Friday, March 5th, 2021

13:30-13:40 Welcome

SESSION I – Bone marrow response to viral infections
Chairs: Stuart Orkin (Boston), Valeria Santini (Florence)

Stuart Orkin (Boston)
Valeria Santini (Florence)

13:45-14:05 Immunity and variability response to infection
Jean-Laurent Casanova (New York)

14:05-14:25 Emergency hemopoiesis in viral infections
Jonas Schulte-Schrepping (Bonn)

14:25-14:32 Enhanced HbF Reactivation By In Vivo Multiplex Mutagenesis of Thalassemic CD34+ Cells
Aphrodite Georgakopoulou (Thessaloniki)*

Antonella Nai (Milan)*

14:39-15:10 Panel discussion

15:10-15:15 Break

15:15-16:15 Possible slot for a satellite symposium

SESSION II – Haematological response to SARS CoV2 infection
Chair(s): Maria-Domenica Cappellini (Milan), Olivier Hermine (Paris)*

16:15-16:20 Introduction
Maria-Domenica Cappellini (Milan)
Olivier Hermine (Paris)*

16:20-16:35 Iron and viral infection
Hal Drakesmith (Oxford)

16:35-16:50 Iron and Heme disruption in COVID-19
Emanuela Tolosano (Turin)

16:50-17:05 Anaemias and COVID-19
Irene Motta (Milan)

17:05-17:20 Focus on blood management during the COVID outbreak
Giancarlo M. Liumbruno (Rome)

17:20-17:40 Hematopoiesis in MDS and Covid 19 infection
Eric Solary (Paris)

17:40-18:10 Panel discussion
SESSION III – Dyserythropoiesis in clonal haemopoiesis and MDS  
Chairs: Valeria Santini (Florence), Michaela Fontenay (Paris)

18:10-18:15  Introduction  
Valeria Santini (Florence)  
Michaela Fontenay (Paris)

18:15-18:30  Into the mechanisms of dyserythropoiesis:  
the SF3B1 mutation and RSP-14 deficiency models  
Michaela Fontenay (Paris)

18:30-18:45  TGF pathway in ineffective erythropoiesis  
Olivier Hermine (Paris)

18:45-19:00  Hypoxic niche and microenvironment in clonal  
haemopoiesis and MDS  
Marc H.G.P. Raaijmakers (Rotterdam)

19:00-19:07  Why is the translation selectivity of low ribosome  
availability deleterious for erythropoiesis?  
Ismael Boussaid (Paris)*

19:07-19:40  Panel discussion

19:40-20:40  3 Simultaneous Meet the Expert Sessions

1. Management of non-transfusion-dependent thalassaemias  
Ali Taher (Beirut)/John Porter (London)*

2. New treatments in haemoglobinopathies  
Antonio Piga (Turin)/Mark Fleming (Boston)*

3. Anaemia and autoimmunity management in MDS.  
Pierre Fenaux (Paris)/Arsene Mekinian (Paris)*

SESSION IV – Erythropoiesis Control  
Chairs: Douglas Higgs (Oxford), Mark Fleming (Boston)

13:30-13:35  Introduction  
Douglas Higgs (Oxford)  
Mark Fleming (Boston)

13:35-13:50  Congenital sideroblastic anaemias  
Mark Fleming (Boston)

13:50-14:05  GATA 1 experience  
Emery Bresnick (Madison)

14:05-14:20  Single cell analysis during erythropoiesis  
Vijay G. Sankaran (Boston)

14:20-14:27  Acquired α-Thalassemia (HbH disease) in a Patient  
with Myelodysplastic Syndrome with Excess Blasts - 1  
(AT-MDS-EB-1) Reveals a Novel Splice-Donor Site Atrx  
variant on NGS  
Prashant Sharma (Chandigarh)

14:27-15:00  Panel discussion

SESSION V – Erythropoiesis control: phase 2  
Chairs: Mohandas Narla (New York), Stuart Orkin (Boston)

15:00-15:05  Introduction  
TBA

15:05-15:20  Erythroid progenitors  
Lionel Blanc (New York)

15:20-15:35  Eryptosis  
Mehrdad Ghashghaeinia (Tübingen)
15:35-15:50 Bone marrow 3D modelling  
Alessandra Balduini (Pavia)

15:50-16:20 Panel discussion

16:20-16:30 Break

16:30-17:30 SATELLITE SYMPOSIUM

Clinical Scenarios in MDS and β-thalassemia: Expert Opinions on Managing Anemia
Chair: Aristoteles Giagounidis (Düsseldorf)
Speakers: María Díez Campelo (Salamanca), Antonis Kattamis (Athens)

This symposium is organized and sponsored by Bristol Myers Squibb.

SESSION VI – Iron metabolism and erythropoiesis
Chair: Clara Camaschella (Milan)

17:30-17:35 Introduction  
Clara Camaschella (Milan)

17:35-17:50 Erythropoiesis and iron metabolism interaction  
Laura Silvestri (Milan)

17:50-18:05 Macrophage and iron  
Martina Muckenthaler (Heidelberg)

18:05-18:20 Atypical microcytic anaemias  
Graça Porto (Porto)

18:20-18:27 Ker-050, a Novel Inhibitor of Tgff Superfamily Signaling, Induces Red Blood Cell Production By Promoting Multiple Stages of Erythroid Differentiation  
Marina Feigenson (Lexington)

18:27-19:00 Panel discussion

19:00-20:00 3 Simultaneous Meet the Expert sessions

1. Regulation of globin gene switches: embryonic to fetal and fetal to adult. 
   Douglas Higgs (Oxford)/Stuart Orkin (Boston)

2. Mechanisms of inflammation, innate and adaptive Immune responses in MDS 
   Shahram Kordasti (London)/Jonathan Irish (Nashville)*

19:00-20:00 Mentored Poster Walk

Sunday, March 7th, 2021

SESSION VII – Inherited dyserythropoiesis
Chair: Achille Iolascon (Naples)

14:00-14:05 Introduction  
Achille Iolascon (Naples)

14:05-14:20 Congenital dyserythropoietic anaemia  
Roberta Russo (Naples)

14:20-14:35 Diamond-Blackfan anaemia  
Lydie Da Costa (Paris)

14:35-14:50 Germline predisposition to MDS and bone marrow failure  
Akiko Shimamura (Boston)
**SESSION VIII – Gene Therapy/Editing**

Chairs: John Porter (London), Maria-Domenica Cappellini (Milan)

14:50-14:57  *Haploidentical Stem Cell Transplantation for High Risk Haemoglobinopathies Using Post-Transplant Cyclophosphamide*  
Eman Khattab (Amman)*

14:57-15:30  *Panel discussion*

15:30-15:35  *Introduction*  
John Porter (London)  
Maria-Domenica Cappellini (Milan)

15:35-15:50  *Who is the best patient candidate for gene therapy?*  
Vip Viprakasit (Bangkok)

15:50-16:05  *Gene therapy in haemoglobinopathies vs BMT*  
Marina Cavazzana (Paris)

16:05-16:20  *Gene therapy in haemoglobinopathies vs gene editing*  
Mitchell Weiss (Memphis)

16:20-16:35  *Focus on: Immunotherapy and CAR-T in MDS: Dream or reality?*  
Rafael Bejar (La Jolla)

16:35-17:05  *Panel discussion*

**17:05-17:15   Break**

**SESSION IX – Drugs and ineffective erythropoiesis**

Chairs: Ali Taher (Beirut), Antonio Piga (Turin)

17:15-17:20  *Introduction*  
Ali Taher (Beirut)  
Antonio Piga (Turin)

17:20-17:35  *Iron restricted erythropoiesis*  
Tomas Ganz (Los Angeles)

17:35-17:50  *New approaches to anaemia of MDS*  
Uwe Platzbecker (Leipzig)

17:50-18:05  *New approaches to the management of sickle cell disease*  
Lucia De Franceschi (Verona)

18:05-18:12  *Inclusion of a shRNA Targeting BCL11A into a β-Globin Expressing Vector Allows Concurrent Synthesis of Curative Adult and Fetal Hemoglobin*  
Danuta Jarocha (Philadelphia)*

18:12-18:42  *Panel discussion*

18:42-19:00  *Closing remarks*