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)

14:43-14:50  Panel discussion

15:10-16:15  Break

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

Saturday, March 6th, 2021

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

                          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 a-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  Mohandas Narla (New York)
                          Stuart Orkin (Boston)

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  **SEMINAR 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.*

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**SESSION VI – Iron metabolism and erythropoiesis**

*Chair: Clara Camaschella (Milan)*

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<td>17:30-17:35</td>
<td>Introduction</td>
<td>Clara Camaschella (Milan)</td>
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<td>17:35-17:50</td>
<td>Erythropoiesis and iron metabolism interaction</td>
<td>Laura Silvestri (Milan)</td>
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<td>17:50-18:05</td>
<td>Macrophage and iron</td>
<td>Martina Muckenthaler (Heidelberg)</td>
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<td>18:05-18:20</td>
<td>Atypical microcytic anaemias</td>
<td>Graça Porto (Porto)</td>
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<td>18:20-18:27</td>
<td><em>Ker-050, a Novel Inhibitor of Tgß Superfamily Signaling, Induces Red Blood Cell Production By Promoting Multiple Stages of Erythroid Differentiation</em></td>
<td>Marina Feigenson (Lexington)</td>
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<td>18:27-19:00</td>
<td>Panel discussion</td>
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<td>19:00-20:00</td>
<td>2 Simultaneous Meet the Expert sessions</td>
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<td>1. Regulation of globin gene switches: embryonic to fetal and fetal to adult.</td>
<td>Douglas Higgs (Oxford)/Stuart Orkin (Boston)</td>
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<td>19:00-20:00</td>
<td>Mentored Poster Walk</td>
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<td><em>Leaders for Biology: Michaela Fontenay (Paris) &amp; Tomas Ganz (Los Angeles)</em></td>
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<td><em>Leaders for Clinical: Maria Diez-Campelo (Salamanca) &amp; Maria-Domenica Cappellini (Milan)</em></td>
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**Sunday, March 7th, 2021**

**SESSION VII – Inherited dyserythropoiesis**

*Chair: Achille Iolascon (Naples)*

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<tr>
<th>Time</th>
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<tr>
<td>14:00-14:05</td>
<td>Introduction</td>
<td>Achille Iolascon (Naples)</td>
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<td>14:05-14:20</td>
<td>Congenital dyserythropoietic anaemia</td>
<td>Roberta Russo (Naples)</td>
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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)

14:50-14:57  Haploidentical Stem Cell Transplantation for High Risk Haemoglobinopathies Using Post-Transplant Cyclophosphamide  
Du’A Darabseh (Amman)

14:57-15:30  Panel discussion

SESSION VIII – Gene Therapy/Editing  
Chairs: John Porter (London), Maria-Domenica Cappellini (Milan)

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