2ND TRANSLATIONAL RESEARCH CONFERENCE
ERYTHROPOIESIS CONTROL AND INEFFECTIVE ERYTHROPOIESIS : FROM BENCH TO BEDSIDE

March 5-7, 2021

Chairpersons: Maria-Domenica Cappellini (Milan), Stuart Orkin (Boston), Valeria Santini (Florence)

Friday, March 5th, 2021

13:30-13:40 Welcome

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

13:40-13:45	Introduction	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)
14:32-14:39	*Targeting TFR2: A Novel "Erythropoiesis-Stimulating" Approach*	Antonella Nai (Milan)
14:39-15:10	*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 SF3B1mutation 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)

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	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 **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 Tgfβ 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 2 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

Leaders for Biology: *Michaela Fontenay (Paris) & Tomas Ganz (Los Angeles)*
Leaders for Clinical: *Maria Diez-Campelo (Salamanca) & Maria-Domenica Cappellini (Milan)*

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)
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 Cappelini (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