5th Scientific Workshop
THE HAEMATOLOGICAL TUMOUR MICROENVIRONMENT AND ITS THERAPEUTIC TARGETING
February 16-18, 2025 – London, United Kingdom
Chairs: Dominique Bonnet, Nitin Jain, Marina Konopleva, Daniela Krause, Simon Méndez-Ferrer, Kwee Yong

Sunday, February 16, 2025

15:00-15:10	**Welcome**	Conference Chairpersons

SESSION I – Normal hematopoietic stem cell niche
Chairs: Bong-Ihn Koh (Münster) and Cesar Nombela-Arrieta (Zurich)

15:10-15:15	Introduction	
15:15-15:30	The hematopoietic stem cell niche and implications for clinical transplantation	Sean Morrison (Dallas)
15:30-15:35	*Discussion*	
15:35-15:50	Pericytes in the hematopoietic stem cell generating niche	Mihaela Crisan (Edinburgh)
15:50-15:55	*Discussion*	
15:55-16:10	Ageing of the hematopoietic stem cells niche	M. Carolina Florian (Barcelona)
16:10-16:15	*Discussion*	
16:15-16:25	*A notch trans-activation to cis-inhibition switch underlies hematopoietic stem cell aging*	*Francesca Matteini (Barcelona)*
16:25-16:30	*Discussion*	
16:30-17:00	*Panel discussion*	
17:00-17:30	***Coffee Break***	

SESSION II – Stress and inflammation
Chairs: Katherine King (Houston) and Darja Karpova (Frankfurt)

17:30-17:35	Introduction	
17:35-17:50	Functional specialization of cranial tissues: lessons from blood vessels	Bong-Ihn Koh (Münster)
17:50-17:55	*Discussion*	
17:55-18:10	Remodeling and regeneration of the bone marrow microenvironment after myeloablative stress	Cesar Nombela-Arrieta (Zurich)
18:10-18:15	*Discussion*	

18:15-18:30	Identifying and quantitating selective stem cell advantage of in human clonal hematopoiesis that is associated with attenuated response to inflammation and aging	Paresh Vyas (Oxford)
18:30-18:35	*Discussion*	
18:35-18:45	*The impact of ikzf1 alterations in the tumor micro-environment in BCR::ABL1 acute lymphoblastic leukemia*	*Chun Shik Park (Memphis)*
18:45-18:50	*Discussion*	
18:50-19:20	*Panel discussion*	

19:20-20:20 ***Poster Walks and Welcome Get-Together stand-up buffet dinner***
Poster Walk Leaders: Ingo Ringshausen (London), Mihaela Crisan (Edinburgh), Diana Passaro (Paris), Darja Karpova (Frankfurt)

Monday, February 17, 2025

08:00-09:00 **3 Simultaneous Meet the Expert sessions (non-clinical)**

1. Why I am grateful for a career in science — Sean Morrison (Dallas)
2. Navigating a career in hematology and inflammation research — Katherine King (Houston)
3. The challenge of applying spatial methods in the bone marrow — Rebekka Schneider (Rotterdam)

SESSION III – Selected brief oral communications
Chairs: Ilaria Malanchi (London) and Jean-Emmanuel Sarry (Toulouse)

09:00-09:10	*Modelling paediatric ETO2::GLIS2 leukaemia in human stem/progenitor cells unveils a developmental interplay between transcriptional alterations and a targetable cytokine signalling dependency*	*Klaudia Galant (Fontenay-aux-Roses)*
09:10-09:15	*Discussion*	
09:15-09:25	*Vitamin K as a modulator of clonal expansion and bone marrow fibrosis in the MPN tumor microenvironment*	*Adam Benabid (Aachen)*
09:25-09:30	*Discussion*	
09:30-09:40	*The CSK-LYN Kinase Axis and Other Tyrosine Kinases: Essential Mediators in CLL-Supportive Macrophages*	*Phuong-Hien Nguyen (Cologne)*
09:40-09:45	*Discussion*	
09:45-09:55	*Unravelling spatial and functional heterogeneity of bone marrow macrophages and their role in AML progression*	*Cera Mai (London)*
09:55-10:00	*Discussion*	

10:00-10:30 ***Coffee break***

SESSION IV – Clonal hematopoiesis
Chairs: Sean Morrison (Dallas) and Marc Raaijmakers (Rotterdam)

10:30-10:35	Introduction

10:35-10:50	Infection as a driver of clonal hematopoiesis	Katherine King (Houston)
10:50-10:55	*Discussion*	
10:55-11:10	Clonal hematopoiesis landscape in frequent blood donors	Darja Karpova (Frankfurt)
11:10-11:15	*Discussion*	
11:15-11:30	Modulation of mitochondrial metabolism curtails expansion of *DNMT3A*-R882-mutant clonal haematopoiesis	Malgorzata Gozdecka (Cambridge)
11:30-11:35	*Discussion*	
11:35-11:45	*Inflammation favours human TET2-derived clonal haematopoiesis via cohabitation of resilient stem cells and hyperactivated myeloid progeny*	*Hector Huerga Encabo (London)*
11:45-11:50	*Discussion*	
11:50-12:00	*Inflammatory signals from fatty bone marrow promote DNMT3A-driven clonal hematopoiesis*	*Nathali Kaushansky (Rehovot)*
12:00-12:05	*Discussion*	
12:05-12:35	*Panel discussion*	

12:35-14:00 Lunch

12:50-13:50 Poster Walks
Poster Walk Leaders: Ingo Ringshausen (London), Mihaela Crisan (Edinburgh), Diana Passaro (Paris), Darja Karpova (Frankfurt)

SESSION V – The niche in myeloid malignancies
Chairs: M. Carolina Florian (Barcelona) and Ioannis Aifantis (New-York)

14:00-14:05	Introduction	
14:05-14:20	Lipid metabolic reprogramming in the tumour microenvironment	Stuart Rushworth (Norwich)
14:20-14:25	*Discussion*	
14:25-14:40	Stromal niche contributions to MDS pathogenesis	Marc Raaijmakers (Rotterdam)
14:40-14:45	*Discussion*	
14:45-15:00	Spatiotemporal mapping of the microenvironment in Myeloproliferative Neoplasms	Rebekka Schneider (Aachen)
15:00-15:05	*Discussion*	
15:05-15:15	*Microenvironmental regulation of myeloid malignancies*	*Jeevisha Bajaj (Rochester)*
15:15-15:20	*Discussion*	
15:20-15:50	*Panel discussion*	

15:50-16:20 Coffee break

SESSION VI – The niche in lymphoid malignancies
Chairs: Paresh Vyas (Oxford) and Rebekka Schneider (Aachen)

16:20-16:25	Introduction	
16:25-16:40	Acute myeloid leukemia: bio-geography, cellular diversity and natural selection	Ioannis Aifantis (New-York)
16:40-16:45	*Discussion*	
16:45-17:00	Mesenchymal stroma cell plasticity in B cell lymphoma	Ingo Ringshausen (London)
17:00-17:05	*Discussion*	
17:05-17:20	Lymph node cancer-associated fibroblasts (LN_CAFs) and immune cell crosstalk	Alan Ramsay (London)
17:20-17:25	*Discussion*	
17:25-17:35	*Bone marrow B cell niche signals shape the pre-leukemic cell fate of murine B cell acute lymphoblastic leukemia*	*Marjorie Delahaye (Rennes)*
17:35-17:40	*Discussion*	
17:40-17:50	*The extracellular matrix protein periostin as regulator of bone marrow microenvironmental senescence and B-cell acute lymphoblastic leukemia progression*	*Rahul Kumar (Mainz)*
17:50-17:55	*Discussion*	
17:55-18:25	*Panel discussion*	

Free evening

Tuesday, February 18, 2025

08:00-09:00 3 Simultaneous Breakfast Meet the Expert Sessions (Clinical)

1. Targeting immune microenvironment in AML	Marina Konopleva (New-York)
2. Novel targets and novel approaches for CAR T cell therapy	Sattva S. Neelapu (Houston)
3. Immune aspects of the bone marrow tumour niche	Kwee Yong (London)

SESSION VII – Solid tumour and microenvironment
Chairs: Stuart Rushworth (Norwich) and Alan Ramsay (London)

09:10-09:15	Introduction	
09:15-09:30	Emergency granulopoiesis and cancer progression	Ilaria Malanchi (London)
09:30-09:35	*Discussion*	
09:35-09:50	Metabolic communication in the TME	Tobias Bopp (Mainz)
09:50-09:55	*Discussion*	
09:55-10:10	The role of injury programmes in tumour initiation and progression	Simona Parrinello (London)
10:10-10:15	*Discussion*	

10:15 -10:25	*A new humanized model of vascularized brain organoids to study the spatial association between infiltrating leukemia and the brain microenvironment*	*Diana Passaro (Paris)*
10:25-10:30	*Discussion*	
10:30-10:40	*Targeting osteoclasts for treatment of high-risk B-cell acute lymphoblastic leukemia*	*Laurence Cheung (Perth)*
10:40-10:45	*Discussion*	
10:45-11:05	*Panel discussion*	
11:05-11:30	***Coffee break***	

SESSION VIII – Clinical translation
Chairs: Ingo Ringshausen (Cambridge) and Kwee Yong (London)

11:30-11:35	Introduction	
11:35-11:50	Genetically-driven immune microenvironment states and immunotherapy responses	Jose Martinez-Climent (Pamplona)
11:50-11:55	*Discussion*	
11:55-12:10	CAR T cell therapy for lymphoma: impact of the microenvironment	Sattva S. Neelapu (Houston)
12:10-12:15	*Discussion*	
12:15 -12:40	**Keynote Lecture** Targeting tumor and host metabolic adaptations driving drug persistence in acute myeloid leukemia	Jean-Emmanuel Sarry (Toulouse)
12:40-12:45	*Discussion*	
12:45-13:15	*Panel discussion*	
13:15-13:25	***Closing Remarks***	Conference Chairpersons

MEETING CLOSURE