



Barcelona BioMed Conference Immunotherapy beyond cancer. A cure for age-related diseases November 18-20, 2019

Monday, 18 November

8.30 Registration

9.00 Welcome by Francesc Posas (Institute for Research in Biomedicine, Director) and organizers

Session I: Inflammation in age-associated disorders

9.15 **Immunometabolic regulation of healthspan**
Vishwa Deep Dixit, Yale School of Medicine (New Haven, CT, USA)

10.00 **Mitochondrial control of inflammation**
Michael Karin, University of California San Diego (La Jolla, CA, USA)

10.45 **Short talk 1 Cell Immunotherapy: more than driving lymphocytes against cancer**
Manel Juan, Hospital Clinic (Barcelona, Spain)

11.05-11.35 *Coffee break and poster session*

11.35 **Chronic obstructive pulmonary disease (COPD): new understanding, new opportunities**
Alvar Agusti, Hospital Clinic (Barcelona, Spain)

12.20 **Mitochondrial stress and protein misrouting in rheumatoid arthritis**
Cornelia Weyand, Stanford Health Care (Palo Alto, CA, USA)

13:05 **Modulating neuroinflammation to treat Parkinson's disease**
Ted M. Dawson, Johns Hopkins University School of Medicine (Baltimore, MD, USA)

13.50-15.15 *Lunch (IEC courtyard)*

Session 2: Immune checkpoints inhibitors beyond cancer

- 15.15 **Sex specific distinctions in pulmonary fibrosis are mediated by estrogen inhibition of STAT3 signaling**
Wonder P. Drake, Vanderbilt University Medical Center (Nashville, TN, USA)
- 16.00 **The prospect of immunotherapy to combat Alzheimer's disease and dementia**
Michal Schwartz, Weizmann Institute of Science (Rehovot, Israel)
- 16.45-17.15 *Coffee break and poster session*
- 17.15 **Endocrinopathies associated with immune checkpoint inhibitor therapy**
Monica Girotra, Memorial Sloan Kettering Cancer Center (New York, USA)
- 18.00 **Normal and neoplastic stem cells**
Irv Weissman, Stanford School of Medicine (Stanford, CA, USA)
- 18.45 *End of session*

Tuesday, 19 November

Session III: Systemic regulation of ageing

- 9.00 **Systemic regulation of brain aging and function**
Tony Wyss-Coray, Stanford University School of Medicine (Stanford, California, USA)
- 9.45 **Caloric restriction mimetics: anti-ageing elixirs that enhance anticancer immunosurveillance**
Guido Kroemer, Centre de Recherche des Cordeliers (Paris, France)
- 10.30 **Short talk 2 Systemic and local factors involved in Hutchinson-Gilford progeria syndrome**
Vicente Andres, National Center of Cardiovascular Research (Madrid, Spain)
- 10.50-11.20 *Coffee break and poster session*
- 11.20 **Short talk 3 Immunometabolic stressed T cells act as aging accelerators**
Maria Mittlebrunn, Center of Molecular Biology (Madrid, Spain)
- 11.40 **Short talk 4 Aged epidermal cells reprogram their daily rhythmic functions to adapt to stress in a dual manner**
Guiomar Solanas, Institute for Research in Biomedicine (Barcelona, Spain)
- 12.00 **Short talk 5 Oncology meets embryology. LIF in cancer, from the lab to the clinical trial**
Joan Seoane, Vall d'Hebron Institute of Oncology (Barcelona, Spain)

12.20 **Epigenetic and metabolic regulation of aging**
Anne Brunet, Stanford University School of Medicine (Stanford, California, USA)

13.05-15.00 *Lunch (IEC courtyard)*

Session IV: Targeting innate immunity in age-associated disorders

15.00 **Neutrophils driving unconventional T cells mediate resistance against tumors**
Sébastien Jaillon, Humanitas University (Milan, Italy)

15.45 **Targeting STING in senescence with small-molecule antagonists**
Andrea Ablasser, EPFL (Lausanne, Switzerland)

16.30-17.00 *Coffee break and poster session*

17.00 **Short Talk 6 Effective cancer immunotherapy by natural mouse conventional type-1 dendritic cells bearing dead tumor antigen**
Stefanie K. Wculek, Spanish National Center for Cardiovascular Research (Madrid, Spain)

17.20 **Impact of mucosal TLR5 on healthspan and longevity**
Kyung A. Cho, Chonnam National University Medical School (Hwasun, Korea)

18.05 **Antiaging Therapy by Counteracting 'Retrobiome'-Induced DNA Damage and Immunosenescence**
Andrei Gudkov, Roswell Park Comprehensive Cancer Center (Buffalo, NY, USA)

18.50 *End of session*

20.30 *Speakers dinner*
(*Restaurant els 4 Gats, Montsió, 3*)

Wednesday, 20 November

Session V: Therapeutic strategies targeting cellular senescence

9.00 **PD-L2 mediates immune evasion of residual tumors and damaged tissues**
Manuel Serrano, Institute for Research in Biomedicine /ICREA (Barcelona, Spain)

9.45 **A one-two punch senescence approach to cancer therapy and aging-related disorders associated to chemotherapy**
Andrea Alimonti, Institute of Oncology Research (Bellinzona, Switzerland)

10.30 **Short Talk 7 Introducing a humanized model of pulmonary fibrosis**
Federico Pietrocola, Institute for Research in Biomedicine (Barcelona, Spain)

10.50-11.20 ***Coffee break and poster session***

11.20 **Short Talk 8 (i)reversible cellular senescence and T cell redirection against solid tumors**
Joaquin Arribas, Vall d'Hebron Institute of Oncology (Barcelona, Spain)

11.40 **Short Talk 9 Cellular senescence as a therapeutic strategy for cancer**
Manuel Collado, Health Research Institute of Santiago de Compostela (Santiago de Compostela, Galicia, Spain)

12.00 **Short Talk 10 Exploring the immunomodulatory role of RANK signaling pathway in breast cancer**
Clara Gómez, Oncobell, Bellvitge Biomedical Research Institute, IDIBELL (Barcelona, Spain)

12.20 **Restoring tumor suppression in advanced cancers**
Scott W. Lowe, Memorial Sloan Kettering Cancer Center (New York, NY, USA)

13.05 ***Concluding remarks and end of conference***