

Masterarbeiten Biomedizin 2023-2024

Supervisor	Institut // Klinik // Dept.	Thema
PD Dr. Cordula Haas	Institut für Rechtsmedizin, Forensic Genetics, UZH	Forensic Age Estimation: Estimating the Chronological Age of a Trace Donor with DNA Methylation- and RNA-Based Methods
Prof. Richard Chahwan	Institute of Experimental Immunology, UZH	Role of LMO2 and SSBP2 in classswitch recombination
Prof. Thierry Hennet	Institute of Physiology, UZH	Structural diversity of lipopolysaccharides influences breast milk IgA in necrotizing enterocolitis and immune cell activation
Prof. Gerald Schwank	Institute of Pharmacology and Toxicology, UZH	Optimizing base- and prime editing for in vivo application
Dr. Luca Pontiggia	Tissue Biology research Unit, Universitätskinderspital ZH	Vascularisation of rete ridges-equipped dermal-epidermal skin substitutes
PD Dr. Agnes Klar	Tissue Biology research Unit, Universitätskinderspital ZH	Development and characterization of advanced co-culture adipogenic spheroids to model obesity-related metabolic disorders
Prof. Lukas Sommer	Institute of Anatomy, UZH	Mechanisms of Tumor Initiation in Human Melanoma
Prof. Rolf Kümmerli	Department of quantitative Biomedicine, UZH	Evolution of antibiotic resistance in polymicrobial lung infections in children suffering from cystic fibrosis
Prof. Magdalini Polymenidou	Department of quantitative Biomedicine, UZH	Unravelling the FUScinating interactome of FUS. The differential interactome of FUS in the nucleus and the cytoplasm
Prof. Thomas Lutz	Institute of Veterinary Physiology, UZH	The role of HDL in endothelial metabolism and function
Prof. Lubor Borsig	Institute of Physiology, UZH	Immunomodulation during tumorigenesis and metastasis
PD Dr. Sean Froese	Stoffwechselerkrankungen (research Metabolism), Universitätskinderspital ZH	Investigating the role of folate-cycle enzyme SHMT1 in methotrexate resistance in paediatric osteosarcoma
Prof. Konrad Basler	Department of Molecular Life Sciences, UZH	Studying the role of the sox2 transcription factor family in a model of colorectal cancer
PD Dr. Beat Bornhauser	Onkologie, Universitätskinderspital ZH	Unravelling New Combinatorial Treatment Approaches Using EP300 Degradation in TCF3::HLF Positive Pediatric Leukemia

Prof. Rolf Kümmerli	Department of quantitative Biomedicine, UZH	Variation in antibiotic susceptibility and virulence factor expression among bacterial pathogens isolated from burn wounds
Prof. Matthias Altmeyer	Department of Molecular Mechanisms of Disease, UZH	The role of post-MiDAS in dealing with heritable DNA lesions
Prof. Christopher Pryce	Klinik für Psychiatrie, Psychotherapie und Psychosomatik, Psychiatrische Universitätsklinik ZH	Investigating TRPC4/5 regulation of chronic stress-induced increased aversion sensitivity in mice
Prof. Sonia Tugues Solsona	Institute of Experimental Immunology, UZH	Validation of immune populations with prognostic value from patients with colorectal cancer liver metastasis in a murine model
Prof. Reto Huber	Entwicklungs pädiatrie, Schlafforschung, Universitätskinderhospital ZH	Exploring the Therapeutic Potential of Local Slow Wave Sleep Modulation in Major Depressive Disorder Patients
Prof. Burkhard Becher	Institute of Experimental Immunology, UZH	Identificaton and phenotyping of GM-CSF expressing memory T helper cells
Dr. Regina Grossmann	Clinical Trial Center, Universitätsspital ZH (USZ)	Plain Summaries - A Summary of a Clinical Study for Non Professionals
Prof. Daniel Eberli	Klinik für Urologie, USZ	Mitochondrial Function in Human Neuropathic and Normal Bladder Detrusor Smooth Muscle Cells
Prof. Daniel Eberli	Klinik für Urologie, USZ	Investigating the impact of cancer-derived extracellular vesicles and secreted factors on prostate cancer immunomodulation
PD Dr. Michele Visentin	Klinik für klinische Pharmakologie und Toxikologie, USZ	The effect of cholesterol on the function of organic cation transporter 3 (OCT3)
Dr. Natasha Arora	Institut für Rechtsmedizin, Forensic Genetics, UZH	Comparative insights into forensic body fluid identification: Potential of integrating mRNA and microbiome-based methods
Prof. Johannes Häberle	Stoffwechselerkrankungen (research Metabolism), Universitätskinderhospital ZH	Small molecules as a novel treatment approach for the urea cycle disorder argininosuccinate synthetase deficiency
Prof. Onur Boyman	Klinik für Immunologie, USZ	Regulatory T Cells in Human Non-Lymphoid Tissues
Prof. Salomé Leibundgut-Landmann	Abteilung Immunologie, Vetsuisse Fakultät, UZH	Malassezia Regulates the Epidermal Barrier Function via AHR Signalling

PD Dr. Cordula Haas	Institut für Rechtsmedizin, Forensic Genetics, UZH	Untargeted Metabolomics-based Approach for Forensic Body Fluid Identification
PD Dr. Cordula Haas	Institut für Rechtsmedizin, Forensic Genetics, UZH	Development and evaluation of a custom microhaplotype panel for distant kinship analysis and comparison to STR methods and a SNP panel
Dr. Cora Thiel	Institute of Anatomy, UZH	Investigating the role of SUN2 on morphology, cytoskeletal dynamics and epigenetics under hypergravity conditions
Prof. Silvia Brem	Multimodales Neuroimaging, Klinik für Kinder- und Jugendpsychiatrie, Psychiatrisches Universitätsspital ZH	Reward and loss processing in cis- and transgender early adolescents
Prof. Michael Arand	Institute of Pharmacology and Toxicology, UZH	Evaluation of Dark Donors in FRET
Prof. Martin Hausmann	Klinik für Gastroenterologie und Hepatologie, USZ	GPR4 Expression in a Mouse Model of Chronic Colitis: Linking Vascular Changes to Inflammatory and Fibrotic Responses
Prof. Christoph Schneider	Institute of Physiology, UZH	Tuft cells in intestinal type 2 immunity
Prof. Johannes Sarnthein	Klinik für Neurochirurgie, USZ	Sparse wavelet representation of interictal epileptic activity for postsurgical seizure outcome prediction
Prof. Enni Markkanen (w)	Institute of Veterinary Pharmacology und Toxicology, UZH	Dissecting molecular mechanisms of iCAF-directed implications in skin cancer
Prof. Hanspeter Nägeli	Institute of Veterinary Pharmacology und Toxicology, UZH	UBR5 stimulates the repair of UV lesions by recruiting the SPT16 histone chaperone
PD Dr. Nicole Bender	Institute of Evolutionary Medicine, UZH	Anthropometry, Body Composition, and Lifestyle Indicators after the COVID-19 Pandemic
PD Dr. Beat Bornhauser	Onkologie, Universitätskinderspital ZH	Targeting metabolic vulnerabilities in high-risk TCF3::PBX1 positive acute lymphoblastic leukemia
Prof. Mitchell Levesque	Dermatologische Klinik, Translational Dermato- Oncology, Universitätsspital ZH (USZ)	Exploring extracellular vesicle-and particle-derived micro-RNAS as melanoma biomarkers
Prof. Nicole Joller	Department of quantitative Biomedicine, UZH	Determination of the role of T-bet in regulatory T cells during type 1 immune response

Prof. Lorenza Penengo	Institute of molecular cancer research, UZH	Characterisation of the interaction between phospho-ubiquitin and MCAK in the DNA damage response
Prof. Lynn Wong	Department of Molecular Life Sciences, UZH	Effect of RIG-I modulation on inflammatory and interferon responses in keratinocytes
Prof. Mitchell Levesque	Dermatologische Klinik, Translational Dermato-Oncology, Universitätsspital ZH (USZ)	Evaluating High Throughput Screen Derived Compounds for their Potential as Future Small Molecule Therapy against the Aggressive NRAS Mutant Melanoma Subtype
PD Dr. Thomas Biedermann	Tissue Biology research Unit, Universitätskinderspital ZH	Nerves and vascular Capillaries in Bioengineered Skin Substitutes
Prof. Mitchell Levesque	Dermatologische Klinik, Translational Dermato-Oncology, Universitätsspital ZH (USZ)	Targeting CD271 and Trk receptors: A new strategy to treat metastatic melanoma based on the activation of pro-death pathways.
Prof. Silvia Brem	Multimodales Neuroimaging, Klinik für Kinder- und Jugendpsychiatrie, Psychiatrisches Universitätsspital ZH	Language processing in the child brain: Individual differences and parental influence on brain structure
PD Dr. Nicole Bender	Institute of Evolutionary Medicine, UZH	Implications of Nutrition and Exercise on Body Hydration in healthy and diseased Patients
Prof. Reto Huber	Entwicklungs pädiatrie, Schlafforschung, Universitätskinderspital ZH	Localising the effects: Investigating the region-specific impact of down-phase targeted auditory stimulation on overnight memory performance
Prof. Michael Baudis	Department of Molecular Life Sciences, UZH	Beyond Copy Number Variations Exploring the interplay of structural and sequence variations in cancer genomics
Prof. Lucas Pelkmans	Department of Molecular Life Sciences, UZH	Prediction of ETiX embryo outcome from high throughput live confocal imaging data using machine learning algorithms
Prof. Markus Manz	Klinik für medizinische Onkologie und Hämatologie, USZ	Impact of Bispecific Adaptor Design on Adaptor CAR T-cell Biocidal Activity in Prostate Cancer Models
Prof. Oliver Distler	Klinik für Rheumatologie, USZ	Exploring the Deregulated Landscape of lncRNAs in Systemic Sclerosis
Prof. Gabriela Kania	Klinik für Rheumatologie, USZ	Mimicking heart fibrosis in vitro
Dr. Shawna Elise McCallin	Spinal Cord Injury Center, Universitätsspital Balgrist	Phage sensitivity in Vancomycin Intermediate Staphylococcus aureus

PD Dr. Agnes Klar	Tissue Biology research Unit, Universitätskinderhospital ZH	Role of macrophages on vascularisation and repair/regeneration of bioengineered human skin
Prof. Hans-Peter Landolt	Institute of Pharmacology and Toxicology, UZH	Effects of sleep deprivation and sleep restriction on sleep and biochemical markers of sleep regulation in humans
Prof. Thomas Lutz	Institute of Veterinary Physiology, UZH	Measuring intraoral intake and taste reactivity in rodent models of obesity
Prof. Nicole Borel	Institut für Veterinärpathologie, UZH	Interspecies transformation of veterinary chlamydiae
Prof. Silvia Brem	Multimodales Neuroimaging, Klinik für Kinder- und Jugendpsychiatrie, Psychiatrisches Universitätsspital ZH	Modeling multisensory learning in the brain of children
Prof. Thomas Kessler	Spinal Cord Injury Center, Universitätsspital Balgrist	Evaluating the microbiome of the lower urinary tract in different populations
Dr. Regina Grossmann	Clinical Trial Center, Universitätsspital ZH (USZ)	National survey and analysis of different population groups in consenting behaviour of General Consent (GC)
Prof. Jana Pachlopnik Schmid	Immunologie, Universitätskinderhospital ZH	Immune mechanisms of a novel Primary Immunodeficiency associated with the RNA sensor ZNFX1
Prof. Rolf Kümmerli	Department of quantitative Biomedicine, UZH	Polymicrobial Infection of Zebrafish Embryos
Prof. Benjamin Hale	Institute of Medical Virology, UZH	Mechanisms underlying susceptibility to virus infections caused by interferon system deficiencies
Prof. Markus Manz	Klinik für medizinische Onkologie und Hämatologie, USZ	Bispecific T cell Engagers for Targeted Cancer Immunotherapy
PD Dr. Christian Tackenberg	Institute for Regenerative Medicine, UZH	Advancing cell therapy for stroke
Prof. Martin Ehrbar	Klinik für Geburtshilfe, USZ	In vitro and ex vivo models for the identification of factors that influence the healing of fetal membranes
Prof. Thierry Hennet	Institute of Physiology, UZH	Characterization of the antibody reactivity towards intestinal bacteria in inflammatory bowel disease