



**IMMUNE PRIVILEGE OF STEM CELLS
AND CANCER IMMUNOTHERAPY**

May 1, 2023

Division of Cancer Biology, National Cancer Institute
National Institutes of Health

Strategic Workshop

Immune Privilege of Stem Cells and Cancer Immunotherapy

May 1, 2023

*NCI Shady Grove Campus
9609 Medical Center Drive
Rockville, MD 20850*

Planning Committee

Elaine Fuchs, Ph.D., Rockefeller University, Co-Chair
Justine Lathia, Ph.D., Cleveland Clinic, Co-Chair
Kevin Howcroft, PhD, NCI
Yin Liu, PhD, NCI

Agenda – May 1, 2023

8:00 – 8:10am Dr. Daniel Gallahan (Division Director, DCB/NCI)
Opening remarks and Logistics

Morning Session chairs: Drs. Justin Lathia and Tannishtha Reya

8:10 – 9:30am Session I: Immune Evasion Mechanisms of Stem Cells

8:10 – 8:30am Justine Lathia, PhD, (Cleveland Clinic)

8:30 – 8:50am Judith Agudo, PhD, (Dana Farber Cancer Institute)

8:50 – 9:10am Yuxuan Miao, PhD, (University of Chicago)

9:10 – 9:30am Omer Yilmaz, MD, PhD, (Massachusetts Institute of Technology)

9:30 – 10:00am Break

10:00 – 11:20am Session II: Signaling Networks, Transcriptional and Epigenetic Regulations Underlying Cancer Stem Cell Immune Evasion

10:00 – 10:20am Tannishtha Reya, PhD, (Columbia University)

10:20 – 10:40am Linheng Li, PhD, (University of Kansas)

10:40 – 11:00am Bradley Bernstein, MD, PhD, (Harvard University)

11:00 – 11:20am Joan Massague, PhD, (Memorial Sloan Kettering Cancer Center)

11:20am – 12:30pm Lunch Break

Afternoon Session Chairs: Drs. Elaine Fuchs and Ronald DePinho

12:30 – 1:50pm Session III: Stem Cells, Niche Microenvironment and Immune Homeostasis

12:30 – 12:50pm Elaine Fuchs, PhD, (Rockefeller University)

12:50 – 1:10pm Alexander Rudensky, PhD, (Memorial Sloan Kettering Cancer Center)

1:10 – 1:30am Lisa Coussens, MD, PhD, (Oregon Health and Science University)

1:30 – 1:50pm Ira Mellman, PhD, (Genentech, Inc)

1:50 – 2:20pm Break

2:20 – 3:40pm Session IV: Stemness, Plasticity in Immune Evasion and Immunotherapy

2:20 – 2:40pm Catriona Jamieson, MD, PhD, (University of California, San Diego)
2:40 – 3:00pm Carla Kim, PhD, (Boston Children’s Hospital)
3:00 – 3:20pm David Tuveson, MD, PhD, (Cold Spring Harbor Laboratory)
3:20 – 3:40pm Ronald DePinho, MD, (MD Anderson Cancer Center)

3:40 – 3:50pm break

3:50 – 4:45pm Session V: Round Table Discussion On Questions Below to be mediated by Drs. Ronald DePinho, Justin Lathia and Elaine Fuchs

1. Mechanisms of stem cell immune evasion: whether and how it is connected to the initiation and maintenance of the immune suppressive environment in tumor?
2. What are the roles of transcriptional and epigenetic regulation, post translational modifications, metabolism and microbiome in immune evasion of cancer stem cells?
3. Immune cells and stem cell interaction: what are their roles in tissue homeostasis, and in health and diseases?
4. What is the relationship between cancer stemness/plasticity and immune evasion?
5. Can we target cancer stem cells in immunotherapy?

