

Dr. Stefan Höhme



Head of Research Group Image analysis and multiscale tissue modeling
– Interdisciplinary Centre for Bioinformatics – University Leipzig

Role in LiSyM-Cancer

- Project leader in SMART-NAFLD
- Project leader in C-TIP-HCC
- Contributes processing, analysis and quantification of multimodal data (e.g. images from 2D-, 3D-, video-microscopy and MRI)

Expertise

- Expert in image analysis and 3D tissue modeling for systems medicine
- Construction of spatio-temporal multi-scale 3D models of liver tissue, comprehensive algorithms for generation of virtual tissues including detailed vascular structures, and AI-based models and analysis

Degrees

- 2009, PhD in Computer science at University of Leipzig
- 2005, Master studies (Dipl. Inf.): Major in Computer science, Minor in Biomedicine

Professional Experience

- Since 2015, Group leader (DFG Emmy-Noether Programme) at Leipzig University
- 2010 - 2014, PostDoc at the Interdisciplinary Centre for Bioinformatics (IZBI) in Leipzig; Partner of the Associated Team QuanTiss at INRIA, Paris

Honors and Awards

- Since 2023, Associate Member at ScaDS.AI Dresden/Leipzig
- 2012, Reinhard Heinrich Award for Best Annual Thesis (1st prize) from any area of Mathematical and Theoretical Biology in Europe received by the European Society for Mathematical and Theoretical Biology (ESMTB)

www.hoehme.com

Publications

2026-06-10	Transient suppression of the ECM1 gatekeeper is essential for HGF/c-MET-driven liver regeneration
2025-12-01	Stage-dependent effects of systemic ASBT inhibition in a cholestasis-induced cholemic nephropathy mouse model <i>JHEP Reports</i>
2025-03-18	Cell Homeostasis or Cell Death—The Balancing Act Between Autophagy and Apoptosis Caused by Steatosis-Induced Endoplasmic Reticulum (ER) Stress <i>Cells</i>
2024-09-29	Role of WISP1 in Stellate Cell Migration and Liver Fibrosis <i>Cells</i>
2023-01-01	Digital twin demonstrates significance of biomechanical growth control in liver regeneration after partial hepatectomy <i>iScience</i>
2022-09-30	Guided interactive image segmentation using machine learning and color-based image set clustering. <i>Bioinformatics</i>