8th SUNRiSE WEBINAR

Tuesday, May 20th, 2025

4:00pm (CET) / Login: https://umontpellier-fr.zoom.us/j/98333758557

Mechanisms of Malignant Progression

Pr Robert A. Weinberg, PhD

Daniel K. Ludwig Professor for Cancer Research
Whitehead Institute
MIT, Cambridge, MA, USA

Biography

Robert Weinberg is a founding member of the Whitehead Institute for Biomedical Research, Director of the Ludwig Center at MIT, and Professor of Biology at MIT. His research over the past four decades has focused on the molecular and biochemical determinants of cancer cell transformation. Notable achievements include the discovery of the first human oncogene (Ras) in 1979-81, the isolation of the first tumor suppressor gene (RB) in 1986, and the experimental transformation of normal human cells into cancer cells in 1999. Since 2004, his work has centered on the epithelial-mesenchymal transition (EMT) and its role in cancer metastasis, exploring the overlap with cancer stemness. Dr. Weinberg is renowned for defining the "hallmarks of cancer" with Douglas Hanahan and received many prestigious awards.

Selected publications

Cell-intrinsic and microenvironmental determinants of metastatic colonization.. **Nature Cell Biol 2024**

ΔNp63/p73 drive metastatic colonization by controlling a regenerative epithelial stem cell program in quasi-mesenchymal cancer stem cells. **Dev Cell 2022**

Genome-wide CRISPR screen identifies PRC2 and KMT2D-COMPASS as regulators of distinct EMT trajectories that contribute differentially to metastasis. **Nature Cell Biol 2022**

Direct and Indirect Regulators of Epithelial-Mesenchymal Transition-Mediated Immunosuppression in Breast Carcinomas. **Cancer Discov 2021**