Dr. rer. nat. Lei Yuan



Postdoc - Max Planck Institute of Molecular Cell Biology and Genetics

Role in LiSyM-Cancer

- Postdoctoral researcher working on the development of tumor assembloids for liver cancer research
- Lab of Prof. Meritxell Huch

Expertise

- 3D cell culture systems
- Stem cell and organoid technology
- Tumor organoid and assembloid models
- Tumor microenvironment modeling
- Experimental platforms for systems medicine

Vita

Lei Yuan is a postdoctoral researcher in the lab of Prof. Meritxell Huch, focusing on the development of periportal liver assembloid models to investigate liver tissue organization and the tumor microenvironment in hepatocellular carcinoma. He received his PhD in Developmental Biology from Westlake University.

Degrees

- **PhD:** Developmental Biology
  Westlake University
  In vitro reconstruction of mammary organoids modeling normal physiology and tumor initiation (Supervisor: Dr. Shang Cai)
- **Master of Science:** Biochemistry and Molecular Biology
  East China Normal University
  REGγ regulates hair follicle regeneration through Lgr5⁺ stem cell activation (Supervisor: Dr. Yongyan Dang)

Honors and Awards

- DFG Walter Benjamin Programme Fellowship, German Research Foundation (DFG), Germany (2025–2027)
- Young Excellent Paper Award, Chinese Society for Cell Biology (2024)
- MCE Award for Excellence in the Advancement of Life Sciences Research (2023)

Publications

2026-03-19	Establishing a long-term versatile culture system for functional mouse mammary organoids from single cells	*Nature Protocols*
2026-01-22	The Taurine-Slc6a6 Axis Promotes Breast Cancer Progression by Alleviating Oxidative Stress and Accelerating Cell Cycle Progression	*Cells*
2025-12-17	Human assembloids recapitulate periportal liver tissue in vitro	*Nature*
2024-02-05	A dynamic culture system that models the intricacy of the mammary gland	*Nature Reviews Molecular Cell Biology*
2023-12-14	NME4 mediates metabolic reprogramming and promotes nonalcoholic fatty liver disease progression	*EMBO Reports*
2023-11-02	Reconstruction of dynamic mammary mini gland in vitro for normal physiology and oncogenesis	*Nature Methods*