

# 3<sup>rd</sup> Meeting of Polish Iron Club

15-16 September, 2017 Gdańsk

## PROGRAM SCHEDULE

**Friday, September 15, 2017**

**9:00** Opening Ceremony/Welcome Address

**9:15–11:55** Session I

*Chairs: Paweł Lipiński, Institute of Genetics and Animal Breeding, Jastrzębiec PAS, Poland*

*Rafał Dutkiewicz, University of Gdansk, Gdańsk, Poland*

**9:15–10:05** Keynote lecture

**Martina Muckenthaler**, Department of Pediatric Oncology, Hematology and Immunology, University of Heidelberg, Molecular Medicine Partnership Unit, Heidelberg

Regulation of iron homeostasis by the hepcidin/ferroportin regulatory system.

**10:05–10:30** – **Katarzyna Mleczko-Sanecka**, International Institute of Molecular and Cell Biology, Warsaw, Poland

Unbiased approaches to decipher genetic control of iron homeostasis.

**10:30–10:55** **Rafał R. Starzyński**, Institute of Genetics and Animal Breeding PAS, Department of Molecular Biology, Jastrzębiec, Poland

Regulation of ferroportin expression by hepatic iron and hepcidin in pregnant females and their fetuses in response to normal and iron-deficient diet.

**10:55–11:15** **Inga Dziembowska**, Faculty of Pharmacy, Ludwik Rydygier Collegium Medicum in Bydgoszcz Nicolaus Copernicus University in Torun, Bydgoszcz, Poland

Effect of daily alcohol and caffeine intake on serum hepcidin levels in healthy men.

**11:15–11:35** **Jolanta Kwiatek-Majkusiak**, Medical University of Warsaw, Warsaw, Poland

Serum levels of pro-hepcidin are higher in patients with Parkinson's disease treated with Deep Brain Stimulation.

**11:35–11:55** **Maja Tomczyk**, Gdansk University of Physical Education and Sport, Gdańsk, Poland.

Glucose and fructose supplementation abrogates exercise-induced increase in hepcidin in young men

**11:55–12:15 Coffee Break**

**12:15–14:05 Session II**

*Chairs: Rafał R. Starzyński, Institute of Genetics and Animal Breeding Jastrzębiec, Poland*

*Jędrzej Antosiewicz, Gdansk University of Physical Education and Sport, Gdańsk, Poland*

**12:15–12:40 Rafał Dutkiewicz**, University of Gdańsk, Gdańsk, Poland.

Molecular chaperones involved in Fe/S biogenesis.

**12:40–13:05 Magdalena Gryzik**, University of Brescia, Brescia, Italy.

The role of NCOA4 in ferritinophagy and ferroptosis.

**13:05–13:25 Marcin Jeleń**, University of Gdansk, Gdańsk, Poland.

Kinetics of interaction between protein involved in the biogenesis of iron-sulfur clusters.

**13:25–13:45 Andżelika Borkowska**, Medical University of Gdansk, Gdańsk, Poland

Homocysteine-induced changes in iron metabolism are mediated by Akt kinases and transcription factor FOXO3a in endothelial cells.

**13:45–14:05 – Katarzyna Rżosińska**, Poznan University of Technology, Poznań, Poland

Petri net based approach to modeling and analysis of macrophage participation in iron metabolism.

**14:05–15:15 Lunch**

**15:15–17:20 Session III**

*Chairs: Katarzyna Mleczko-Sanecka, International Institute of Molecular and Cell Biology, Warsaw, Poland*

*Katarzyna Sikorska, Medical University of Gdansk, Gdańsk, Poland*

**15:15–16:05 Keynote lecture**

**Alexander Drakesmith**. MRC Human Immunology Unit, Weatherall Institute of Molecular Medicine, John Radcliffe Hospital and University of Oxford, Oxford, UK.

Iron, infection and immunity.

**16:05–16:25 Anna Woziwodzka**, University of Gdansk-Medical University of Gdansk, Gdańsk, Poland.

Role of duodenal cytochrome b (CYBRD1) in iron overload in chronic hepatitis C.

**16:25–16:45 Katarzyna Sikorska**, Medical University of Gdansk, Gdańsk, Poland.

Iron and the immune response in chronic hepatitis C.

**16:45–17:05 Agnieszka Sabisz**. Medical University of Gdansk, Gdańsk, Poland

Evaluation of iron content in skeletal muscles of patients with hereditary hemochromatosis.

**17:05–17:25 Ludmiła Danilowicz-Szymanowicz**, Medical University of Gdańsk, Gdańsk, Poland

Cardiac involvement in hereditary hemochromatosis - what we know today?

**17:25–17:45 Aleksandra Bednarz**, Jagiellonian University, Kraków, Poland.

Role of kidneys in heme detoxification and iron metabolism during neonatal hyperbilirubinemia - research based on laboratory mouse model.

**19:00 Galla Dinner**

## **Saturday, September 16, 2017**

**9:00–11:15 Session IV**

*Chairs: Paweł Lipiński, Institute of Genetics and Animal Breeding, Jastrzębiec PAS, Poland  
Jędrzej Antosiewicz, Gdansk University of Physical Education and Sport, Gdańsk, Poland*

**9:00–9:50 Keynote lecture**

**Sophie Vaulont**. INSERM, U1016, Institut Cochin, CNRS, UMR8104, Paris, 75014, Université Paris Descartes, Sorbonne Paris Cité, Paris, France

Hepcidin: from discovery to therapeutics.

**9:50-10:15 Katarzyna Sikorska**. Medical University of Gdansk, Gdańsk, Poland

Disorders of iron homeostasis in non-alcoholic fatty liver disease – what does a clinician want to know from a biologist?

**10:15–10:35 Mateusz Szudzik.** Institute of Genetics and Animal Breeding PAS, Jastrzębiec, Poland

Iron nanoparticles: hope for treating neonatal iron deficiency anemia in piglets.

**10:35–10:55 Małgorzata Haloń,** Medical University of Gdansk, Gdańsk, Poland.

Insulin signaling and iron metabolism in skeletal muscle of transgenic animals bearing SOD1 G93A.

**10:55–11:15 Jakub Kortas,** Gdansk University of Physical Education and Sport, Gdańsk, Poland

Nordic Walking training reduced oxidative stress and induced changes in iron metabolism in elderly people.

**11:15-11:35 Coffee Break**

**11:35–12:35 Session V**

*Chair: Małgorzata Lenartowicz, Jagiellonian University, Kraków, Poland*

**11:35–11:55 Kaja Chmielewska.** Institute of Computing Science, Poznan University of Technology, Poland.

Interrelations between vitamin A and iron - modeled and analysed using Petri nets.

**11:55–12:15 Aneta Jończy.** Institute of Genetics and Animal Breeding PAS, Jastrzębiec, Poland.

Characterization of iron metabolism-related genes in the Jackson Laboratory toxic milk mouse model of Wilson disease

**12:15–12:35 Mateusz Ogórek,** Jagiellonian University, Kraków, Poland

Copper transport in spermatogenesis

**12:35 Concluding remarks**

*Paweł Lipiński, Institute of Genetics and Animal Breeding PAS, Jastrzębiec, Poland*

**12:50 Lunch**