodworth, BS, PhD
University of Vermont
(Presented By: Robert Woodworth)
- Poster# 279** **PROXIMITY LIGATION ASSAYS INDICATE THAT HEMOCHROMATOSIS PROTEINS HFE AND
TRANSFERRIN RECEPTOR 2 (TFR2) DO NOT INTERACT**
Gautam Rishi, Msc (Medical Genetics), MSc (Human Genomics), Daniel Wallace, PhD and
V.Nathan Subramaniam, PhD
Queensland Institute of Medical Research
(Presented By: Gautam Rishi)
- Poster# 280** **A NEW CLASSIFICATION OF GENETIC IRON OVERLOAD SYNDROMES**
Motoyoshi Yano, MD, Hiroaki Miyajima, MD, Naohisa Tomosugi, MD, Shinya Wakusawa, PhD,
Tetsuji Yamashita, MD, Ai Hattori, PhD, Yasuaki Tatsumi, PhD, Koichi Kato, MD and Hisao
Hayashi, MD
Yokkaichi Municipal Hospital
(Presented By: Motoyoshi Yano)

Wednesday, April 17, 2013

- Poster# 281** **HETEROZYGOUS DELETION OF THE HFE GENE CONTRIBUTES TO HEPATIC IRON LOADING BUT NOT STEATOSIS IN MICE FED A HIGH FAT DIET**
Laurence Britton, MBChB¹, Lesley Jaskowski¹, Ashley Wilkinson, BBiotech (Hons), PhD¹, Kim Bridle, BSc (Hons), PhD¹, Nathan Subramaniam, PhD² and Darrell Crawford, MBBS, MD¹
¹Gallipoli Medical Research Foundation, University of Queensland; ²Queensland Institute of Medical Research
(Presented By: Laurence Britton)
- Poster# 282** **HFE MUTATIONS IN OCEANIAN PEOPLE (MELANESIAN AND POLYNESIAN)**
Gerard Dine, PD, PhD
IRMES
(Presented By: Gerard Dine)
- Poster# 283** **ATYPICAL JUVENILE HEMOCHROMATOSIS ASSOCIATED WITH HETEROZYGOSITY FOR NOVEL HEMOJUVELIN MUTATIONS**
Serena Pelusi, MD, Raffaella Rametta, Claudia Della Corte, Paola Francalanci, Paola Dongiovanni, Edoardo Alessandro Pulixi, Silvia Fargion, Anna Ludovica Fracanzani, Valerio Nobili and Luca Valenti
University of Milano
(Presented By: Serena Pelusi)
- Poster# 284** **HEREDITARY HEMOCHROMATOSIS UNRELATED TO KNOWN MUTATIONS IN IRON GENES**
Raffaella Rametta, PhD, Paola Dongiovanni, Anna Ludovica Fracanzani, Paolo Maggioni, Edoardo Alessandro Pulixi, Silvia Fargion and Luca Valenti
University of Milano
(Presented By: Raffaella Rametta)
- Poster# 285** **HIGHFERRITIN: A MEDICAL WEB TOOL FOR DIAGNOSIS AND RECOMMENDATIONS IN PATIENTS WITH HYPERFERRITINEMIA**
Francisco Fuster¹, Albert Altés, MD², David Beneitez, MD³, Miquel Bruguera, MD⁴, Jordi Felez, MD⁵, Rosario Lopez, MD², Maria Fatima Matute, MD⁶, Maria José Pérez-Lucena, MD⁵, Angel Remacha, MD⁷, Mari Angels Ruiz, MD⁸, Cristina Sanz, MD⁴, Miquel Torres, MD⁸ and Mayka Sanchez, PhD¹
¹IMPPC; ²Althaia Foundation, Hematology Service, Manresa, Barcelona; ³Hospital Universitari Vall d'Hebron, Red Blood Cell Pathology Unit, Department of Hematology, Barcelona; ⁴Hospital Clínic of Barcelona, Hepatology Service or Hemotherapy and Hemostasis Service Barcelona; ⁵CAP Canaletes-CAP Serrapera, SAP Vallès Occidental, Institut Català de la Salut, Cerdanyola del Vallés, Barcelona; ⁶Hospital Clínic de San Carlos, Radiology Service, Madrid; ⁷Hospital de Sant Pau i Santa Creu, Biologic Hematology Service, Barcelona; ⁸Hospital de l'Esperit Sant, Clinical laboratory Service or Internal Medicine Service, Sta, Coloma de Gramenet, Barcelona
(Presented By: Mayka Sanchez)
- Poster# 286** **ASSESSING THE MITOCHONDRIAL IRON METABOLISM IN HEREDITARY HEMOCHROMATOSIS**
Sonia Distantè¹, K Høie², L Mørkrid² and L Eide³
¹Dept Med Biochemistry; ²Dept Med Biochemistry, Oslo University Hospital; ³Oslo University, Oslo
(Presented By: Sonia Distantè)
- Poster# 287** **BLOODLETTING THERAPY IN HEMOCHROMATOSIS: DOES IT AFFECT TRACE ELEMENTS HOMEOSTASIS?**
B Bolan², R Ulvik², L Mørkrid³ and Sonia Distantè¹
¹Dept Med Biochemistry; ²Institute of Medicine, University of Bergen and Laboratory of Clinical Biochemistry, Haukeland University Hospital, Bergen; ³Dept Med Biochemistry, Oslo University Hospital, Oslo, Norway
(Presented By: Sonia Distantè)

Wednesday, April 17, 2013

Poster# 288

THE FRENCH REFERENCE CENTRE FOR RARE IRON OVERLOAD DISEASES OF GENETIC ORIGIN: A MULTI-COLLABORATIVE APPROACH

Lenaïck Detivaud, PhD¹, Anne-Marie Jouanolle², Edouard Bardou-Jacquet³, Martine Ropert⁴, Annick Mosser², Yves Deugnier³, Béatrice Leclerc⁵, Olivier Loréal³, Véronique David², Yves Gandon⁶, Bruno Turlin⁷, Patricia Aguilar-Martinez⁸, Robert Bader², Catherine Buffet¹⁰, Xavier Causse¹¹, Bernard Drenou², Véronique Loustaud-Ratti¹², Jean-Pierre Vinel¹³, Denis Vital-Durand¹⁴ and Pierre Brissot³

¹French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Liver Diseases, Department of Molecular Biology, INSERM UMR 991, University Hospital Pontchaillou F-35033 Rennes, France; ²French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Molecular Biology, University Hospital Pontchaillou F-35033 Rennes, France; ³French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Liver Diseases, INSERM UMR 991, University Hospital Pontchaillou F-35033 Rennes, France; ⁴French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Biochemistry, University Hospital Pontchaillou F-35033 Rennes, France; ⁵French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, University Hospital Pontchaillou F-35033 Rennes, France; ⁶French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Radiology, University Hospital Pontchaillou F-35033 Rennes, France; ⁷French Reference Centre for Rare Iron Overload Diseases of Genetic Origin, Department of Pathology, University Hospital Pontchaillou F-35033 Rennes, France; ⁸Competence Centre of Montpellier, Laboratory of Hematology, University Hospital St Eloi F-34295 Montpellier, France; ⁹Competence Centre of Mulhouse, Departments of Gastroenterology and Hematology, Hospital Emile Muller F-68070 Mulhouse, France; ¹⁰Competence Centre of Kremlin-Bicêtre, Department of Hepatology and Gastroenterology University Hospital Bicêtre, F-94270 Kremlin-Bicêtre, France; ¹¹Competence Centre of Orléans, Department of Hepatology and Gastroenterology, Hospital La Source, F-86709 Orléans, France; ¹²Competence Centre of Limoges, Hepatology Federation - Médecine Interne A, University Hospital Limoges, F-87042 Limoges, France; ¹³Competence Centre of Toulouse, Department of Hepatology and Gastroenterology, Pôle Digestif, University Hospital Purpan, F-31059, Toulouse, France; ¹⁴Competence Centre of Lyon, Department of Medicine, University Hospital Lyon Sud, F-69495, Pierre-Bénite, France
(Presented By: Lenaïck Detivaud)

Poster# 289

TFR2-RELATED HEREDITARY HEMOCHROMATOSIS AS A FREQUENT CAUSE OF PRIMARY IRON OVERLOAD IN CENTRAL-SOUTHERN ITALY

Francesca Clementina Radio, Silvia Majore, Francesco Binni, Bianca Maria Ricerca, Carmelilia De Bernardo and Paola Grammatico
Medical Genetics, Molecular Medicine Department, Sapienza University of Rome, San Camillo-Forlanini Hospital
(Presented By: Francesca Clementina Radio)

Poster# 290

A NOVEL HFE FRAMESHIFT MUTATION IN A PATIENT WITH HEREDITARY HEMOCHROMATOSIS TYPE 1

Silvia Majore, Francesca Clementina Radio, Stefania Trasarti, Michele Valiante, Carmelilia De Bernardo and Paola Grammatico
Medical Genetics, Molecular Medicine Department, Sapienza University of Rome, San Camillo-Forlanini Hospital, Rome, Italy
(Presented By: Silvia Majore)

Poster# 291

ORTHOTOPIC LIVER TRANSPLANTATION FOR HEREDITARY HAEMOCHROMATOSIS IN IRELAND

John Denis Ryan, MBBS, J.L. Chin, Ahmed Abu Shanab, Raphael Merriman, John Hegarty and Aiden McCormick
St. Vincent's University Hospital
(Presented By: John Denis Ryan)

Poster# 292

HEPATOCTYTE DIVALENT METAL-ION TRANSPORTER-1 IS DISPENSABLE FOR HEPATIC IRON ACCUMULATION AND NON-TRANSFERRIN-BOUND IRON UPTAKE IN MICE

Chia-Yu Wang, PhD and Mitchell Knutson, PhD
University of Florida
(Presented By: Chia-Yu Wang)

Wednesday, April 17, 2013

- Poster# 293** **DECIPHERING THE HFE-INTERACTION NETWORK FOR THE REGULATION OF IRON HOMEOSTASIS**
Flavia D'Alessio, PhD^{1,2}, Matthias, W. Hentze, MD^{1,3} and Martina, U. Muckenthaler, PhD^{1,2}
¹Molecular Medicine Partnership Unit; ²University of Heidelberg; ³European Molecular Biology Laboratory
(Presented By: Flavia D'Alessio)
- Poster# 294** **DIFFERENTIAL CARBOHYDRATE PROCESSING OF THE WILD TYPE AND C282Y-MUTANT HFE PROTEINS**
J.V. Fleming, L O'Driscoll, BSc, MSc and L Foley, BSc
University College Cork
(Presented By: J.V. Fleming)
- Poster# 295** **MUTATION ANALYSIS OF SEVEN GENES INVOLVED IN IRON METABOLISM IN A MENNONITE POPULATION**
Chris Whittington², Michelle-Angelique Hallendorff¹, Faira Suidgeest¹, Natalie Strickland¹, Samuel Krikler² and Monique Zaahl, BSc, HonsBMedSci, MMedSci, PhD, MBA¹
¹Stellenbosch University; ²University of British Columbia
(Presented By: Monique Zaahl)
- Poster# 296** **LISTENING TO THE PATIENTS' VOICE: THE FIRST EUROPEAN SURVEY ABOUT GENETIC INFORMATION IN HEMOCHROMATOSIS**
Emerência Teixeira, Pierre Brissot, Barbara Butzeck, Françoise Courtois, Robert Evans, Janet Fernaud, Margaret Mullett, Brigitte Pineau, Graça Porto, Mayka Sánchez, Júlio Borlido-Santos, Robert Sorriell, Dorine Swinkles, Ketil Toska, Judit Várkonyi and EFAPH (European Federation of Associations of Patients with Hemochromatosis) IBMC – Instituto de Biologia Molecular e Celular, Universidade do Porto
(Presented By: Emerência Teixeira)
- Poster# 297** **LIVER TRANSPLANTATION NORMALIZES SERUM HEPcidIN LEVEL AND CURES IRON METABOLISM ALTERATION IN HFE P.CYS282TYR HEMOCHROMATOSIS**
Edouard Bardou-Jacquet, MD, Julie Philip, MD, Martine Ropert, MD, Marianne Latournerie, MD, Pauline Houssel-Debry, MD, Dominique Guyader, MD, PHD, Olivier Loreal, MD, PHD, Karim Boudjema, MD, PHD and Pierre Brissot, MD, PHD
Service des maladies du foie, Centre de référence des surcharges en fer rares d'origine génétique, University Hospital of Rennes. INSERM U991 University of Rennes 1
(Presented By: Edouard Bardou-Jacquet)
- Poster# 298** **A NOVEL Tmprss6 MUTATION IN 2 BULGARIAN SIBLINGS**
Patricia Bignell, BSc Hons¹, Mimi Sheikh, MD¹, Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford
(Presented By: Patricia Bignell)
- Poster# 299** **JUVENILE HAEMOCHROMATOSIS MUTATIONS ARE NOT THAT SIMPLE**
Patricia Bignell, BSc Hons¹, Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford
(Presented By: Patricia Bignell)
- Poster# 300** **COMPREHENSIVE GENETIC TESTING IS REQUIRED FOR PATIENTS WITH UNEXPLAINED IRON OVERLOAD**
Patricia Bignell, BSc (Hons)¹, Alison Merryweather-Clarke, PhD², Chun Yu Lok, DPhil², Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford
(Presented By: Patricia Bignell)
- Poster# 301** **NOVEL GENE DELETIONS RESULT IN HAEMOCHROMATOSIS**
Patricia Bignell, BSc (Hons)¹, Samantha Knight, PhD², Peter Mackie, MD³, Ruth Clifford, MD², Richard Murrin, MD⁴, Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford; ³Wexham Park Hospital; ⁴City Hospital, Birmingham
(Presented By: Patricia Bignell)

Wednesday, April 17, 2013

- Poster# 302** **ESTIMATING DISEASE PENETRANCE IN P.C282Y HOMOZYGOTES IN THE UK**
Patricia Bignell, BSc Hons¹, Alison Merryweather-Clarke, PhD², Chun Yu Lok, D Phil², Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford
(Presented By: Patricia Bignell)
- Poster# 303** **SEVEN NEW CASES OF TYPE 3 HEMOCHROMATOSIS WITH EIGHT PREVIOUSLY UNDESCRIBED TFR2 MUTATIONS EMPHASIZE THE HIGH VARIABILITY OF CLINICAL PRESENTATION**
Edouard Bardou-Jacquet, MD, Severine Cunat, MD, Marie Pascale Beaumont-Epinette, MD, Bernard Grandchamps, MD, PHD, Xavier Causse, MD, Sylvie Sauvion, MD, Bruno Pouliquen, MD, Yves Deugnier, MD, Veronique David, MD, PHD, Olivier Loreal, MD, PHD, Patricia Aguilar-Martinez, MD, PHD, Pierre Brissot, MD, PHD and Anne Marie Jouanolle, MD, PHD
Service des maladies du foie, Centre de référence des surcharges en fer rares d'origine génétique, University Hospital of Rennes. INSERM U991 University of Rennes 1
(Presented By: Edouard Bardou-Jacquet)
- Poster# 304** **CONSERVATION OF MAJOR HISTOCOMPATIBILITY COMPLEX (MHC) HAPLOTYPES IN HFE C282Y HOMOZYGOUS HEMOCHROMATOSIS PATIENTS AND ITS EFFECT ON THE PHENOTYPE OF LOW CD8+ T-LYMPHOCYTES: A STUDY IN 3 POPULATIONS FROM PORTO, ALABAMA AND TRONDHEIM**
Mónica Costa, PhD student¹, Eugénia Cruz, MD, PhD^{1, 4}, James Barton, MD, PhD², Ketil Thorstensen, PhD³, Sandra Morais, MD^{4, 5}, Berta Martins Silva, PhD⁵, Jorge Pinto, PhD¹, Cristina Vieira, PhD⁶, Angel Carracedo, PhD⁷, Jorge Vieira, PhD⁶, Ronald Acton, PhD² and Graca Porto, MD, PhD^{1, 4}
¹Basic and Clinical Research on Iron Biology, Instituto de Biologia Molecular e Celular (IBMC), University of Porto, Porto, Portugal; ²Southern Iron Disorders Center and Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama, USA; ³Department of Medical Biochemistry, St. Olav Hospital, Trondheim, Norway; ⁴Clinical Hematology, Centro Hospitalar do Porto – Hospital Santo António, Porto, Portugal; ⁵Molecular Pathology and Immunology, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, Porto, Portugal; ⁶Evolutionary Systems Biology, Instituto de Biologia Molecular e Celular (IBMC), University of Porto, Porto, Portugal; ⁷Galician Foundation of Genomic Medicine (SERGAS) and Genomic Medicine Group-CIBERER- University of Santiago de Compostela, Spain
(Presented By: Mónica Costa)
- Poster# 305** **OXIDATIVE STRESS DECREASES HFE PROTEIN LEVELS**
Louise Foley and J.V. Fleming, BSc, PhD
University College Cork
(Presented By: Louise Foley)
- Poster# 306** **EXTRA-HEPATIC IRON MEASUREMENTS IN HEREDITARY HEMOCHROMATOSIS**
Bjoern P. Schoennagel, MD, Jin Yamamura, MD, Regine Grosse, MD, Gritta E. Janka, MD, Gerhard Adam, MD, Peter Nielsen, MD PhD and Roland Fischer, PhD
University Medical Center Hamburg-Eppendorf
(Presented By: Roland Fischer)
- Poster# 307** **FINE-TUNING OF SYSTEMIC IRON LEVELS BY MACROPHAGE-HFE**
Naveen Kumar Tangudu, Dilay Lai, Richard Sparla, Matthias Hentze, Martina Muckenthaler and Maja Vujic Spasic, PhD
Ulm University, Centre for Biomedical Research, Institute of General Zoology and Endocrinology
(Presented By: Maja Vujic Spasic)
- Poster# 308** **EFFICACY OF DEFERASIROX IN THE TREATMENT OF SEVERE IRON OVERLOAD IN A PATIENT WITH HFE-HAEMOCHROMATOSIS AND β -THALASSEMIA MINOR**
Peter Nielsen, MD, PhD, Regine Grosse, MD and Roland Fischer, PhD
University Medical Center Hamburg-Eppendorf
(Presented By: Peter Nielsen)

Wednesday, April 17, 2013

- Poster# 309** **NEXT GENERATION TARGETED DEEP SEQUENCING OF HEMOCHROMATOSIS GENES IN IRON OVERLOADED PATIENTS: A PILOT STUDY**
Daniele Manna¹, Giampiero Zamperin², Michela Corbella¹, Federica Zaninotto², Sadaf Badar¹, Paolo Bozzini¹, Nicola Martinelli¹, Alberto Ferrarini², Alejandro Giorgetti², Oliviero Olivieri¹, Massimo Delledonne² and Domenico Girelli¹
¹University of Verona, Department of Medicine, Verona, Italy; ²University of Verona, Department of Biotechnology, Verona, Italy
(Presented By: Daniele Manna)
- Poster# 310** **IMPACT OF D181V AND A69T ON THE FUNCTION OF FERROPORTIN AS AN IRON EXPORT PUMP AND HEPcidIN RECEPTOR**
Roman Praschberger, Melanie Schranz, Martin Hermann, William J. H. Griffiths, David J. Lomas, Antonello Pietrangelo, Timothy M. Cox, Wolfgang Vogel and Heinz Zoller
Innsbruck Medical University
(Presented By: Roman Praschberger)
- Poster# 311** **HOMOZYGOSITY FOR COMMON HFE MUTATIONS IS AN INDEPENDENT PREDICTOR OF IMPROVED SURVIVAL IN LIVER CLINIC PATIENTS**
Armin Finkenstedt, MD, Melanie Schranz, MD, PhD, Wolfgang Vogel, MD and Heinz Zoller, MD
Medical University of Innsbruck
(Presented By: Armin Finkenstedt)
- Poster# 312** **THE PHENOTYPE OF TFR2-TMPRSS6 DOUBLE KNOCK OUT MICE ONLY PARTIALLY OVERLAPS THAT OF TMPRSS6 NULL MICE**
Rosa Maria Pellegrino, Antonella Nai, Martina Boero, Marco Rausa, Marco De Gobbi, Giuseppe Saglio, Laura Silvestri, Antonella Roetto and Clara Camaschella
University of Torino – Dept. of Oncology
(Presented By: Antonella Roetto)
- Poster# 313** **BRACHIAL ARTERY PSEUDOANEURYSM FOLLOWING PHLEBOTOMY FOR IRON OVERLOAD: FIRST CASE REPORT**
Jean-Michel Davaine¹, Urial Sebbag², Edouard Bardou-Jacquet^{3,4,5} and Pierre Brissot^{3,4,5}
¹Vascular Surgery Department, Thorax Institute, University Hospital, Nantes, France; ²Centre Cardiologique du Nord, Saint Denis, France; ³Liver Disease Unit; ⁴Inserm-UMR 991; ⁵University Hospital Pontchaillou, Rennes, France
(Presented By: Jean-Michel Davaine)
- Poster# 314** **DIAGNOSIS OF ATYPICAL IRON DISORDERS: CLINICAL APPLICATION OF NEXT-GENERATION SEQUENCING**
V. Nathan Subramaniam, Daniel Wallace, Graham Cooksley, Barbara Leggett and Cameron McDonald
Queensland Institute of Medical Research
(Presented By: V. Nathan Subramaniam)
- Poster# 315** **ASSOCIATION BETWEEN HFE P.(C282Y) AND CORONARY HEART DISEASE IN THE NPHSII COHORT: INTERACTION WITH SMOKING**
Ann Walker, PhD, Chana Unger, BSc, Philip Howard, BSc, Jackie Cooper, MSc, Jutta Palmen, MSc, Ka-Wah Li, MSc, Dan Yin, BSc, Stela McLachlan, PhD, Philippa Talmud, DSc and Humphries Steve, PhD
UCL
(Presented By: Ann Walker)
- Poster# 316** **NRF2 PROTECTS AGAINST DIETARY IRON-INDUCED LIVER INJURY**
Sandro Silva-Gomes, PhD, Ana Santos, MSc, Carolina Caldas, BSc, João Neves, PhD, Pedro Rodrigues, PhD and Tiago Duarte, PhD
Instituto de Biologia Molecular e Celular
(Presented By: Tiago Duarte)

Wednesday, April 17, 2013

- Poster# 317** **CLINICAL IMPACT OF HFE MUTATIONS IN PORTUGUESE PATIENTS WITH CHRONIC HEPATITIS C**
Joana Ferreira^{1,2,3}, Cilénia Baldaia^{2,4}, Ângela Inácio³, Manuel Bicho^{3,5}, José Velosa⁴, Paula Faustino¹ and Fátima Serejo^{2,4}
¹Departamento de Genética Humana, Instituto Nacional de Saúde Dr. Ricardo Jorge, Lisboa; ²Instituto de Medicina Molecular, Lisboa; ³Laboratório de Genética, Faculdade de Medicina de Lisboa, Lisboa; ⁴Departamento de Gastroenterologia e Hepatologia, Hospital de Santa Maria, Centro Hospitalar Lisboa Norte, Lisboa; ⁵Instituto Bento da Rocha Cabral, Lisboa, Portugal
(Presented By: Paula Faustino)
- Poster# 318** **HEPCIDIN KNOCKOUT MICE DEVELOP CHRONIC LIVER INJURY AND LIVER FIBROSIS AS A CONSEQUENCE OF LYSOSOMAL IRON OVERLOAD**
Mariia Lunova¹, Katrin Muller, PhD student², Johannes Haybaeck, Dr³, Sophie Vaulont, Prof.⁴, Caroline Lackner, Prof.³, Christian Trautwein, Prof.⁵ and Pavel Strnad, PD, Dr⁵
¹Uniklinik Ulm; ²Department of Internal Medicine I, University Medical Center Ulm, Ulm, Germany; ³Institute of Pathology, Medical University of Graz, Graz; ⁴Institut Cochin, INSERM U1016, Université Paris Descartes, Paris, France; ⁵Department of Medicine III, University Hospital Aachen, Aachen, Germany
(Presented By: Mariia Lunova)
- Poster# 319** **TFR2 BETA ISOFORM HAS A ROLE IN CARDIAC IRON METABOLISM**
Martina Boero, Francesca Tullio, Rosa Maria Pellegrino, Antonietta Palmieri, Pasquale Pagliaro, Giuseppe Saglio, Claudia Penna and Antonella Roetto
University of Torino Department of Oncology
(Presented By: Martina Boero)
- Poster# 320** **UNEXPLAINED ISOLATED HYPERFERRITINEMIA IN PATIENTS WITHOUT MUTATIONS IN FERRITIN GENE AND L-FERRITIN IRES REGIONS**
Giulia Ravasi, Master degree¹, Sara Pelucchi, Master degree¹, Paola Trombini, PhD, MD¹, Raffaella Mariani, PhD, MD¹, Federico Greni, Master degree¹, Cristina Arosio, Master Degree¹, Silvia Majore, MD² and Alberto Piperno, MD¹
¹University Milano-Bicocca; ²University Sapienza Roma
(Presented By: Giulia Ravasi)
- Poster# 321** **SINGLE AND REPEATED DOSE FIRST-IN-HUMAN STUDY WITH THE ANTI-HEPCIDIN SPIEGELMER NOX-H94**
Kai Riecke, MD¹, Stefan Zöllner, PhD¹, Malcolm Boyce, MD², Benjamin vanHecke, MD², Stéphanie Vauléon, PhD¹, Luciana Summo, PhD¹, Coby M Laarakkers, BSc³, Dorine W Swinkels, MD, PhD³ and Frank Schwöbel, PhD¹
¹NOXXON Pharma AG; ²Hammersmith Medicines Research; ³Hepcidinanalysis.com
(Presented By: Kai Riecke)
- Poster# 323** **SERUM HEPcidIN LEVELS IN HOSPITALIZED PATIENTS. A PILOT STUDY**
Alejandro del Castillo-Rueda¹, Nadiya Matskin², María Isabel Moreno-Carralero³ and María Josefa Morán-Jiménez³
¹Hospital Gregorio Marañón, Universidad Complutense, Madrid, Spain; ²Hospital Gregorio Marañón; ³Instituto de Investigación Hospital 12 de Octubre, Madrid, Spain.
(Presented By: Alejandro del Castillo-Rueda)
- Poster# 324** **SUPPRESSION OF TMPRSS6 USING ANTISENSE TECHNOLOGY AMELIORATES HEREDITARY HEMOCHROMATOSIS AND BETA-THALASSEMIA**
C. Casu¹, S. Guo², S. Gardenghi, S. Booten, A. Watt, S. Freier, Y. Ginzburg, R. Fleming, B.P. Monia and S. Rivella
¹Weill Cornell Medical College, New York, NY; ²Isis Pharmaceuticals
(Presented By: C. Casu)
- Poster# 325** **THE BMP'S PATHWAY IN HEPcidIN REGULATION DURING ENDOPLASMIC RETICULUM STRESS RESPONSE**
Susanna Canali, BSc, Chiara Vecchi, PhD, Cinzia Garuti, PhD and Antonello Pietrangelo, MD, PhD
University of Modena and Reggio Emilia
(Presented By: Susanna Canali)

Wednesday, April 17, 2013

- Poster# 326** **HEPCIDIN- A USEFUL SERUM MARKER IN ACTIVE CROHN'S DISEASE**
Raja Chinnathurai, MRCP¹, Doug Ward, PhD², Chris Tselepis, PhD² and Tariq Iqbal¹
¹Queen Elizabeth Hospital Birmingham; ²University of Birmingham
(Presented By: Tariq Iqbal)
- Poster# 327** **STRATEGIES FOR THE SYNTHESIS OF HEPCIDIN AND ANALOGUES**
Anna Adams, Derek Macmillan, Arnold Pizzey and Kaila Srail
University College London
(Presented By: Anna Adams)
- Poster# 328** **CLINICAL CHARACTERISTICS OF PATIENTS WITH METABOLIC SYNDROME AND IRON OVERLOAD**
Alejandro del Castillo-Rueda, Rodrigo del Brio-Castillo, Laura Butragueño-Laiseca and Alejandra del Campo-Mur
Hospital Gregorio Marañón, Universidad Complutense, Madrid, Spain
(Presented By: Alejandro del Castillo-Rueda)
- Poster# 329** **THE STATIN-IRON NEXUS: ANTI-INFLAMMATORY TREATMENT FOR ARTERIAL DISEASE**
Leo Zacharski, MD, Ralph DePalma, MD, Galina Shamayeva, MS and Bruce Chow, MS
Geisel School of Medicine at Dartmouth
(Presented By: Leo Zacharski)
- Poster# 330** **EFFECT OF IRON DEPLETION ON LIVER DAMAGE IN NONALCOHOLIC FATTY LIVER DISEASE: PRELIMINARY RESULTS OF A RANDOMIZED CONTROLLED TRIAL**
Luca Valenti, MD¹, Anna Ludovica Fracanzani, MD², Paola Dongiovanni, PhD³, Erika Fatta, MD³, Edoardo Alessandro Pulixi, MD³, Marco Maggioni, MD³, Serena Rovida, MD² and Silvia Fargion, MD²
¹University of Milano; ²Università degli Studi Milano; ³Fondazione IRCCS Ca' Granda
(Presented By: Luca Valenti)
- Poster# 331** **ANEMIA AND IRON METABOLISM IN PATIENTS WITH PORTAL THROMBOSES**
Elena Lukina, professor¹, Elena Sysoeva, PhD¹, Alla Levina, PhD¹, Elena Jakovleva, PhD¹ and Evgeniy Kitsenko, MD²
¹Hematology Research Center; ²National Research Center for Surgery
(Presented By: Elena Lukina)
- Poster# 332** **ENDOTHELIAL DELETION OF FLVCR1A ALTERS VASCULAR INTEGRITY**
Sara Petrillo, Sonia Mercurio, Deborah Chiabrando, Lorenzo Silengo, Massimo Santoro, Fiorella Altruda and Emanuela Tolosano
Molecular Biotechnology Center, University of Turin
(Presented By: Sara Petrillo)
- Poster# 333** **THE ROLE OF IRON IN ATHEROSCLEROSIS**
Léon Kautz, PhD, James Onwuzurike, Victoria Gabayan, Bo Qiao, Xuping Wang, Aldons Lulis, PhD, Tomas Ganz, PhD, MD and Elizabeta Nemeth, PhD
University of California Los Angeles, Center for Iron Disorders
(Presented By: Léon Kautz)
- Poster# 334** **ACTION OF IRON AND FRUCTOSE ON GENE EXPRESSION IN HUMAN LIVER CELLS**
Tatiana Christides, BA (Hons), MSc, MD¹ and Paul Sharp, BSc (Hons), PhD²
¹University of Greenwich; ²King's College London
(Presented By: Tatiana Christides)
- Poster# 335** **NON-TRANSFERRIN-BOUND IRON CORRELATES WITH LDL, AND HAEMOGLOBIN, AND ATTENUATES WITH STATINS: A CASE FOR RBC GLYCATION AND HAEMOLYSIS IN TYPE 2 DIABETES?**
Desley White, PhD, BSc Hons, Angela Shore, PhD, Avril Collinson, BSc, PhD and Keith Collard, BSc, MSc, PhD
Plymouth University
(Presented By: Desley White)

Wednesday, April 17, 2013

- Poster# 336** **GENETIC VARIATION OF IRON METABOLISM IN OBESE MICE**
Kathryn Page, PhD¹, David Killilea, PhD², Simon Hui, PhD³, Brian Parks, PhD³, Eleazar Eskin, PhD³, A. Jake Lusic, PhD³ and Chris Vulpe, PhD¹
¹UC Berkeley; ²Children's Hospital Research Institute Oakland; ³UCLA
(Presented By: Kathryn Page)
- Poster# 337** **HEPATIC IRON GRADE AND PATTERN AFFECTS OXIDATIVE STRESS AND APOPTOSIS IN NONALCOHOLIC FATTY LIVER DISEASE**
James Nelson, PhD¹, Bryan D. Maliken², Heather M. Klintworth, PhD, Mary Beauchamp¹, Matthew M. Yeh, MD PhD³ and Kris V. Kowdley, MD⁴
¹Benaroya Research Institute; ²University of Cincinnati; ³University of Washington; ⁴Center for Liver Disease, Digestive Disease Institute and Benaroya Research Institute, Virginia Mason Medical Center
(Presented By: James Nelson)
- Poster# 338** **THE IL1B +3953 C>T POLYMORPHISM MINOR ALLELE IS ASSOCIATED WITH A HIGHER NAFLD ACTIVITY SCORE, LESS PARENCHYMAL IRON, THE PRESENCE OF NONALCOHOLIC STEATOHEPATITIS AND IS AN INDEPENDENT RISK FACTOR FOR ADVANCED FIBROSIS IN SUBJECTS WITH NONALCOHOLIC FATTY**
James Nelson, PhD¹, Matthew Yeh, MD, PhD² and Kris Kowdley, MD³
¹Benaroya Research Institute; ²University of Washington; ³Benaroya Research Institute, Center for Liver Disease, Digestive Disease Institute, Virginia Mason Medical Center, Seattle, WA
(Presented By: James Nelson)
- Poster# 339** **FERRYL HEMOGLOBIN IS A PROINFLAMMATORY AGONIST THAT ACTIVATES ENDOTHELIAL CELLS AND INDUCES MOUSE PERITONITIS**
Viktória Jeney, Gabriela Silva, PhD, László Potor, György Balla, DSc, Miguel P. Soares, PhD and József Balla, DSc
Department of Medicine, University of Debrecen and MTA-DE Vascular Biology, Thrombosis and Hemostasis Research Group, Hungarian Academy of Sciences, 4012 Debrecen, Hungary
(Presented By: Viktória Jeney)
- Poster# 340** **DOES INSULIN AFFECT EXPRESSION OF PROTEINS INVOLVED IN IRON HOMEOSTASIS? PRELIMINARY RESULTS FROM HEPG2 CELLS AND PRIMARY MOUSE HEPATOCYTES**
Joe Varghese, MD¹, Andrew Tristan McKie, PhD² and Molly Jacob, MD, PhD³
¹Christian Medical College; ²King's College, London, UK; ³Christian Medical College, Vellore, India
(Presented By: Joe Varghese)
- Poster# 341** **MTORC1-MEDIATED PHOSPHORYLATION STABILIZES ISCU PROTEIN: IMPLICATIONS FOR IRON METABOLISM**
Ping La
Chop
(Presented By: Ping La)
- Poster# 342** **CHANGES IN GENE EXPRESSION OF CHOLESTEROL METABOLISM PATHWAYS IN MOUSE MODELS OF HAEMOCHROMATOSIS**
Ross Graham, BSc (Hons) PhD MSB^{1,2,5,6}, Roheeth D Delima, BSc (Hons)^{2,6}, Daniel Johnstone, BSc (Hons) PhD^{3,4}, Elizabeth A Milward, BSc (Hons) PhD⁴, John K Olynyk, BMedSc MBBS FRACP MD^{1,2,7,8} and Debbie Trinder, BSc (Hons) PhD^{2,6}
¹Curtin Health Innovation Research Institute, Curtin University, WA; ²Western Australian Institute for Medical Research; ³Bosch Institute, School of Medical Sciences, University of Sydney, New South Wales; ⁴School of Biomedical Sciences & Pharmacy, University of Newcastle, New South Wales; ⁵School of Biomedical Sciences, Curtin University, WA; ⁶School of Medicine & Pharmacology, University of Western Australia; ⁷Dept. of Gastroenterology, Fremantle Hospital, WA; ⁸Institute for Immunology & Infectious Diseases, Murdoch University, WA
(Presented By: Ross Graham)

Wednesday, April 17, 2013

- Poster# 343** **PROTECTION OF THE DIABETIC HEART: CHANGES IN THE HOMEOSTASIS OF IRON EXPLAINS MYOCARDIAL RESPONSE TO STRESS**
Vladimir Vinokur, PhD¹, Baruch Bulvik, PhD², Eduard Berenshtein, MD, PhD², Sara Zangen-Weksler, PhD³, Ron Eliashar, MD⁴ and Mordechai Chevion, PhD²
¹The Hebrew University of Jerusalem; ²The Hebrew University of Jerusalem, Israel; ³Hadassah-Hebrew University Medical Center, Jerusalem, Israel; ⁴The Hadassah-Hebrew University Hospital, Jerusalem, Israel
(Presented By: Vladimir Vinokur)
- Poster# 344** **MITOCHONDRIAL FERRITIN- NULL MICE ARE MORE SENSITIVE TO CARDIOTOXICITY**
Dr. Michela Asperti¹, Dr. Federica Maccarinelli², Maura Poli, PhD², Dr. Paola Ruzzenenti², Dr. Maria Regoni², Dr. Ilaria Uberti², Dario Finazzi, MD² and Paolo Arosio, PhD²
¹Department MMT, University of Brescia; ²DMMT, University of Brescia
(Presented By: Michela Asperti)
- Poster# 345** **IMMUNE MEDIATED DYSREGULATION OF CELLULAR IRON TRANSPORT PROTEINS AS A POTENTIAL BASIS OF DEFECTIVE IRON HOMEOSTASIS IN CHRONIC HEART FAILURE**
Karl Norrington, MBBS, Mohamad Barakat, MBBS, Mihir Kelshikir, BSc, Hazel Turner, MBBS, Surjit Kalia Srani, PhD, Stefan Anker, PhD, Philip Poole-Wilson, MD and Darlington Okonko, PhD
Imperial College London
(Presented By: Karl Norrington)
- Poster# 346** **TELOMERE LENGTH AND IRON OVERLOAD: THE INFLUENCE OF PHENOTYPE AND GENOTYPE**
Arch G. Mainous, PhD², Gordon D. McLaren, MD¹, Robert U. Wright, MPH, Mary M. Hulihan, MPH, Waleed Twal, PhD, Christine E. McLaren, PhD, Vanessa A. Diaz, MD, W. Scott Argraves, PhD and Althea M. Grant, PhD
¹Department of Veterans Affairs Long Beach Healthcare System; ²The Medical University of South Carolina
(Presented By: Gordon D. McLaren)
- Poster# 347** **TOTAL MORTALITY BY ELEVATED FERRITIN CONCENTRATION - A POPULATION-BASED STUDY**
Christina Ellervik, Associate professor, PhD, Anne Tybjaerg-Hansen, Professor, DMSci and Børge G. Nordestgaard, Prof., DMSci
Faculty of Health Sciences, University of Copenhagen, Denmark
(Presented By: Christina Ellervik)
- Poster# 348** **THE SOLUTION STRUCTURE, BINDING PROPERTIES, AND DYNAMICS OF THE 34 KDA BACTERIAL SIDEROPHORE BINDING PROTEIN FEPB**
Chu B. C., Otten R., Krewulak K. D., Mulder F. A. A. and Vogel H. J.
(Presented By: H.J. Vogel)
- Poster# 349** **KNOCK-DOWN OF THE MENKES COPPER-TRANSPORTING ATPASE (ATP7A) IN RAT INTESTINAL EPITHELIAL (IEC-6) CELLS INCREASES FERROPORTIN 1 (FPN1) EXPRESSION AND ENHANCES IRON TRANSPORT**
Sukru Gulec¹, Caglar Doguer¹, James F. Collins, PhD¹
¹University of Florida
(Presented By: James F. Collins)
- Poster# 350** **EFFECTS OF CHRONIC LEAD EXPOSURE ON THE BRAIN IRON HOMEOSTASIS AND IRON TRANSPORTER EXPRESSIONS IN RATS**
Sugyoung Oh, Jayong Chung
Kyung Hee University
(Presented By: Jayong Chung)
- Poster# 351** **ALTERED IRON METABOLISM EFFECTS AND ANTI-LEUKEMIA ACTIVITY OF A-TYPE PROANTHOCYANIDINS FROM VACCINIUM MACROCARPON (CRANBERRY)**
Laura Bystrom, PhD¹, Hsiao-Ting Hsu, MS¹, Neng Yang, PhD¹, Cathy Neto, PhD², Stefano Rivella, PhD¹ and Monica Guzman, PhD¹
¹Weill Cornell Medical College; ²University of Massachusetts-Dartmouth
(Presented By: Laura Bystrom)

Wednesday, April 17, 2013

Poster# 352 INTERPLAY BETWEEN INNATE IMMUNITY AND IRON HOMEOSTASIS

Catherine Mura, Bernard Ryffel, Valérie Quesniaux
INEM CNRS UMR 7355, 3B rue de la ferollerie 45071 Orléans, France
(Presented By: Catherine Mura)

Poster# 353 DEVELOPMENT AND EARLY VALIDATION OF A NEW COMPETITIVE ELISA HIGHLY SPECIFIC FOR MURINE HEPcidIN-1 IN SERUM AND URINE

Mark Westerman, PhD¹, Vaughn Ostland, PhD¹, Huiling Han, MD¹, Patrick Gutschow MS¹, Gordana Olbina, PhD¹, Erika V. Valore, PhD², Elizabeta Nemeth, PhD², Tomas Ganz, PhD, MD²
¹Intrinsic LifeSciences, LLC; ²UCLA, David Geffen School of Medicine
(Presented By: Mark Westerman)

16:00 – 17:30 Concurrent Session V: Biolron – Biometals Joint Session

*Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL
Department of Chemistry*

Chairs: Guenther Winkelmann, PhD
Greg Anderson, BSc, MSc, PhD

16:00 – 16:20 ZN/FE Metal Switching May Regulate Enzyme Activity in Vivo

Carol Fierke, PhD

16:20 – 16:40 The Intra-Cellular Ferric Reductase (YQJH) of Escherichia Coli; Release Of Iron From Iron Stores

Simon Andrews, PhD, BSc

16:40 – 17:00 The Battle for Iron Between Pathogenic Bacteria and the Host

Hans J. Vogel, BSc, MSc, PhD

17:00 #25 OVEREXPRESSED DROSOPHILA FERRITIN ALTERS IRON, ZINC AND MANGANESE HOMEOSTASIS

Fanis Missirlis, PhD¹, Lucía Gutiérrez, PhD², Kristina Zubow, PhD³, Jon Nield, PhD³ and Francisco J Lázaro, PhD⁴

¹CINVESTAV-IPN; ²School of Physics, The University of Western Australia; ³School of Biological and Chemical Sciences, Queen Mary, University of London; ⁴Departamento de Ciencia y Tecnología de Materiales y Fluidos, Universidad de Zaragoza
(Presented By: Fanis Missirlis)

17:15 #26 TRANSCRIPTIONAL REGULATION OF HEME HOMEOSTASIS IN LACTOCOCCUS LACTIS

Shigetoshi Aono, PhD¹, Hitomi Sawai, PhD, Masaru Yamanaka, PhD, Hiroshi Sugimoto, PhD² and Yoshitsugu Shiro, PhD²

¹Okazaki Institute for Integrative Bioscience, National Institutes of Natural Sciences; ²RIKEN/SPring8
(Presented By: Shigetoshi Aono)

16:00 – 17:30 Concurrent Session VI: Hcpidin in the Clinic: YES or NO?

*Location: Christopher Ingold Lecture Theatre; Christopher Ingold Building, UCL
Department of Chemistry*

Chairs: Dorine Swinkels, MD, PhD
Domenico Girelli, MD, PhD

16:00 – 16:15 Introduction

Dorine Swinkels, MD, PhD
Domenico Girelli, MD, PhD

Wednesday, April 17, 2013

16:15 #27 DIFFERENCES IN HEPcidIN REGULATION DISTINGUISH MILD AND SEVERE PHENOTYPES OF E-BETA THALASSAEMIA
Emma Jones², Angela Allen, Patricia Evans, Chris Fisher, Sant-Rayn Pasricha, Anuja Premawardhena, Nancy Olivieri, John Porter, Timothy St. Pierre, Hal Drakesmith¹ and David Weatherall
¹University of Oxford; ²WIMM / University of Oxford
(Presented By: Hal Drakesmith)

16:30 #28 HEPcidIN IS ASSOCIATED WITH THE PRESENCE OF PLAQUE IN THE GENERAL POPULATION
Tessel Galesloot, Suzanne Holewijn, Jacqueline de Graaf, Sita Vermeulen and Dorine Swinkels
Radboud University Medical Centre
(Presented By: Tessel Galesloot)

16:45 #29 SPR BIOSENSORS AND "NATURAL HEPcidIN RECEPTOR" IMMOBILIZATION FOR HEPcidIN-25 DETERMINATION IN SERUM
Annalisa Castagna¹, Alessandra Maria Bossi, PhD², Michele Bovi, PhD², Oliviero Olivieri, Prof.¹ and Domenico Girelli, Prof.¹
¹Department of Medicine, University of Verona; ²Department of Biotechnology, University of Verona
(Presented By: Annalisa Castagna)

17:00 – 17:30 DEBATE:
Benefits Domenico Girelli, MD, PhD
Drawbacks Dorine Swinkels, MD, PhD
Discussants: Robert Fleming, MD
Herbert Y. Lin, MD, PhD

17:30 – 19:00 Plenary Session VII: Symposium on Mitochondrial Iron Disorders
(In collaboration with ApoPharma)
Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL Department of Chemistry
Chairs: Ioav Cabantchik, MD, PhD
Barry H. Paw, MD, PhD

17:30 – 18:00 The Genetics of Mitochondrial Disorders and their Treatment
Arnold Munnich, MD

18:00 – 18:30 Mitochondrial Iron Dysfunction in Hematological Disorders
Tracey Rouault, MD

18:30 – 19:00 Mitochondrial Iron Dysfunction in Neurological Disorders
Grazia Isaya, MD, PhD

19:00 – 20:30 Reception
(Sponsored by Apopharma)
Location: Cloisters; Wilkins Building

Thursday, April 18, 2013

08:00 – 18:15

Registration / Information Desk Open

Location: South Cloister; Wilkins Building

07:30 – 08:45

Meet the Expert Session III: Animal Models of Iron Disorders

Location: Garden Room; Wilkins Building

Nancy Andrews, MD, PhD

09:00 – 10:30

Concurrent Session VII: Iron Hypoxia and Erythropoiesis

Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL

Department of Chemistry

Chairs: Gaetano Cairo, PhD

Carole Peyssonnaud, PhD

09:00 – 09:30

Erythropoietin-Induced Excessive Erythrocytosis in a Transgenic Mouse Model

Max Gassmann, MD

9:30 #30

THE ERYTHROID FACTOR ERYTHROFERRONE AND ITS ROLE IN IRON HOMEOSTASIS

Léon Kautz, PhD, Elizabeta Nemeth, PhD and Tomas Ganz, PhD, MD

University of California Los Angeles, Center for Iron Disorders

(Presented By: Léon Kautz)

9:45

#31

AMP-ACTIVATED PROTEIN KINASE PLAYS A CRITICAL ROLE IN THE REGULATION OF HEPCIDIN EXPRESSION IN RESPONSE TO ERYTHROPOIETIC DEMAND

Hua Huang, PhD, Lara Krieg, BS and Xin Du, PhD

University of California, San Diego

(Presented By: Hua Huang)

10:00

#32

HEPCIDIN-INDEPENDENT IRON RECYCLING IN A MOUSE MODEL OF HAEMOLYTIC ANAEMIA

David Frazer, Sarah Wilkins, Nadia Whitelaw, Emma Whitelaw and Greg Anderson

Queensland Institute of Medical Research

(Presented By: David Frazer)

10:15

#33

SMALL MOLECULE HIF-2 α INHIBITORS SUPPRESS ERYTHROCYTOSIS AND PATHOLOGIC ANGIOGENESIS OF VHL-/- ZEBRAFISH.

Ana Metelo, MSc¹, Li Xiang, PhD¹, Rania Baker¹, Lee Kametsky, PhD², Anne Carpenter, PhD², Randall Peterson, PhD¹ and Othon Iliopoulos, MD PhD¹

¹Cancer Center – Massachusetts General Hospital; ²Broad Institute, Cambridge, MA

(Presented By: Ana Metelo)

09:00 – 10:30

Concurrent Session VIII: Cell Iron Regulation

Location: Christopher Ingold Lecture Theatre; Christopher Ingold Building, UCL

Department of Chemistry

Chairs: Matthias Hentze, MD

Elizabeth A. Leibold, PhD

9:00

#34

IRON REGULATORY PROTEINS MEDIATE MACROPHAGE INNATE IMMUNITY AGAINST SALMONELLA

Manfred Nairz², Dunja Ferring-Appel¹, Andrea Schroll², Matthias W. Hentze¹, Günter Weiss² and Bruno Galy¹

¹European Molecular Biology Laboratory, Heidelberg, Germany; ²Innsbruck Medical University, Innsbruck, Austria

(Presented By: Bruno Galy)

Thursday, April 18, 2013

- 9:15 #35 THE IRP1-HIF-2 α AXIS: COORDINATING IRON AND OXYGEN SENSING WITH ERYTHROPOIESIS AND IRON ABSORPTION**
Rick Eisenstein, PhD¹, Sheila Anderson, DVM¹, Christopher Nizzi, MS¹, Yuan-I Chang, PhD¹, Kathryn Deck, PhD¹, Paul Schmidt, PhD², Bruno Galy, PhD³, Alisa Damernsawad, BS¹, Aimee Broman, MS¹, Christina Kendziorski, PhD¹, Matthias Hentze, MD³, Mark Fleming, MD, D Phil² and Jing Zhang, PhD¹
¹UW-Madison; ²Harvard Medical School; ³EMBL
(Presented By: Rick Eisenstein)
- 9:30 #36 IRP-1 CONTROLS IRON METABOLISM IN FRATAXIN-DEFICIENT TISSUES**
Alain Martelli, PhD¹, Stéphane Schmucker, PhD¹, Laurence Reutenauer¹, Hervé Puy, Prof.², Bruno Galy, PhD³, Matthias Hentze, Prof.³ and Hélène Puccio, Research Director¹
¹Department of Translational Medicine and Neurogenetics, Institut de Génétique et de Biologie Moléculaire et Cellulaire, CNRS UMR-7104, INSERM U-964, Université Louis Pasteur, 1 rue Laurent Fries, Illkirch, France; ²Centre Français des Porphyries, Biochimie et Biologie Moléculaire, Assistance Publique des Hôpitaux de Paris, INSERM U-773, Université de Versailles-Saint Quentin en Yvelines, France; ³European Molecular Biology Laboratory, Meyerhofstrasse, 1, 69117, Heidelberg, Germany
(Presented By: Alain Martelli)
- 9:45 #37 SNX3 REGULATES RECYCLING OF THE TRANSFERRIN RECEPTOR AND IRON ASSIMILATION**
Caiyong Chen, PhD¹, Daniel Garcia-Santos, PhD², Yuichi Ishikawa, MD, PhD¹, Alexandra Seguin, PhD³, Liangtao Li, MD³, Gordon Hildick-Smith, BA¹, Matthew King, BS¹, Iman Schultz, PhD¹, Paul Kingsley, PhD⁴, James Palis, MD⁴, Shilpa Hattangadi, MD⁵, Harvey Lodish, PhD⁵, Takahiro Maeda, MD, PhD¹, Diane Ward, PhD³, Jerry Kaplan, PhD³, Prem Ponka, MD, PhD² and Barry Paw, MD, PhD¹
¹Harvard Medical School; ²McGill University; ³University of Utah; ⁴University of Rochester; ⁵Massachusetts Institute of Technology
(Presented By: Barry Paw)
- 10:00 #38 IRON REGULATORY PROTEINS SECURE EFFICIENT DIETARY IRON INTAKE AND DEFINE A BASAL SET POINT FOR THE REGULATION OF IRON ABSORPTION**
Bruno Galy², Dunja Ferring-Appel¹, Christiane Becker³, Norbert Gretz⁴, Hermann-Josef Gröne⁵, Klaus Schümann⁶ and Matthias W. Hentze²
¹European Molecular Biology Laboratory; ²European Molecular Biology Laboratory, Heidelberg, Germany; ³Lehrstuhl für Tierernährung, Technical University, München, Germany; ⁴Medical Research Center, Medical Faculty Mannheim, University of Heidelberg, Mannheim, Germany; ⁵Deutsches Krebsforschungszentrum Heidelberg, Heidelberg, Germany; ⁶Lehrstuhl für Tierernährung, Technical University, München, Germany and Lehrstuhl für Ernährungsphysiologie, Technical University, München, Germany
(Presented By: Dunja Ferring-Appel)
- 10:15 #39 A SUPPRESSOR SCREEN USING CAENORHABDITIS ELEGANS TO IDENTIFY GENES REGULATING CELLULAR IRON HOMEOSTASIS**
E. A. Leibold, S. J. Romney
Departments of Medicine and Oncological Sciences, University of Utah
(Presented By: Elizabeth Leibold)
- 10:30 – 11:00 Coffee Break**
Location: Cloister and Jeremy Bentham Room; Wilkins Building
- 11:00 – 12:30 Concurrent Session IX: Iron in Inflammation/Infections**
*Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL
Department of Chemistry*
Chairs: Tomas Ganz, MD, PhD
Cindy Roy, PhD
- 11:00 – 11:15 Introduction**
Cindy Roy, PhD

Thursday, April 18, 2013

- 11:15 #40 IN A MOUSE MODEL OF CHRONIC INFLAMMATION, LIVER-SPECIFIC DELETION OF ALK3 (A BMP TYPE I RECEPTOR) PREVENTS THE DEVELOPMENT OF ANEMIA OF INFLAMMATION**
Claire Mayeur, MD¹, Andrea S. Steinbicker, MD², Starsha A. Kolodziej and Kenneth D. Bloch, MD¹
¹MGH; ²Department of Anesthesiology, Intensive Care and Pain Medicine, University Hospital Muenster, Muenster, Germany
(Presented By: Claire Mayeur)
- 11:30 #41 INFLAMMATION REGULATES Tmprss6 EXPRESSION VIA STAT5 IN HUMAN CELLS AND MICE**
Delphine Meynard, PhD¹, Chia Chi Sun, PhD¹, Wenjie Chen, PhD¹, Qifang Wu, PhD¹, Shanzhuo Chen¹, Caroline.N. Nelson, PhD², Michael.J. Waters, PhD², Jodie.L. Babitt, MD¹ and Herbert Y. Lin, MD, PhD¹
¹Program in Anemia Signaling Research, Division of Nephrology, Program in Membrane Biology, Center for Systems Biology, Massachusetts General Hospital and Harvard Medical School;
²Institute for Molecular Bioscience and School of Biomedical Sciences, University of Queensland, St Lucia, Queensland, Australia 4072
(Presented By: Delphine Meynard)
- 11:45 #42 A STRONG ANTI-INFLAMMATORY SIGNATURE REVEALED BY LIVER TRANSCRIPTION PROFILING OF Tmprss6^{-/-} MICE**
Laura Silvestri, PhD¹, Michela Riba², Marco Rausa¹, Melissa Sorosina³, Davide Cittaro², Filippo Martinelli-Boneschi³, Antonella Nai¹, Alessia Pagani¹ and Clara Camaschella¹
¹Vita-Salute University and San Raffaele Scientific Institute; ²Center for Translational Genomics and Bioinformatics-San Raffaele Scientific Institute; ³Institute of Experimental Neurology-San Raffaele Scientific Institute
(Presented By: Laura Silvestri)
- 12:00 #43 HEMOPEXIN DEFICIENCY IN MICE RESULTED IN ENHANCED TH17 DIFFERENTIATION AND EXACERBATED EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**
Giada Ingoglia, PhD student¹, Simona Rolla, PhD², Valentina Bardina, Master Degree², Lorenzo Silengo, Prof.³, Fiorella Altruda, Prof.³, Francesco Novelli, Prof.² and Emanuela Tolosano, Prof.³
¹University of Turin, Turin, Italy; ²Centro di Ricerca in Medicina Sperimentale, University of Turin; ³Department of Genetics, Biology and Biochemistry and Molecular Biotechnology Center, University of Turin
(Presented By: Giada Ingoglia)
- 12:15 #44 IRON RECYCLING AND RETENTION IN MICE WITH A FERRITIN H DELETION IN MACROPHAGES**
Claude Schweizer, PhD, Larry Richman and Lukas Kühn, PhD
EPFL - Ecole polytechnique Fédérale de Lausanne, ISREC - Swiss Institute for Experimental Cancer Research
(Presented By: Lukas Kühn)
- 11:00 – 12:30 Concurrent Session X: Iron, Heme and Erythropoiesis**
Location: Christopher Ingold Lecture Theatre; Christopher Ingold Building, UCL Department of Chemistry
Chair: Mark D. Fleming, MD, DPhil
Janis L. Abkowitz, MD
- 11:00 – 11:30 Heme Trafficking and Human Erythropoiesis**
Janis L. Abkowitz, MD

Thursday, April 18, 2013

- 11:30 #45 HEME EXPORT THROUGH FLVCR1B IS ESSENTIAL TO PRESERVE MITOCHONDRIAL FUNCTIONALITY**
Deborah Chiabrando¹, Carlotta Giorgi², Lorenzo Silengo¹, Fiorella Altruda¹, Paolo Pinton² and Emanuela Tolosano¹
¹Molecular Biotechnology Centre, University of Torino, Italy, Department of Molecular Biotechnology and Life Sciences, University of Torino, Italy; ²Department of Experimental and Diagnostic Medicine, Section of General Pathology, Interdisciplinary Center for the Study of Inflammation (ICSI) and LTTA center, University of Ferrara, Italy
(Presented By: Deborah Chiabrando)
- 11:45 #46 GLYCINE TRANSPORTER 1 PLAYS A CRUCIAL ROLE IN HEMOGLOBINIZATION**
Matthias Schranzhofer¹, Richard Bergeron, MD, PhD², Daniel Garcia dos Santos, PhD¹ and Prem Ponka, MD, PhD¹
¹McGill University; ²University of Ottawa
(Presented By: Matthias Schranzhofer)
- 12:00 #47 ABNORMAL BODY IRON DISTRIBUTION AND ERYTHROPOIESIS IN A NOVEL MOUSE MODEL WITH INDUCIBLE GAIN OF IRON REGULATORY PROTEIN (IRP) -1 FUNCTION**
Daniela Casarrubea, MSc, Lydie Viatte, PhD, Tina Hallas, Aparna Vasanthakumar, PhD, Richard S. Eisenstein, PhD, Klaus Schümann, PhD, Matthias W. Hentze, PhD and Bruno Galy, PhD
European Molecular Biology Laboratory (EMBL)
(Presented By: Daniela Casarrubea)
- 12:15 #48 THE IRON-INDEPENDENT REGULATING ROLE OF MACROPHAGES IN STRESS ERYTHROPOIESIS IS ASSOCIATED WITH THE INTEGRIN β 1/FOCAL ADHESION KINASE-1 PATHWAY**
Bart J. Crielaard, MD, PhD, Pedro Ramos, PhD, Carla Casu, PhD, Sara Gardenghi, PhD, Laura Breda, PhD, Ritama Gupta, Ella Guy, Maria F. Mariongiu, PhD, Patricia Giardina, MD and Stefano Rivella, PhD
Weill Cornell Medical College
(Presented By: Bart J. Crielaard)
- 12:30 – 14:00 Lunch**
Location: Cloisters; Wilkins Building
- 14:00 – 15:30 Concurrent Session XI: Iron in Brain and Neurodegeneration**
*Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL
Department of Chemistry*
Chairs: Joshua L. Dunaief, MD, PhD
James Duce, PhD
- 14:00 #49 RETINAL IRON DYSREGULATION IN SYSTEMIC OR CONDITIONAL KNOCKOUT MOUSE MODELS OF HUMAN DISEASE: PROTECTION BY IRON CHELATION**
Joshua Dunaief, MD, PhD¹, Majda Hadziahmetovic, MD¹, Natalie Wolkow¹, Ying Song, MD¹, Paul Hahn, MD, PhD¹, Yafeng Li¹, John Connelly, PhD², Michael Spino, PharmD², Sophie Vaultont, PhD³ and Marie-Paule Roth⁴
¹University of Pennsylvania; ²ApoPharma, Inc; ³Institut Cochin, Inserm; ⁴Université de Toulouse, Inserm
(Presented By: Joshua Dunaief)
- 14:15 #50 A NOVEL RELATIONSHIP BETWEEN β -AMYLOID PROTEIN PRECURSOR AND TAU IN ALZHEIMER'S DISEASE RELATED IRON DISRUPTION**
James Duce, PhD¹, Peng Lei, PhD², Andrew Tsatsanis, BSc¹, Bruce Wong, PhD², Linh Lam, BSc², Scott Ayton, PhD², Jack Rogers, MD, PhD³, David Finkelstein, PhD² and Ashley Bush, MD, PhD²
¹University of Leeds; ²The Florey Institute of Neuroscience and Mental Health; ³Massachusetts General Hospital
(Presented By: James Duce)

Thursday, April 18, 2013

14:30 #51 IRON ACCUMULATION IN THE CHOROID PLEXUS AND OTHER BRAIN BARRIER COMPONENTS IN MOUSE MODELS OF HEMOCHROMATOSIS
Elizabeth Milward¹, Moones Heidari, MSc¹, Bulent Acikyol, BSc¹, Ross Graham, PhD², Anita Chua, PhD³, Roheeth Delima, BSc³, Michael House, PhD³, Debbie Trinder, PhD³, John Olynyk, MD, PhD⁴, Pablo Moscato, PhD¹ and Daniel Johnstone, PhD⁵
¹The University of Newcastle; ²Curtin University of Technology; ³University of Western Australia; ⁴Fremantle Hospital; ⁵University of Sydney
(Presented By: Elizabeth Milward)

14:45 #52 TARGETING BRAIN CHELATABLE IRON AS THERAPEUTIC STRATEGY FOR PARKINSON'S DISEASE. TRANSLATIONAL AND CLINICAL STUDIES
Caroline Moreau, MD, PhD², Jean-Christophe Devedjian, Jerome Kluza, Charlotte Laloux, Aurélie Jonneaux, Maud Petrault, Gilles Ryckewaert, Kathy Dujardin, MD, PhD, Guillaume Garçon, Nathalie Rouaix, Alain Duhamel, Patrice Jissendi, Bernard Sablonniere, Jean-Christophe Corvol, Christian Rose, Luc Defebvre, Philippe Marchetti, Ioav Cabantchik³, Regis Bordet and David Devos¹
¹Lille Nord de France University; ²CHRU of Lille; ³Hebrew University of Jerusalem, Israel
(Presented By: David Devos)

15:00 #53 A NOVEL DISEASE ENTITY CHARACTERIZED BY IDIOPATHIC GENERALIZED SEIZURES AND L-FERRITIN DEFICIENCY
Sonia Levi¹, Anna Cozzi, PhD², Paolo Santambrogio, PhD², Daniela Privitera, PhD¹, Vania Broccoli, PhD², Ida Luisa Rotundo, PhD², Barbara Garavaglia, PhD³, Rudolf Benz, MD⁴, Jeroen S. Goede, MD⁵ and Martina U. Muckenthaler, PhD⁶
¹Vita-Salute San Raffaele University; ²San Raffaele Scientific Institute; ³IRCCS Foundation Neurological Institute "C.Besta", Milan, Italy; ⁴Kantonsspital, Münsterlingen, Switzerland; ⁵University Hospital, Zurich, Switzerland; ⁶University of Heidelberg, Germany
(Presented By: Sonia Levi)

15:15 #54 EFFECT OF H63D-HFE ON CHOLESTEROL METABOLISM, BRAIN ATROPHY, AND COGNITIVE IMPAIRMENT: IMPLICATIONS FOR ALZHEIMER DISEASE
Fatima Ali-Rahmani, PhD, Patricia Grigson, PhD, Sang Lee, PhD, Elizabeth Neely, BX, Brian Kinsman, BX, James Connor, PhD and Cara-Lynne Schengrund, PhD
Pennsylvania State University College of Medicine
(Presented By: James Connor)

14:00 – 15:30 Concurrent Session XII: Hemochromatosis and Other Liver Iron Loading Disorders
Location: Christopher Ingold Lecture Theatre; Christopher Ingold Building, UCL Department of Chemistry
Chairs: Antonello Pietrangelo, MD, PhD
Heinz Zoller, PhD

14:00 #55 OVER-EXPRESSION OF HEPATIC SMAD7 IN MICE CAUSES HEMOCHROMATOSIS
Maja Vujic Spasic, PhD, Thorsten Maass, Dilay Lai, Kasia Melczko-Sanecka, Steven Dooley, Andreas Teufel and Martina Muckenthaler
Ulm University, Centre for Biomedical Research, Institute of General Zoology and Endocrinology
(Presented By: Maja Vujic Spasic)

14:15 #56 ANALYSIS OF TISSUE SPECIFIC KNOCKOUTS OF HEPICIDIN
Sara Zumerle, Jacques Mathieu, Stéphanie Delga, Lydie Viatte, Sophie Vaultont and Carole Peyssonnaud
INSERM, U1016, Institut Cochin, Paris, France, CNRS, UMR8104, Paris, France, Université Paris Descartes, Sorbonne Paris Cité, Paris, France
(Presented By: Sara Zumerle)

Thursday, April 18, 2013

- 14:30 #57 SURVIVAL AND CAUSES OF DEATH IN A COHORT OF 1086 TREATED C282Y HFE HOMOZYGOUS PATIENTS**
Edouard Bardou-Jacquet, MD, Jeff Morcet, Michele Perrin, Ghislain Manet, Dominique Guyader, MD, PHD, Romain Moirand, MD, PHD and Yves Deugnier, MD, PHD
Service des maladies du foie, Centre de référence des surcharges en fer rares d'origine génétique, University Hospital of Rennes, INSERM U991 University of Rennes 1
(Presented By: Edouard Bardou-Jacquet)
- 14:45 #58 PRIMARY HEPATIC IRON OVERLOAD IN EXTREME OBESITY IS COMMON AND NOT ASSOCIATED WITH METABOLIC ABNORMALITIES.**
Glenn Gerhard, MD, Christopher Still, DO, Craig Wood, MS, Anthony Petrick, MD, Jon Gabrielsen, MD, William Strodel, MD, Xin Chu, PhD and George Argyropoulos, PhD
Penn State College of Medicine
(Presented By: Glenn Gerhard)
- 15:00 #59 THE USE OF NEXT-GENERATION SEQUENCING TO SCREEN FOR MUTATIONS IN 16 GENES INVOLVED IN IRON HOMEOSTASIS AS AN AID TO GENETIC DIAGNOSIS FOR PATIENTS WITH IRON OVERLOAD OR IRON DEFICIENCY**
Patricia Bignell, BSc Hons¹, Adam Burns, BSc¹, Anna Schuh, PhD¹ and Kathryn Robson, PhD²
¹Oxford University Hospital; ²University of Oxford
(Presented By: Patricia Bignell)
- 15:15 #60 IDENTIFICATION OF GENES AND VARIANT ALLELES ASSOCIATED WITH IRON OVERLOAD IN HEMOCHROMATOSIS HFE C282Y HOMOZYGOTES**
Christine E. McLaren, PhD, Pradyumna D. Phatak, MD, Paul C. Adams, MD, V. Nathan Subramaniam, PhD, James C. Barton, MD, Chad P. Garner, PhD, Lawrie W. Powell, MD, PhD, Lyle C. Gurrin, PhD, Katrina J. Allen, MD, PhD, Deborah A. Nickerson, PhD, Grant A. Ramm, PhD, Gregory J. Anderson, PhD and Gordon D. McLaren, MD
University of California, Irvine
(Presented By: Christine E. McLaren)
- 15:30 – 17:00 Concurrent Session XIII: Therapeutic Manipulation of the Hcpidin Pathway**
Location: Christopher Ingold Auditorium; Christopher Ingold Building, UCL
Department of Chemistry
Chairs: Elizabetha Nemeth, PhD
Igor Theurl, MD
- 15:30 – 15:45 Therapeutic Manipulation of the Hcpidin-Ferroportin Pathway: Overview**
Igor Theurl, MD
Elizabetha Nemeth, PhD
- 15:45 #61 IDENTIFICATION OF HEPARINS WITHOUT ANTICOAGULANT ACTIVITY WHICH INHIBIT HEPICIDIN IN VIVO**
Maura Poli, PhD¹, Domenico Girelli, MD², Annamaria Naggi, PhD³, Natascia Campostrini, PhD², Michela Asperti, PhD⁴, Dario Finazzi, MD⁴, Dr. Federica Maccarinelli⁴, Dr. Annalisa Castagna² and Paolo Arosio, PhD⁴
¹department MMT, University of Brescia; ²University of Verona; ³Institute Ronzoni, Milano; ⁴University of Brescia
(Presented By: Maura Poli)
- 16:00 #62 IRON MOBILIZATION AND PHARMACODYNIC MARKER MEASUREMENTS IN NON-HUMAN PRIMATES FOLLOWING ADMINISTRATION OF PRS-080, A NOVEL AND HIGHLY SPECIFIC ANTI-HEPCIDIN THERAPEUTIC**
Andreas Hohlbaum, PhD¹, Hendrik Gille¹, Jürgen Christian¹, Andrea Allersdorfer¹, Jakub Jaworski², James Burrows², Barbara Rattenstetter¹, Maria Kolodziejczyk¹, Shane Olwill¹ and Laurent Audoly¹
¹Pieris AG; ²Queen's University Belfast
(Presented By: Andreas Hohlbaum)

Thursday, April 18, 2013

16:15 #63 RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED PK/PD STUDY ON THE EFFECTS OF A SINGLE INTRAVENOUS DOSE OF THE ANTI-HEPCIDIN SPIEGELMER NOX-H94 ON SERUM IRON DURING EXPERIMENTAL HUMAN ENDOTOXEMIA
Lucas van Eijk, MD, MSc, Dorine Swinkels, MD, PhD, Aaron John, Frank Schwoebel, PhD, Frank Fliegert, MD, Luciana Summo, PharmD, PhD, Stéphanie Vauleon, PhD, Coby Laarakkers, BSc, Kai Riecke, MD and Peter Pickkers, MD, PhD
Radboud University Nijmegen Medical Centre
(Presented By: Lucas van Eijk)

16:30 #64 LOW DOSE MINIHEPCIDIN PEPTIDE CAUSES IMPROVEMENT OF ANEMIA BY INCREASED ERYTHROPOIETIC EFFICIENCY IN A MOUSE MODEL OF THALASSEMIA INTERMEDIA
C. Casu, S. Gardenghi, E. Nemeth, T. Ganz, B. MacDonald and S. Rivella
Weill Cornell Medical College, New York, NY
(Presented By: C. Casu)

16:45 #65 RNAI TARGETING OF TMPRSS6 DECREASES IRON OVERLOAD IN A MOUSE MODEL OF HEREDITARY HEMOCHROMATOSIS AND ELIORATES ANEMIA AND IRON OVERLOAD IN MURINE β -THALASSEMIA INTERMEDIA
Paul Schmidt, PhD¹, Iva Toudjarska, PhD², Anoop Sendamarai, PhD¹, Tim Racie, BS², Stuart Milstein, PhD², Brian Bettencourt, PhD², Julia Hettinger², David Bumcrot, PhD², James Butler, PhD² and Mark Fleming, MD, DPhil¹
¹Children's Hospital Boston/Harvard Medical School; ²Alnylam Pharmaceuticals
(Presented By: Paul Schmidt)

15:30 – 17:00 Concurrent Session XIV: Analytical Methods for Iron Studies Including MRI
Location: Christopher Ingold Lecture Theatre; Christopher Ingold Building, UCL Department of Chemistry

Chairs: Timothy St. Pierre, PhD
John Wood, MD, PhD

15:30 #66 IDENTIFICATION OF NONFERRITIN MITOCHONDRIAL IRON DEPOSITS IN A MOUSE MODEL OF FRIEDREICH ATAXIA
Des R. Richardson¹, M. Whitnall¹, Y. Suryo Rahmanto¹, M.L.H. Huang¹, F. Saletta¹, H.C. Lok¹, L. Gutierrez², F.J. Lazaro³, A.J. Fleming², T.G. St Pierre², M.R. Mikhael⁴ and P. Ponka⁴
¹The University of Sydney; ²University of Western Australia; ³Universidad de Zaragoza; ⁴Lady Davis Institute for Medical Research, McGill University
(Presented By: Des R. Richardson)

15:45 #67 BRAIN IRON AND MRI IN ALZHEIMER'S DISEASE, PARKINSON'S DISEASE, AND MULTIPLE SYSTEM ATROPHY
Joanna Collingwood¹, Mary E. Finnegan¹, Naomi P. Visanji², Emily House³, Lili-Naz Hazrati⁴, Vijay Antharam⁵, John-Paul Bullivant⁵, Martin R. Lees¹, Albina Mikhailova⁵, Christopher Batich⁵, Mark R. Davidson⁵ and Jon Dobson⁵
¹University of Warwick; ²Toronto Western Hospital; ³Lancaster University; ⁴University of Toronto; ⁵University of Florida
(Presented By: Joanna Collingwood)

16:00 #68 RESPIRATORY CHAIN DEFICIENCY DUE TO FE-S CLUSTER DEFICIENCY IN SKELETAL MUSCLE LEADS TO A SYSTEMIC STARVATION RESPONSE CHARACTERIZED BY INCREASED FGF-21 SECRETION AND UP-REGULATION OF KETOGENIC ENZYME HMGCS2 IN SKELETAL MUSCLE FIBERS OF ISCU MYOPATHY PATI
Daniel Crooks, PhD¹, Thanemozhi Natarajan, PhD², Chuming Chen, PhD³, Hongzhan Huang, PhD³, Manik Ghosh, PhD⁴, Wing-Hang Tong, PhD⁴, Ronald Haller, MD⁵, Cathy Wu, PhD³ and Tracey Rouault, MD⁴
¹NICHHD; ²Georgetown University Medical Center, Washington, DC, USA; ³Center for Bioinformatics and Computational Biology, University of Delaware, Newark, DE, USA; ⁴National Institute of Child Health and Human Development, NIH, Bethesda, MD, USA; ⁵University of Texas Southwestern Medical Center, Dallas, TX, USA
(Presented By: Daniel Crooks)

Thursday, April 18, 2013

- 16:15 #69 BONE MARROW IRON ACCUMULATION IN SICKLE CELL DISEASE, PAROXYSMAL NOCTURNAL HEMOGLOBINURIA AND THALASSEMIA PATIENTS ASSESSED BY MRI**
Lucía Gutiérrez¹, Michael J. House¹, Nisha Vasavda², Emma Drašar², Austin Kulasekararaj², Swee L. Thein² and Tim G. St Pierre¹
¹The University of Western Australia; ²King's College London
(Presented By: Tim G. St Pierre)
- 16:30 #70 BIO-MARKERS OF IRON TRAFFICKING AND DISTRIBUTION IN TRANSFUSIONAL OVERLOAD: INSIGHTS FROM COMPARING DIOND BLACKFAN ANEMIA WITH SICKLE CELL DISEASE AND THALASSEMIA (MCSIO PILOT STUDY)**
John Porter, MD¹, Patrick Walter, PhD², Lynne Neumayr, MD², Patricia Evans, PhD¹, Marcela Weyhmiller, PhD², Paul Harmatz, MD², John Wood, MD, PhD³, Jeff Miller, MD⁴, Guenter Weiss, MD⁵, Quing Yuan, PhD⁶, Zhiyue Wang, PhD⁶, Regine Grosse, MD⁷, Bjoern Schoennagel, MD⁷, Joerg Meerpohl, MD⁸, Roland Fischer, PhD⁷, Peter Nielsen, MD, PhD⁷, Markus Seifert, BSc⁵ and Elliott Vichinsky, MD²
¹University College London; ²Children's Hospital & Research Center Oakland; ³Children's Hospital Los Angeles; ⁴National Institute of Diabetes and Digestive and Kidney Diseases; ⁵Medical University of Innsbruck; ⁶University of Texas Southwestern Medical Center Dallas; ⁷University Medical Center Hamburg-Eppendorf; ⁸University Medical Center Freiburg
(Presented By: John Porter)
- 16:45 #71 IRON METALLODRUGS: STABILITY, REDOX ACTIVITY AND TOXICITY AGAINST ARTEMIA SALINA**
Hector Aguilar Vitorino¹, Flavia Zanotto, PhD², Luca Mantovanelli² and Breno Pannia Espósito, PhD¹
¹University of São Paulo – Institute of Chemistry; ²University of Sao Paulo-Institute of Biosciences;
(Presented By: Hector Aguilar Vitorino)

17:00 – 18:15 Plenary Session VIII: Best of Posters

Location: Bloomsbury Theatre

Chairs: Clara Camaschella, MD
Guenter Weiss, MD

- Poster# 82 MACROPHAGES HAVE AN IRON-INDEPENDENT ROLE IN THE REGULATION OF STRESS AND INEFFECTIVE ERYTHROPOIESIS AND CONTRIBUTE TO HEPCIDIN REGULATION**
Bart J. Crielgaard, MD, PhD, Carla Casu, PhD, Pedro Ramos, PhD, Sara Gardenghi, PhD, Laura Breda, PhD, Ross L. Levine, Omar Abdel-Wahab, PhD, Benjamin L. Ebert, Saghil Ghaffari, MD, PhD, Robert W. Grady, PhD, Patricia Giardina, MD and Stefano Rivella, PhD
Weill Cornell Medical College
(Presented By: Bart J. Crielgaard)
- Poster# 177 SOTATERCEPT, AN ACTIVIN RIIA LIGAND TRAP, INCREASES HEMOGLOBIN AND IRON AVAILABILITY IN HEPCIDIN TRANSGENIC MICE**
Cindy Roy, PhD¹, Jacqueline Langdon, Alan Berger, PhD, Chris Cheadle, PhD, Victoria Sung, PhD² and Qian-Li Xue, PhD
¹Johns Hopkins University; ²Celgene Corporation
(Presented By: Cindy Roy)
- Poster# 8 ATOH8 REGULATES HEPCIDIN TRANSCRIPTION, CELLULAR PSMAD1,5,8 LEVELS AND IS SUPPRESSED BY ERYTHROPOIETIC ACTIVITY**
Andrew McKie, BSc, PhD¹; Neeta Patel, BSc²; Joe Varghese, MD, PhD³; Patarabutr Masaratana, MD, PhD⁴; Molly Jacob, MD, PhD³; Oluyemisi Latunde-Dada, BSc, PhD²; Robert J. Simpon, BSc, PhD²
¹Kings College London; ²Kings College London, UK, Division of Diabetes and Nutritional Sciences; ³Christian Medical College Vellore, India, Department of Biochemistry; ⁴Faculty of Medicine Siriraj Hospital, Bangkok, Thailand, Department of Biochemistry
(Presented By: Andrew McKie)

Thursday, April 18, 2013

- Poster# 160** **DETAILED CHARACTERIZATION OF THE MOUSE MODEL OF ANEMIA OF INFLAMMATION CAUSED BY HEAT-KILLED BRUCELLA ABORTUS REVEALS MULTIPLE CAUSES OF ANEMIA AND PARTIAL DEPENDENCE ON HEPCIDIN**
Airie Kim, MD¹, Eileen Fung, PhD², Sona Parikh², Victoria Gabayan, BS², Elizabeta Nemeth, PhD² and Tomas Ganz, PhD, MD²
¹University of California at Los Angeles; ²UCLA
(Presented By: Airie Kim)
- Poster# 1** **THE ROLES OF HEPCIDIN AND FERROPORTIN IN AUTOCRINE REGULATION OF IRON LEVELS**
Samira Lakhali-Littleton, BSc, DPhil, Daniel Biggs, BSc, MSc, Rebecca Diaz, BSc, PhD, Ana Santos, BSc, PhD, Chris Preece, BSc, PhD, Benjamin Davies, BSc, PhD, Peter Robbins, MA, DPhil, BM, BCh
Oxford University
(Presented By: Samira Lakhali-Littleton)
- Poster# 310** **IMPACT OF D181V AND A69T ON THE FUNCTION OF FERROPORTIN AS AN IRON EXPORT PUMP AND HEPCIDIN RECEPTOR**
Roman Praszberger, Melanie Schranz, Martin Hermann, William J. H. Griffiths, David J. Lomas, Antonello Pietrangelo, Timothy M. Cox, Wolfgang Vogel and Heinz Zoller
Innsbruck Medical University
(Presented By: Roman Praszberger)
- Poster# 32** **DEFECTIVE GLUCOSE METABOLISM IN IRP1-/- MICE**
Nicole Wilkinson and Kostas Pantopoulos, PhD
Lady Davis Institute for Medical Research and McGill University
(Presented By: Nicole Wilkinson)
- Poster# 196** **ANIMAL MODELS OF NEUROFERRITINOPATHY**
Federica Maccarinelli¹, Michela Asperti, Dr², Sara Capoccia, Dr³, Antonella Pagani, Dr⁴, Barbara Buffoli, PhD⁵, Franca Codazzi, PhD⁴, Dario Finazzi, MD², Ilaria Pelizzoni, PhD⁴, Anna Cozzi, PhD⁴, Maurizio Strippoli, Dr⁴, Letterio Politi, MD⁴, Ottavio Cremona, MD⁶, Fabio Grohovaz, PhD⁶, Sonia Levi, PhD⁶ and Paolo Arosio, PhD²
¹DMMT; ²DMMT, University of Brescia; ³ISTITUTO SUPERIORE DI SANITA', Rome; ⁴Institute H.San Raffaele, Milano; ⁵University of Brescia; ⁶University Vita-Salute, Milano
(Presented By: Federica Maccarinelli)
- Poster# 95** **ASCORBATE STATUS MODULATES RETICULOENDOTHELIAL IRON STORES AND RESPONSE TO DEFERASIROX IRON CHELATION IN ASCORBATE-DEFICIENT RATS.**
Casey Brewer, BSc, Maya Otto-Duessel, PhD, Jens Lykkesfeldt, PhD, DSc, Hanspeter Nick, PhD and John Wood, MD, PhD
Children's Hospital Los Angeles
(Presented By: Casey Brewer)
- Poster# 316** **NRF2 PROTECTS AGAINST DIETARY IRON-INDUCED LIVER INJURY**
Sandro Silva-Gomes, PhD, Ana Santos, MSc, Carolina Caldas, BSc, João Neves, PhD, Pedro Rodrigues, PhD and Tiago Duarte, PhD
Instituto de Biologia Molecular e Celular
(Presented By: Tiago Duarte)
- 18:15** **Concluding Remarks**
Greg Anderson, BSc, MSc, PhD
- 19:30 – 24:00** **Gala Dinner/Award Ceremony**
Location: The "Dixie Queen" Boat, Tower Pier