

Masterarbeiten Biomedizin 2025-2026

Supervisor	Inst. // Klinik // Dept.	Thema
PD Dr. Michele Visentin	Klinik für klinische Pharmakologie und Toxikologie, USZ	<i>Effect of nephrotoxic antibiotics on ROS production</i>
Prof. Dr. Reto Huber	Entwicklungspädiatrie, Schlafforschung, Universitätskinderhospital ZH	<i>MRI biomarkers of the neurofluid system and their relationship to sleep</i>
Prof. Dr. Gerald Schwank	Institute of Pharmacology and Toxicology, UZH	<i>Charakterisierung und Übersetzung von RNA-Baseneditor-Varianten, die durch OrthoRep-vermittelte gerichtete Evolution identifiziert wurden</i>
Dr. Mathias Hauri-Hohl	Universitätskinderhospital, Stammzellen	<i>Phenotypic and functional characterization of T cells as starting material for CAR-T cells</i>
PD Dr. Beat Bornhauser	Onkologie, Universitätskinderhospital ZH	<i>Improvement of CAR T-Cell therapy in relapsed ALL: Strategies to sensitize leukemia cells to CART-induced cell death</i>
Prof. Dr. Magdalini Polymenidou	DQBM	<i>Developing novel iPSC-based neural models to investigate TDP-43 pathology</i>
Prof. Dr. Bruno Weber	Institute of Pharmacology and Toxicology, UZH	<i>How prefrontal astrocytes mediate cognitive deficits in the translational MIA mouse model of psychiatric disorders</i>
Prof. Dr. Pavel Janscak	IMCR	<i>The Role of Ewing Sarcoma Breakpoint Region 1 (EWSR1) Protein in R-Loop Regulation in Human Cells</i>
Prof. Dr. Alexandra Trkola	IMV	<i>Studying VH4-34 Germline Antibodies with Distinct Light Chains and Their Impact on HIV-1 Broad Neutralization</i>
Prof. Dr. Edna Grünblatt	Translationale molekulare Psychiatrie, Klinik für Kinder- und Jugendpsychiatrie, Psychiatrisches Universitätsspital ZH	<i>Astrocyte differentiation and their inflammatory responses in ADHD pathophysiology</i>
Prof. Dr. Giovanni Camici	Center for Molecular Cardiology, UZH	<i>Effect of glucagon-like peptide 1 receptor (GLP-1R) on brain microvascular response to hypoxia/reoxygenation and cellular senescence</i>
Prof. Dr. Michael Arand	Institute of Pharmacology and Toxicology, UZH	<i>Optimisation of the Tat system for efficient isolation of recombinant proteins from bacteria, focusing on the hypoxide hydrolase (mEH)</i>
PD Dr. Beat Bornhauser	Onkologie, Universitätskinderhospital ZH	<i>Targeting/Characterizing the molecular program driven by fusion transcription factors in leukemia</i>

PD Dr. Agnes Silvia Klar	Tissue Biology research Unit, Universitätskinderspital ZH	<i>Isolation of Keratinocytes from different epithelial layers</i>
Prof. Dr. Silke Stertz	IMV	<i>Determining the role of inflammatory conditions on virus susceptibility of nasal and bronchial airway epithelia</i>
Prof. Dr. Gerald Schwank	Institute of Pharmacology and Toxicology, UZH	<i>Continuous evolution of ultracompact RNA-guided DNA base editing systems derived from pre-CRISPR programmable endonucleases</i>
PD Dr. Agnes Silvia Klar	Tissue Biology research Unit, Universitätskinderspital ZH	<i>Interplay between Macrophages and Fibroblasts: Their Collaborative Role in Scar Formation</i>
Prof. Dr. Raffaella Santoro	DMMD	<i>The role of the nucleolus in gene expression and chromatin states in healthy and disease states</i>
Prof. Dr. Gerald Schwank	Institute of Pharmacology and Toxicology, UZH	<i>Continuous Insertional Genome Editor Evolution through OrthoRep</i>
Prof. Dr. Nicole Joller	DQBM	<i>The role of TIGIT-induced tissue repair in cancer</i>
Prof. Dr. Thomas Lutz	Institute of Veterinary Physiology, UZH	<i>Astrocytes lipid metabolism in the mediobasal hypothalamus: effects on energy homeostasis</i>
Prof. Dr. Pal Johansen	USZ, Dermatology	<i>Investigating the role of cytoplasmic pattern recognition receptors in triggering epidermal inflammation in psoriasis pathogenesis</i>
PD Dr. Martin Felix Häusler	Institut Evolutionäre Medizin	<i>Did Lorenzo de' Medici 'the Magnificent' (1449-92), father of the Renaissance, suffer from acromegaly?</i>
Prof. Dr. Michael Arand	Institute of Pharmacology and Toxicology, UZH	<i>Characterization of endogenous substrate species of mEH</i>
PD Dr. Michele Visentin	Klinik für klinische Pharmakologie und Toxikologie, USZ	<i>Effect of protein carbonylation on plasma protein binding to drugs</i>
PD Dr. Paolo Cinelli	Klinik für Traumatologie, USZ	<i>Diversity of Stem Cell Subtypes in Different Bone Regions</i>
Prof. Dr. Marianne Rohrbach	Universitätskinderspital, Metabolism	<i>iPSC-derived & in vitro models of bone to study the pathophysiology of osteogenesis imperfecta</i>
Prof. Dr. Andrea Eva Steuer	IRM	<i>Towards an easy and simple laboratory workflow for the analysis of phosphatidylethanol (PEth) homologues as alcohol consumption biomarkers in forensic toxicology</i>

PD Dr. Nicole Bender	Institut Evolutionäre Medizin	<i>Fat Distribution and Body Composition: A Study of Female Athletes in Endurance and Bodybuilding Sports</i>
PD Dr. Martin Felix Häusler	Institut Evolutionäre Medizin	<i>The effect of pelvis morphology on locomotor cost</i>
Prof. Dr. Mitchell P. Levesque	Dermatologische Klinik, Translational Dermato-Oncology, Universitätsspital ZH (USZ)	<i>Exploring drug resistance mechanisms and novel targets in melanoma, using patient-derived cells</i>
Prof. Dr. Lubor Borsig	Institute of Physiology, UZH	<i>Tumor-endothelium communication promotes lung metastasis</i>
Prof. Dr. Hubert Hilbi	Medizinische Mikrobiologie	<i>Characterization of a mitochondria-targeting Legionella effector protein</i>
PD Dr. Thomas Biedermann	Tissue Biology research Unit, Universitätskinderhospital ZH	<i>Transdifferentiation of human fibroblasts into iNeurons and their use in skin substitutes</i>
Prof. Dr. Gerald Schwank	Institute of Pharmacology and Toxicology, UZH	<i>Engineering R2 Retrotransposases for Improved Function</i>
Prof. Dr. Stephan Neuhaus	IMLS	<i>Evaluation of Bioactive Compounds in Zebrafish Model for Medulloblastoma Tumors</i>
Prof. Dr. Edna Grünblatt	Translationale molekulare Psychiatrie, Klinik für Kinder- und Jugendpsychiatrie, Psychiatrisches Universitätsspital ZH	<i>Elucidating astrocytes involvement in ADHD employing personalized iPSC-models</i>
Prof. Dr. Andrea Eva Steuer	IRM	<i>How to detect chemical urine adulteration attempts - LC-MS/MS-based metabolomics and proteomics strategies for routine application</i>
Prof. Dr. Alex Hajnal	IMLS	<i>Regulation of actomyosin contractility in C. elegans germline</i>
Prof. Dr. Nicole Joller	DQBM	<i>Setting up CRISPR editing in primary murine innate acting CD4+ T cells to enable functional validation of multi-omics targets</i>
PD Dr. Beat Bornhauser	Onkologie, Universitätskinderhospital ZH	<i>Determination of the molecular basis of immunotherapy sensitivity</i>
Prof. Dr. Martin Baumgartner	Onkologie, Universitätskinderhospital ZH	<i>Evaluation of autophagic flux control as off-target mechanism of small molecule inhibitors of FGFR-driven invasion in medulloblastoma</i>
Dr. Mathias Hauri-Hohl	Universitätskinderhospital, Stammzellen	<i>One population, distinct identities: unraveling the sex-specific diversity of human single positive</i>
Dr. Lynn Wong	IMLS	<i>Identify signaling networks and complexes downstream of TNFR2</i>

Dr. Lynn Wong	IMLS	<i>Identifying a novel form of cell death in primary XIAP deficient macrophages</i>
Prof. Dr. Theofanis Karayannis	Brain Research Institute, UZH	Cross-Species Maturation of Thalamocortical Connectivity in Primates: A Diffusion MRI Tractography Study.
Prof. Dr. Peter Sander	Medizinische Mikrobiologie	<i>Regulation and mechanisms of tetracycline resistance in Mycobacterium</i>
Prof. Dr. Michael Hottiger	DMMD	<i>The Role of PARP7 in Transcriptional Regulation</i>
Prof. Dr. Michael Weller	USZ, Neurology	<i>CAR T Cell-Based Immunotherapies in Multiple Sclerosis and Related Autoimmune CNS Disorders</i>