

Scientific programme

International Workshop "Microbes & Cancer: Unravelling the Connection for Innovative Therapies"

Madrid, June 13-14, 2024

Venue: CNB Auditorium

Thursday 13th June 2024

09:00-10:00 Reception and registration.

10:00-10:10 Official Opening- Welcome and introduction

Esteban Veiga, CNB, Madrid, Spain

Luis Ángel Fernández, CNB-CSIC, Madrid, Spain

Ana Cuenda, CNB, Madrid, Spain

10:10-13:10 SESSION I - Microbiome and cancer

Chair: Luis Ángel Fernández, CNB-CSIC, Madrid, Spain

Main talks (30+10 min)

10:10-10:50 **Inflammation driven cancer: Host microbe interactions**

Fiona Powrie, University of Oxford, Oxford, UK.

10:50-11:30 **Stress kinases in the regulation of microbiota and colon cancer**

Ana Cuenda, CNB-CSIC, Madrid, Spain.

11:30-12:10 *Coffee break and Poster session*

12:10-12:50 **Microbiota, Melatonin, and miRNAs: Novel biomarkers and predictive models for breast cancer risk and metastasis**

María Isabel Queipo-Ortuño, University of Malaga, Malaga, Spain.

Short talks selected from attendees (7+3 min)

12:50-13:00 **The L-phenylalanine oxidase IL4I1 induces gut and skin dysbiosis promoting melanoma development**

Anna Llebaria Fabrias. Institut Cochin. Paris, France.

13:00-13:10 **Microbiota metabolites in multiple myeloma progression and response to treatment**

María Linares Gómez. Instituto Investigación 12 Octubre, Madrid, Spain.

13:10-14:40 *Lunch and Poster session*

14:40-17:20 SESSION II - Bacterial interactions with cancer and immune cells

Chair: **Esteban Veiga**, CNB, Madrid, Spain

Main talks (30+10)

14:40-15:20 **Modelling Cancer-Microbe Interactions with Organoids and Organ Chips**

Jens Puschhof, *Deutsches Krebsforschungszentrum, Heidelberg, Germany.*

15:20-16:00 **Long-term activation of anti-tumour innate lymphocytes after BCG-priming**

Mar Valés-Gómez, *CNB-CSIC, Madrid, Spain.*

16:00-16:20 *Coffee break*

Main talk (30+10)

16:20-17:00 **Sex differences in immune responses to bladder cancer and urinary tract infection.**

Matthieu Rousseau, *Institut Cochin, Paris, France.*

Short talks selected from attendees (7+3)

17:00-17:10 **Bladder fibroblasts orchestrate the inflammatory response against *Bacillus Calmette-Guérin* immunotherapy.**

Víctor Manuel García Martínez. *CIEMAT-Hospital 12 de Octubre-CIBERONC, Madrid, Spain.*

17:10-17:20 **Integration of bacterial DNA in the genome of infected human cells: A potential source of tumorigenic mutations?**

Pablo Guridi Fernández. *University of Cantabria, Santander, Spain.*

17:20-18:30 *Poster session and Networking refreshments*

End of the first day

Friday 14th June 2024

09:30-12:20 SESSION III - Engineering bacteria for cancer therapies

Chair: **Mar Valés**, CNB, Madrid, Spain

Main talks (30+10)

09:30-10:10 **Engineered MycoChassis to treat non-small cell lung carcinoma**
María Lluch, IBB, UAB, Barcelona, Spain.

10:10-10:50 **Engineering *E. coli* for the targeted delivery of protein payloads to cancer cells**
Luis Ángel Fernández, CNB-CSIC, Madrid, Spain.

10:50-11:20 *Coffee break and Poster session*

Main talks (30+10)

11:20-12:00 **Conditional control of bacteria cancer therapeutics**
Jerome Bonnet, CBS CNRS, Montpellier, France.

Short talks selected from attendees (7+3)

12:00-12:10 **Enhancing anti-tumor bacterial therapies in vivo with smart polymeric encapsulation reducing systemic immunogenicity of probiotic *E. coli***
Quentin Boussau, Montpellier University, Montpellier, France.

12:10-12:20 **A search for BARs: engineering outer membrane proteins toward the development of Bacterial Antigen Receptors in *E. coli***
Álvaro Ceballos-Munuera, CNB-CSIC, Madrid, Spain.

12:20-13:30 *Lunch and Poster session*

13:30-16:20 SESSION IV - Bacteria and cancer immunotherapies

Chair: **Dr. Ana Cuenda**, CNB, Madrid, Spain

Main talks (30+10)

13:30-14:10 **Metabolic modulation of tumors with engineered bacteria for cancer immunotherapy**
Roger Geiger, IRB, Bellinzona, Switzerland.

14:10-14:50 **Stimulation of antitumor lung immunity by intravenous administration of the live vaccine BCG.**
Dr. Nacho Aguiló, School of Medicine, University of Zaragoza, Spain.

14:50-15:10 *Coffee break*

15:10-15:50 **Next generation of cancer immunotherapies based on bacteria-instructed lymphocytes.**
Dr. Esteban Veiga, CNB-CSIC, Madrid, Spain.

Short talks selected from attendees (7+3)

15:50-16:00 **MV130 as a new innate memory-based immunotherapy against cancer**
Luna Minute. *idiPaz, Madrid, Spain.*

16:00-16:10 **MORELIA study: Fecal microbiota transplantation as an immunotherapy efficacy booster in lung cancer patients**
Ana del Amo de Palacios. *Hospital Universitario Ramón y Cajal, IRYCIS, Universidad de Alcalá, Madrid, Spain.*

16:10-16:40 **Round table and conclusions**
"Challenges in Microbes & Cancer research"

End of the Workshop