



EMBO Global Lecture Series

Prof. Leonard Zon

Department of Stem Cell and
Regenerative Biology,
Harvard Medical School, USA



Stem Cell Clonality and the Niche

23 November, 2026

KS Auditorium, Advanced Centre for Treatment, Research and
Education in Cancer (ACTREC), Navi Mumbai
10:00-10:45 am

The blood stem cell niche including stromal cells and endothelial cells aid hematopoietic stem cell proliferation and differentiation. We have been studying the transcription factors that control sinusoidal vessels that are a major niche cell type. We also have examined how leukemia alters niche cell clonality to drive the growth of leukemia.





EMBO Global Lecture Series

Prof. Nina Cabezas-Wallscheid

Department of Health Sciences and
Technology, ETH Zurich,
Switzerland



Metabolic Regulation of Aged Hematopoietic Stem and Multipotent Progenitor Cells

23 November, 2026

KS Auditorium, Advanced Centre for Treatment, Research and
Education in Cancer (ACTREC), Navi Mumbai
10:45-11:30 am

How aging regulates hematopoietic stem and progenitor cells at the metabolic level remains largely unexplored. Here, we integrate metabolic, epigenetic, and molecular analyses of human and mouse HSCs and MPPs across aging and disease and uncover mechanisms that shape stem cell function, maintenance, and resilience.





EMBO Global Lecture Series

Prof. Andreas Trumpp

Division of Stem Cells and Cancer,
German Cancer Research Center,
HI-STEM, Germany



Profiling and Targeting Pancreatic Cancer Innervating Neurons

23 November, 2026

KS Auditorium, Advanced Centre for Treatment, Research and
Education in Cancer (ACTREC), Navi Mumbai
11:30-12:15 pm

The peripheral nervous system (PNS) orchestrates organ function in health and disease. Pancreatic ductal adenocarcinoma is infiltrated by PNS neurons that contribute to the complexity of the TME. Trace-n-seq identified distinct PDAC-innervating neuronal states and cancer-induced reprogramming. Denervation enhanced immunotherapy, while nab-paclitaxel reduced tumor growth. Combined nerve targeting showed synergistic regression, supporting the SYNERGY phase I/II trial.





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Prof. Sean Morrison

Children's Medical Center Research
Institute, University of Texas
Southwestern Medical Center, USA



Hematopoietic Stem Cell Activation and Regeneration

23 November, 2026

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Education in Cancer (ACTREC), Navi Mumbai
12:15-1:00 pm

NGF from LepR⁺ stromal cells sustains peripheral nerves that promote hematopoietic and vascular regeneration after stress. Nerves activate $\beta 2/\beta 3$ -adrenergic signaling in LepR⁺ cells to induce regenerative growth factors (Nature Cell Biology, 2023). We have identified non-selective β -blockers impair engraftment and survival after hematopoietic transplantation (Cancer Discovery, 2025). Hematopoietic stress also derepresses retrotransposons in HSCs, activating innate immune signaling including cGAS-STING. In addition, this promotes HSC activation and extramedullary hematopoiesis (Science, 2024).

