

" Development, metabolism and function of dendritic cells and macrophages in health and disease "

CFCD Annual meeting

December 7th – 8th 2023, Bordeaux, France

Thursday December 7th, 2023

8:30 **Opening of the registration desk**

9:00 **Welcome address** *Bénédicte Manoury*

SESSION I – DCs and macrophages in anti-tumor immunity

Chaired by Julie Helft & Paula Michea-Veloso

9:15-9:40 **Caetano Reis e Sousa** (*The Francis Crick Institute, London, UK*)

Development and function of dendritic cells

9:40-10:05 **Stefani Spranger** (*Massachusetts Institute of Technology, Cambridge, USA*)

Not all T cell responses are equal: how dendritic cells shape anti-tumor immunity

10:05-11:05 **Selected oral presentations (1st part)**

10:05. Emmanouil Aerakis (*BSCR Vari, Greece*)

Interferon-induced lysosomal membrane permeabilization and death cause cDC1-deserts in tumors

10:20. Maria Koufaki (*CR UK, Manchester, UK*)

Functionally decoding the enigmatic "mregDCs": guardians or saboteurs of tumour immunity?

10:35-11:00



Coffee Break

11:00-11:30

Selected oral presentations (2nd part)

11:00 Pauline Santa (*Immunoconcept, Bordeaux, France*)

Functions of DNASE1L3 in the regulation on anti-tumor immune responses.

11:15 Guillaume Darrasse-Jeze (*i3, Pitié Salpêtrière, Paris, France*)

FLT3L-dependent dendritic cells control tumor immunity by modulating Treg and NK cell homeostasis

11:30-11:55

Massimiliano Mazzone (*VIB KU Center for Cancer Biology, Leuven, Belgium*)

Harnessing tumor metabolism to overcome immunosuppression: A novel way to enhance the success of cancer immunotherapy

11:55-12:20

Mikaël Pittet (*School of Medicine, Geneva, Switzerland*)

Microenvironmental coordination in human cancers

12:20-13:05

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Lunch talks by Sponsors➤ **12:20-12:35 William Amoyal (VIZGEN)***Highly multiplexed, multi-omic tissue mapping at single-cell resolution with the MERSCOPE spatial biology platform*➤ **12:35-12:50 Ali Tebbi (AKOYA Biosciences)***Scaling up deep Spatial Phenotyping with a novel Omics approach*➤ **12:50-13:05 Thibaud Metzger (NanoString)***Beyond the Slide: Revolutionizing Spatial Profiling with NanoString Technology*

13:05-15:00

LUNCH and Poster viewing

SESSION II – Multi-omics approaches of DC and macrophage development*Chaired by Florent Ginhoux & Jérôme Martin*

15:00-15:25

Matthew Collin (Translational and Clinical Research Institute, Newcastle, UK)*Macrophages and dendritic cells in human graft versus host disease*

15:25-15:50

Shalin Naik (The Walter and Eliza Hall Institute of Medical Research, Australia)*The development of DCs in steady-state and emergency*

15:50-16:35

Selected oral presentations**15:50. Thomas Laurent (CR2TI, Nantes, France)***Combinatorial analysis of MNP molecular programs in Crohn disease uncovers inflammatory states associated with anti-TNF resistance***16:05. Nathan Vaudiau (Institut Pasteur, Paris, France)***Distinct migratory dendritic cell subsets cooperate to promote tissue-resident memory CD8⁺T cells specification in tumor-draining lymph nodes***16:20. Cécile Piot (Francis Crick Institute, London, UK)***Heterogeneity and spatiotemporal dynamics of tumour cDC1s*

16:35-17:00



Coffee Break

17:00-17:25

Julie Giraud (ImmunoConcEpT, Bordeaux, France)*TREM1⁺ CD163⁺ Myeloid Cells are Potent Immunosuppressive Cells and Associate with Poor Clinical Factors in Human Hepatocellular Carcinoma*

17:25-17:50

**Ido Amit (Weizmann Institute of Science, Rehovot, Israël)***The power of ONE: Immunology in the age of spatial and single cell genomics*

18:00






Cocktail

Friday December 8th, 2023

8:30 Opening of the registration desk

SESSION III – Role of metabolism in the function of DCs and macrophages*Chaired by Johan Garaude & Fabien Blanchet*

- 9:00-9:25** **Rafael Argüello (Centre d'Immunologie de Marseille-Luminy, Marseille, France)**
DC subsets and their metabolic dependencies: You are what you eat? or You eat what you are?
- 9:25-9:50** **Sophia Maschalidi (VIB Center for Inflammation Research, Ghent, Belgium)**
Dendritic cells and Solute Carrier Transporters in apoptotic cell clearance and tissue repair
- 9:50-10:35** **Selected oral presentations**
- 9:50. Vincent Flacher (I²CT, IBMC, Strasbourg, France)**
Epidermal maintenance of Langerhans cells relies on autophagy-regulated lipid metabolism
- 10:05. Stefanie Wculek (IRB, Barcelona, Spain)**
Mitochondrial metabolism regulates the immunogenic responsiveness of dendritic cells
- 10:20 Nathalie Bendriss-Vermare (CRCL, Lyon, France)**
Conventional Dendritic cells drive the generation of polyfunctional and antitumor ST2+ NK cells
- 10:35-11:00**  Coffee Break
- 11:00-11:25** **Evanna Mills (Dana Farber Cancer Institute, Boston, USA)**
Metabolite signaling in macrophages during health and disease
- 11:25-11:50** **Giulia Pasqual (Università degli Studi di Padova, Padova, Italy)**
Dendritic cell-T cell interactions in immunity and tolerance
- 11:50-12:20** **Lunch talks by Sponsors**
-  ➤ **11:50-12:05 Anis Larbi (Beckman Coulter)**
Extracellular vesicles (EVs) in the immunobiology of dendritic cells and macrophages
-  ➤ **12:05-12:20 Olivier Jaen (Cytex)**
Analysis of Dendritic Cell subsets by Spectral Flow Cytometry and Imaging
- 12:20-14:15** LUNCH and Poster viewing
- 14:15-14:30** **CFCD General Assembly**

SESSION IV – Tissue-specific functions of DCs and macrophages*Chaired by Helena Paidassi & Vanja Sisirak*

- 14:30-14:55** **Ruth Franklin (Harvard Stem Cell Institute, Boston, USA)**
Regulation of inflammatory responses by macrophages in the lung
- 14:55-15:20** **Bart Lambrecht (VIB Center for Inflammation Research, Ghent, Belgium)**
Biology of DC's and macrophages in the lung.
- 15:20-16:05** **Selected oral presentations**
- 15:20. Sébastien This (GCI, Montreal, Canada & CIRI, Lyon France)**
Back dans les bacs: rehabilitating the contribution of cDCs subsets in the maintenance of mucosal tolerance
- 15:35. Fabiola Osorio (ICBM, Santiago, Chile)**
Control of intestinal Th17 homeostasis by the unfolded protein response sensor IRE1 in myeloid cells
- 15:50. Katrina Podsypanina (INEM, Paris, France)**
Toll-like receptor 9 dependent dendritic cells-NK cooperation in anti-tumor immune control
- 16:05-16:30**  Coffee Break
- 16:30-16:55** **Ana-Maria Lennon (Institut Curie, Paris, France)**
Dendritic Cell Migration: from basics to application
- 16:55-17:20** **Camille Bigenwald (Institut Gustave Roussy, Villejuif, France)**
Senolysis in Histiocytosis
- 17:20** **Award ceremony and concluding remarks**
- 17:40** **End of the meeting**