

Updates on Genetics and Epigenetics of Haematological Malignancies: From Knowledge to Applications

20-22 November 2024

Auditorium of the Josep Carreras Leukaemia Research Institute (IJC) at Can Ruti Campus (Badalona, Barcelona)

Organizers: Laura Belver, Anna Bigas, Marcus Buschbeck and Manel Esteller
Josep Carreras Leukaemia Research Institute (IJC)

PROGRAMME

WEDNESDAY, 20 NOVEMBER

- 13:30 – 14:30 Registration
- 14:30 – 14:40 **Welcome - Manel Esteller**
Josep Carreras Leukaemia Research Institute (IJC), CIBERONC
- 14:40 – 15:25 Opening Lecture, introduced by Manel Esteller
- Ross Levine**
Memorial Sloan Kettering Institute, New York, USA
"Deciphering and Targeting Clonal Evolution to AML"
- 15:30 – 16:30 **Session 1 - Stem Cells and Premalignancy**
Session Chair: Gregoire Stik
- Senior lectures (20+10)
- Michael Milsom**
German Cancer Research Center (DKFZ), Heidelberg, Germany
"Pre-malignant programming of hematopoietic stem cells during aging and inflammation"
- Florian H. Heidel**
Hannover Medical School (MHH), Germany
"Epigenetic regulators as targets and effectors of cell signaling"
- 16:30 – 16:45 - Selected Short talk (10+2)
- Michael Scherer**
German Cancer Research Center (DKFZ), Heidelberg, Germany
"Unraveling clonal identity and cell state in hematopoiesis from single-cell DNA methylation data"
- 16:45 – 17:10 Group Photo and Coffee break

With the participation of:



17:15 – 17:30

- Selected Short talk (10+2)

Cristina Lopez-Rodriguez

Department of Medicine and Life Sciences, Universitat Pompeu Fabra,
Barcelona, Spain

"Fine-tuning of hematopoiesis under inflammatory stress"

17:30 – 18:00

- Senior lecture (20+10)

Vincenzo Calvanese

Josep Carreras Leukaemia Research Institute (IJC), Catalonia, Spain

"Chromatin and transcriptional modulation in human blood stem cell self-renewal"

18:00 – 19:30

IJC Poster session "get to know us", Cocktail and Networking

With the participation of:



THURSDAY, 21 NOVEMBER

09:00 – 11:00

Session 2 - Premalignancy, Immune Niches and Disorders

Session Chair: Marcus Buschbeck

- Senior lectures (20+10)

George Vassiliou

Wellcome-MRC Cambridge Stem Cell Institute, Cambridge, UK

"Clonal haematopoiesis and leukaemia prevention"

Bruno Paiva

Clinica Universidad de Navarra, Centro de Investigación Médica Aplicada (CIMA), Spain

"Immunogenomic research in monoclonal gammopathies"

Alberto Orfao

University of Salamanca, CIBERONC, Spain

"Oncogenetic pathways and immune response in systemic mastocytosis: from bone marrow mastocytosis to advanced disease subtypes"

Brigitte Schlegelberger

Hannover Medical School (MHH), Germany

"How to deal with genetic predisposition to hematologic malignancies"

11:00 – 11:20

Coffee break

11:30 – 13:00

Session 3 - Biology and Treatment of Myeloid Neoplasms

Session Chair: Manel Esteller

- Senior lectures (20+10)

Iannis Aifantis

New York University (NYU), New York, USA

"Mapping of tumor-immune system interactions in myeloid neoplasms"

Matteo Della Porta

Humanitas Cancer Center, Milan, Italy

"A single cell multi-omics approach to understand the mechanisms of leukemic evolution in patients with myelodysplastic syndromes"

Courtney DiNardo

MD Anderson, Houston, USA

"Individualizing AML Therapy: Best Practices and Novel Therapeutics in 2024"

13:00 – 13:15

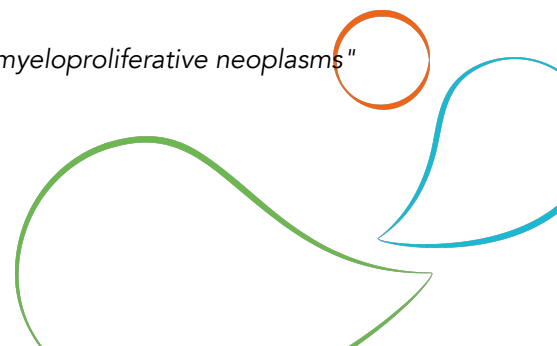
- Selected Short talk (10+2)

Alessandra Ferrelli

The Francis Crick Institute, London, UK

"Developing a humanised in vivo model to study myeloproliferative neoplasms"

With the participation of:



13:15 – 14:00

Lunch and Poster Session

14:00 – 15:00

Session 4 - Epigenetics and Chromatin Dynamics in Hematological Malignancies

Session Chair: Biola M. Javierre

- Senior lectures (20+10)

Manel Esteller

Josep Carreras Leukaemia Research Institute (IJC), CIBERONC, Catalonia, Spain
"Epigenetics and Epitranscriptomics in Hematological Malignancies"

Christoph Plass

German Cancer Research Center (DKFZ), Heidelberg, Germany
"Enhancer hijacking in acute myeloid leukemia"

15:10 – 15:55

- Selected Short talk (10+2)

Andreas Lennartsson

Karolinska Institutet, Solna, Sweden
"Targeting Polycomb in the treatment of KMT2A-rearranged acute myeloid leukemia"

Alba Maiques-Diaz

Clínic Foundation for Biomedical Research - August Pi i Sunyer Biomedical Research Institute (IDIBAPS), Barcelona, Spain
"Chronic lymphocytic leukemia hijacks germinal center B cell transcriptional and epigenetic mechanisms to proliferate"

Ruslan Sadreyev

Massachusetts General Hospital, Boston, USA
"AML aggressiveness is driven by chromatin remodeling and expression changes of core regulators"

16:00 – 16:15

Coffee break

16:20 – 17:20

Session 5 - Biology and Treatment of Acute Leukemias

Session Chair: Laura Belver

- Senior lectures (20+10)

Jan Cools

KU Leuven, Center for Human Genetics, Belgium
"Transcriptional deregulation in T-cell acute lymphoblastic leukemia"

Maria L. Toribio

Centro de Biología Molecular "Severo Ochoa", Madrid, Spain
"Pre-TCR targeting as a Selective Immunotherapy for T-cell Acute Lymphoblastic Leukemia"

With the participation of:



17:30 – 17:45

- Selected Short talk (10+2)

Alexander Waclawiczek

German Cancer Research Center (DKFZ), Heidelberg, Germany

"Four Leukemic Stem Cell Types mediate Resistance and Response in Acute Myeloid Leukemia"

17:45 – 18:45

Poster session, Cocktail and Networking

With the participation of:



FRIDAY, 22 NOVEMBER

09:00 – 10:30

Session 6 - Biology and Treatment of Lymphomas and Myelomas Session Chair: Tomàs Navarro

- Senior lectures (20+10)

Anna Bigas

Josep Carreras Leukaemia Research Institute (IJC), Hospital del Mar Research Institute, CIBERONC, Catalonia, Spain

"From Stem Cell Biology to Cancer Therapeutics"

Teresa Palomero

Columbia University, New York, USA

"Navigating the Molecular Landscape of Peripheral T-Cell Lymphomas: from Somatic Mutations to Mouse Models and Beyond"

Francesco Bertoni

Institute of Oncology Research, Bellinzona, Switzerland

"Mechanisms of resistance to BCR signaling inhibitors in B-cell lymphomas"

10:30 – 11:00

- Selected Short talk (10+2)

Nuno R. dos Santos

i3S - Institute for Research and Innovation in Health - University of Porto, Porto Portugal

"Antibody blockade of the PSGL-1 immune checkpoint enhances T-cell responses to B-cell lymphoma"

Wim Vanden Berghe

University of Antwerp, Antwerp, Belgium

"Resolving epigenetic sensitization mechanisms of ferroptosis signaling to overcome therapy resistance in multiple myeloma"

11:00 – 11:20

Coffee break

11:30 – 11:40

Molecular Oncology Poster Presentation Awards

11:40 – 12:10

Closing Lecture, introduced by Manel Esteller.

Ari Melnick

Weill Cornell Medicine, New York, USA

"Epigenetic mechanisms and targeted therapies for B cell lymphoma"

12:10 – 12:15

Final remarks and Farewell

With the participation of:

