

SEMINAR

Wednesday September 3rd , 2025– 10h00

Conference room [SV 1717](#)- EPFL - Lausanne

Dr. Alexey V. Terskikh

Professor, FHRI Distinguished Fellow, Harry Perkins Institute & University of Western Australia

<https://perkins.org.au/person/professor-alexey-terskikh>

“Imaging of chromatin and epigenetics reveals cell identity and biological age”

Host: Prof. Johan Auwerx, EPFL

Abstract:

Alexey V. Terskikh is a Future Health Research & Innovation Distinguished Fellow, Head of the Chromatin and Ageing Laboratory at the Harry Perkins Institute and Professor at The University of Western Australia. He has a part-time position at the Scintillon Research Institute in San Diego, California.

Alexey completed his PhD studies in molecular immunology at the University of Lausanne in 1997 and accomplished his postdoctoral studies in Irv Weissman’s laboratory at Stanford in 2002. Alexey established his research group at EPFL in 2002. He moved to the Burnam Institute in San Diego (2006), where he investigated epigenetic mechanisms of neurogenesis using adult mouse dentate gyrus and human-induced pluripotent stem cell models and identified novel approaches to Zika virus treatment and the mechanism of viral propagation.

Alexey’s group discovered that patterns of epigenetic marks in the nucleus inform cellular identities and developed a novel technique: microscopic imaging of epigenetic landscapes (MIEL). Application of this technique to ageing, termed image-based chromatin and epigenetic age (ImAge), captures intrinsic age-related progressions (trajectories) of the spatial organisation of chromatin and epigenetic marks in single nuclei. ImAge represents the first-in-class imaging-based biomarker of ageing with single-cell accuracy.