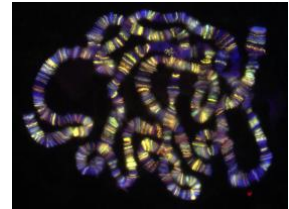


Completed MSc theses in the specialization Cell and Molecular Biology



2025

- **Mathi Funk.** 22.02.2025. Prof. V. Heussler
Host cell in double trouble: The effect of AAV transduction of host cells on Plasmodium development in the liver stage.
- **Ezgi Laleci.** 10.02.2025. Dr. R. Esposito / Prof. C. Riether
Investigating lncRNAs mediating 5-fluorouracil response in colorectal cancer.
- **Muthita Pitaktrairat.** 07.02.2025. Prof. G. Konstantinidou
Assessing clinically relevant inhibitors for pancreatic cancer treatment.
- **Sanjana Marar.** 06.02.2025. Prof. M. Mohsen
Advancing Cancer Nano-Vaccines: Optimising Design and Delivery for Enhanced Therapy.
- **Alexander Schmid.** 17.01.2025. Prof. P. Escher
Peroxisome Proliferator-Activated Receptors: Function and Significance in Murine Photoreceptors.
- **Jennifer Miguez Vazquez.** 15.01.2025. Prof. M. Vogel
Antigen recycling in Mast Cells for the regulation of the immune response.

2024

- **Asma Laleh.** 13.12.2024. Prof. N. Mercader
Characterization of genetic loss of function models to study genes involved in cell-cell communication during zebrafish heart regeneration.
- **Patrick Seywald.** 10.12.2024. PD Dr. C. Ros
Unravelling the mechanism of human parvovirus B19 selective targeting and uptake in erythroid progenitor cells.
- **Dinda Hardy Lubis.** 03.12.2024. Prof. M. Rubin
Validation of a CRISPR/Cas9 synthetic lethality screen and generation of novel DNA repair deficient *in vitro* cell models.
- **Tyrone Wyss.** 15.11.2024. Prof. J. Furrer
Probing the Penetration of Encapsulated Photosensitizers into Porcine Skin and Artificial Human Skin Models.
- **Thomas Schneeberger.** Prof. R. Häner
Supramolecular Light-Harvesting DNA Vesicles.
- **Nicole Marti.** 26.09.2024. Prof. S. Rottenberg
Overcoming PARPi resistance in BRCA1;p53-deficient cells through DNA-PK inhibition
- **Melanie Kropp.** 02.09.2024. Prof. O. Pertz
Development of a Spheroid Array to study Oncogenic Signaling Dynamics and Mammary Acinar Morphogenesis in a 3D In Vitro MCF-10A Model.
- **Clio Cordier.** 19.08.2024. Prof. P. Jullien
Suppression of *Arabidopsis thaliana* female gametophyte sRNA pathways reveals their role in reproduction and their non-cell autonomous modes of action.

- **Sabrina Bertello Hernandez.** 14.08.2024. Prof. S. Freigang
The Impact of cell-intrinsic IL-1R1-signaling on differentiation, migration, and functionality of Hoxb8-derived neutrophils.
- **Elif Degerli.** 30.07.2024. Prof. B. Zuber
Structural studies of pore forming toxins NetB, NetE, NetG and CctA.
- **Fabrizio Troia.** 01.06.2024. Prof G. Zimmer
Molecular characterization of an H9N2 influenza A virus isolated from flying foxes (*Rousettus aegyptiacus*).
- **Philip Rubin.** 30.05.2024. Prof C. Riether & Dr. R. Esposito
Investigating the role of lncRNA CASC19 in colorectal cancer using patient-derived organoids.
- **Nadja Köchli.** 30.04.2024. Prof Ch. Albrecht
Investigating Maternal-Fetal Drug Transfer: Development of a Fluidic In Vitro Model.
- **Mengyu Zhou.** 22.04.2024. Prof M. Tschan
Post-translational regulation and function of the oncogenic DMTF1b protein.
- **Daniela Hunziker.** 17.04.2024. PD C. Ros
On the road to VP1uR: Identification of the uptake-receptor of human parvovirus B19.
- **Joël Daniel Frei.** 04.04.2024. Prof. O. Pertz
Using micropatterns to study cytoskeletal feedback on MAPK pathway in optoFGFR cell line.
- **Iris Suter.** 25.03.2024. Prof. P. Meister
Understanding the role of liquid-liquid phase separation during X-chromosome dosage compensation in *C. elegans*.
- **Anitha Vigneswaran.** 26.02.2024. Prof. A. Hemphill
CRISPR/Cas9-Mediated Genetic Engineering in *T. gondii*: Complementation and phenotypic characterization of TgShSp1 Δ tim10 and knock-in of bfd1 into TgRH.
- **Noelia Gerber.** 09.02.2024. Prof. B. Towbin
Development and Validation of a System for Investigating Protein Dynamics in *C. elegans*: A Case Study with YAP-1.
- **Xuanxuan Zhang.** 29.01.2024. Prof. A. Eggel
Evaluate the effect of disruptive anti-IgE molecules on human plasmacytoid dendritic cells.
- **Michalina Sypka.** 22.01.2024. Prof. M. Vogel
Novel Immunoassays for Monitoring IgE Quality and Cancer Progression.

2023

- **Abdulloh Kafa Bihi.** 03.12.2023. PD Dr. I. Marinoni
MCT1, MCT4, and ACSS2 as Potential Novel Therapeutic Targets Against Metabolic Heterogeneity in Pancreatic Neuroendocrine Tumors.
- **Dario Manuel Bernasconi.** 10.10.2023. Prof. V. Heussler
Characterisation of succinate dehydrogenase subunits in *P. berghei*.
- **Bettina Hitz.** 25.07.2023. Prof. M. Erb
The role of the cuticle in defense responses triggered by the Green Leaf Volatile (Z)-3-hexenyl acetate in maize.
- **Ana Quirós González.** 21.07.2023. Prof. M. Tschan
Hexokinase 3 modulates gene transcription and lactate production via Pkm2 alternative splicing in acute myeloid leukemia.

- **Julie Perey.** 19.05.2023. Prof. B. Towbin
Modulation of mTOR activity reveals a trade-off between starvation survival and recovery in *C. elegans*.
- **Stefanie Teyseire.** 19.05.2023. Prof. A. Hemphill
Calcium-dependent protein kinases in apicomplexans and their interaction with bumped kinase inhibitors.
- **Pascal Zumstein.** 01.05.2023. Prof. B. Lundström Stadelmann
Novel chemotherapeutic treatments for alveolar echinococcosis: Screening of the MMV Pandemic Response Box and characterization of the *Echinococcus multilocularis* L-threonine dehydrogenase as a potential drug target.
- **Fabienne Lengen.** 28.04.2023. Prof. M. Nowacki
Investigation of novel putative Ptiwis and their potential interaction partners.
- **Corina Trafelet.** 17.04.2023. Prof. M. Nowacki
Putative DEAH box helicases Ema1a and Ema1b's involvement in *Paramecium tetraurelia* genome rearrangements.
- **Adhuresa Ramosaj.** 14.04.2023. Prof. J.-M. Nuoffer
Characterization of MCT8 deficiency.
- **Thilo Page.** 13.04.2023. Prof. V. Heussler
Investigating the role of four Plasmodium proteins identified by a high throughput reverse genetic screen.
- **Sophie Buchser.** 13.04.2023. Prof. V. Heussler
LC3 lipidation of the parasitophorous vacuole membrane of *Plasmodium berghei* liver stage parasites.
- **Sibghatullah Siddique.** 27.03.2023. Prof. A. Macpherson
Consequences of dietary-microbial interplay early in life on T cell development.
- **Michael Ammeter.** 24.03.2023. Prof. S. Hapfelmeier
Developing a robust organoid invasion assay model for quantifying the pathogenicity of bacteria.
- **Anja Hämmerli.** 20.03.2023. Prof. P. Meister
Characterizing the establishment, maintenance and function of SDC bodies in *C. elegans*.
- **Ronan Le Puil.** 31.01.2023. PD Dr. A. Ramette
Performance enhancements of FTIR technology in clinical Microbiology.

2022

- **Anja Helmer.** 07.12.2022. Prof. R. Rieben
Tacrolimus inhibits neutrophils and neutrophil extracellular traps that are involved in vascularized composite allograft rejection.
- **Ashley Fernandes.** 01.11.2022. Prof. M. Hediger
Role of neutral amino acid transporter SLC38A2/ SNAT2 in colorectal cancer progression.
- **Lukas Küng.** 19.10.2022. Prof. M. Rubin
Understanding the mechanism of P5P4Kα in models of prostate cancer.
- **Corinne Hämmerli.** 18.09.2022. Prof. Ch. Benarafa
Gasdermin D and E in Neutrophil Cell Death and Study of Pro-inflammatory Cytokine Response in Sb1a.Sb6a-/- Bone Marrow Derived Macrophages.

- **Xiaoyi Niu.** 29.08.2022. Prof. C. Riether
The role of LIGHT signaling in the regulation of Leukemic Stem Cells & Improving Cas9 genome editing efficiency by sgRNA scaffold modification.
- **Jovana Jankovic.** 12.08.2022. Prof. S. von Gunten
Characterization of Siglec-7 expression on CD8+ T cells.
- **Xiaochi Ma.** 28.07.2022. Prof. C. Riether
The Role of Acetylcholine in the Regulation of Leukemia Stem Cells.
- **Kristýna Filipová.** 02.07.2022. Prof. A. Perren
Mapping the metabolic landscape of pancreatic neuroendocrine tumors (PanNETs).
- **Seraina Bartetzko.** 30.06.2022. Prof. S. Kleinlogel
CRISPR-Cas mediated transactivation of middle-wave sensitive cone opsin in retinal ON-bipolar cells for vision restoration.
- **Huijuan Wang.** 27.06.2022. Prof. E. Vassella
PARPi enhances temozolomide sensitivity in WRN-deficient glioblastoma cells.
- **Timothé Schärer.** 17.06.2022. Prof. C. Faso
Nanobodies as chemical knock-out tools to inhibit encystation in *Giardia lamblia*.
- **Vinicius Paola da Silva.** 25.03.2022. Prof. M. Schweizer
Molecular Biology Tools to Study the Evolution of Bovine Viral Diarrhea Virus.
- **Mara Kern.** 16.03.2022. Prof. T. Ochsenreiter
Different Approaches to Visualise and Analyse the Structures Involved in Kinetoplast Segregation of *Trypanosoma brucei*.
- **Masaba Baroi.** 15.03.2022. Prof. B. Suter
Specifying the role of Topoisomerase 3 β and its motives in synapse development.
- **Melanie Schmid.** 14.03.2022. Prof. V. Heussler
Elucidating the Role of putative essential Proteins during Liver Stage Development of *Plasmodium berghei*.
- **Jeremy Rotzetter.** 25.02.2022. Prof. S. Leib
Chemical inactivation studies on liquid laboratory waste containing biosafety level 2 pathogens.
- **Janik Scotton.** 17.02.2022. Prof. P. Meister
Establishing single molecule footprinting in *C. elegans*.
- **Ioana Gheorghe.** 01.02.2022. Prof. B. Towbin
A high-throughput RNAi screen to study organ growth coordination in *C. elegans*.

2021

- **Jenna Streit.** 15.12.2021. Prof. M. Nowacki
Investigation of novel PIWI proteins in *Paramecium tetraurelia*.
- **Julia Basile.** 06.12.2021. Prof. R. Johnson
Exploring the molecular mechanism of lncRNAs that promote Non-Small Cell Lung Cancer.
- **Fereshteh Akbari.** 16.09.2021. Prof. S. Hapfelmeier
Investigating the interplay of bacterial gene expression and host immunity in a host-pathogens-microbiota interaction model.
- **Zahraa Ahmed Mohammed Al qassab.** 01.09.2021. Prof. S. Saxena
Examining Alterations in PV Interneurons in Spinocerebellar Ataxia Type 1.

- **Nicolas Kramer.** 12.07.2021. Prof. V. Heussler
Host cell endosomal and lysosomal SNAREs during the *Plasmodium berghei* liver stage.
- **Fabrizio Motta.** 05.07.2021. Prof. T. Kaufmann
Towards exploitation of BOK as therapeutic target.
- **Leon Schlagenhof.** 30.06.2021. Prof. V. Heussler
Localisation of Putative Host Cell Maurer's Clefts Proteins in *Plasmodium falciparum* Infected Red Blood Cells.
- **Alisa Ambrodji.** 15.06.2021. Prof. C. Largiader
Detection of allele-specific dihydropyrimidine dehydrogenase expression in liver using real-time digital droplet PCR.
- **Alessandro Pardini.** 08.06.2021. Prof. V. Heussler
Characterization of putative RNA binding proteins in *Plasmodium berghei* development.
- **Reto Lang.** 06.06.2021. Prof. V. Thiel
Characterization of stress granules during virus infection.
- **Mike Hemmann.** 31.05.2021. Prof. S. von Gunten
HASLECs - High Affinity Siglec Ligand Expressing cells and their effect on NK cells and polymorphonuclear leukocytes.
- **Katja Stengele.** 02.04.2021. Prof M. Erb
Arabidopsis feedbacks on benzoxazinoid conditioned soils.
- **Carmen Perry.** 23.03.2021. PD Dr. P. Olias
Characterization of two *Theileria annulata* proteins exported to the host cell nucleus and evaluation of their effect on a bovine macrophage cell line.
- **Ramya Ranganath Das.** 18.02.2021. PD Dr. P. Plattet
Characterization of Diagnostic Tools for PD-L1 Markers in Canine Brain Tumours.
- **Franziska Schmid.** 17.02.2021. Prof. B. Towbin
Effects of perturbed mTOR signalling on brood size of caloric restricted *Caenorhabditis elegans*.
- **Filip Manevski.** 16.02.2021. Prof. M. Tschan
Comparison of CRISPR/Cas9 gene modulation systems and their effect on the expression of homeobox protein CDX2 in colorectal cancer.
- **Roman Bächler.** 12.02.2021. Prof. C. Albrecht
Establishment and comparison of static and fluidic microvessel systems as cell models for studying trophoblast physiology.
- **Shruti Jha.** 02.02.2021. Prof. M. Nowacki
Comparative localization and functional study of Ptiwi01 and Ptiwi09 proteins in *Paramecium tetraurelia*.
- **Bushra Sharf Den Abu Fakher.** 27.01.2021. Prof. E. Vassella
Involvement of miR19b in Temozolomide resistance in patient derived Glioblastoma stem cells.
- **Andr j Vianin.** 14.01.2021. Prof. N. Mercader Huber
The zebrafish xenotransplantation model as a tool for precision medicine in the evaluation of metastatic behavior of tumor cells.

2020

- **Pushpita Singh.** 07.09.2020. Prof. R.-P. Charles
Establishment of an *in vitro* model overexpressing 4F2hc and studying its role with LAT1 and the mTOR pathway.

- **Benjamin Grädel**. 31.08.2020. Prof. O. Pertz
Podosome dynamics and structure in migrating fibroblasts.
- **Megha Kalra**. 27.07.2020. Prof. O. Mühlemann
Insight into the nuclear export and substrate selection for UPF1.
- **Johan Kantsjö**. 30.06.2020. Prof. A. Macpherson
Impact of the Microbiota on maternal-fetal Interface Immunity.
- **Lea Lingg**. 24.06.2020. Prof. S. Rottenberg
Validating hits from genetic screens on PARP inhibitor and irradiation response in Brca1^{-/-};p53^{-/-} mouse mammary tumors.
- **Jan Dergič**. 31.05.2020. Prof. M. Hediger
Exploring the Gating Mechanism of Orai Channel Isoforms and Mapping the Binding Site of GSK-7975A on Orai1.
- **Séverine Arcioni**. 30.05.2020. Prof. U. Amstutz
Graft monitoring in solid organ transplant recipients using donor-derived cell-free DNA: comparison of two methods.
- **Carmen Patricia Trefny**. 13.05.2020. Prof. E. Vassella
MiR-19b involvement in the regulation of PP2A and apoptosis resistance in glioma cell lines.
- **Sophie Theodora Schneider**. 18.04.2020. Prof. V. Heussler
Investigating TRiC and HSPA8 in Plasmodium falciparum protein export utilizing an immortalized erythroid progenitor cell line.
- **Paulina Schärer**. 26.03.2020. Prof. R. Johnson
Functional validation of lncRNA candidates in lung cancer detected by CRISPRCas9 screening and development of a CRISPR competition assay
- **Nino Stocker**. 17.03.2020. PD Dr. S. Kleinlogel
Anatomical Evaluation of Optogenetic Vision Restoration – Morphological identification of light-responsive retinal ganglion cells in Opto-mGluR6 treated murine retinas.
- **Daniel Abbühl**. 09.03.2020. Prof. I. Roditi
Genes required for adaptation and transmission in African trypanosomes
- **Bernard Mefi Merlin**. 15.02.2020. Prof. R. Johnson
Validation of predicted cancer driver long non-coding RNAs using CRISPR activation.
- **Daniela Ramp**. 11.02.2020. Prof. C. Albrecht
Generation and analysis of specific iron transporter knockout trophoblast cells via CRISPR/Cas9 technology.

2019

- **Melanie Scherer**. 16.12.2019. PD Dr. Philippe Plattet
Characterization of Nanobodies against Canine Distemper Virus.
- **Salvatore Calderaro**. 09.10.2019. Prof. A. Schneider
Biochemical analysis of mitoribosomal assembly factors in *Trypanosoma brucei*.
- **Pascal Jutzi**. 31.07.2019. Prof. E. Vassella
Interplay between TNF- α and miRNAs in regulation of NF κ B signalling in different disease models.
- **Fabian Ziegler**. 10.07.2019. Prof. C. Albrecht
Role of the Large Amino Acid Transporter 1 (LAT1) in placental amino acid transport.

- **Markus Gerber.** 18.03.2019. Prof. V. Thiel
Insights into dynamics of virus-host interactions at the coronavirus replication and transcription complex.
- **Raphael Beyeler.** 14.03.2019. Prof. V. Heussler
Characterization of Molecular Chaperones and an Alpha Tubulin Involved in *Plasmodium berghei* Development.
- **Simon Hostettler.** 11.03.2019. PD. Dr. S. Kleinlogel
Behavioral evaluation of optogenetic vision restoration.
- **Viviane Brönnimann.** 11.03.2019. Prof. C. Largiadèr
Association of genetic polymorphisms in TP53 and miR-27-a with early-onset 5-FU toxicity.
- **Julian Riedweg.** 14.02.2019. Prof. P. Meister
The effect of dosage compensation on transcription in single cells in *C. elegans*.
- **Aleksandra Jejina.** 13.02.2019. Prof. B. Suter
Is *Drosophila* BicDR involved in microtubule transport of mRNAs and proteins?
- **Irina Bregy.** 06.02.19. Prof. T. Ochsenreiter
Structural and Functional Analysis of Protein Involved in Mitochondrial Genome Maintenance in *Trypanosoma brucei*.
- **Pascal Moll.** 31.01.2019. PD Dr. P. Plattet
Towards the Establishment of Alternative Options to Treat Canine Cancers.
- **Thomas Höhener.** 24.01.2019. Prof. O. Pertz
Deciphering signaling network dynamics downstream of an optogenetic receptor tyrosine kinase prototype.

2018

- **Sophie Milesi.** 31.10.2018. Prof. M. Tschan
Cancer-associated fibroblasts and their role in autophagy modulation and therapy resistance in breast cancer.
- **Marilena Anna Imhof.** 10.09.2018. Prof. R.-P. Charles
From RNA sequencing Data to a possible prognostic marker for anaplastic thyroid cancer.
- **Emina Džafro.** 07.09.2018. Prof. B. Gantenbein
Investigation of the effects of nicotinamide riboside on the cellular senescence of primary human bone-marrow mesenchymal stromal cells.
- **Thuvaraga Kalakaran.** 03.09.2018. Prof. C. Albrecht
Association of Iron and Glucose Homeostasis in Human Trophoblasts.
- **Sheida Hadji Rasouliha.** 29.08.2018. Prof. T. Leeb
Investigation into underlying genetic causes in dogs with hypohidrotic ectodermal dysplasia, hypoparathyroidism and laryngeal paralysis.
- **Anina Bindschedler.** 24.07.2018. Prof. V. Heussler
p62 signaling in *Plasmodium berghei* infected cells – a possible link to autophagy.
- **Abdulaziz Rami Abdul-Fattah Jaber.** 01.07.2018. Prof. P. Meister
Biochemistry and in vivo Reconstitution of the nematode Dosage Compensation Complex.
- **Lisa Thönen.** 30.06.2018. Prof. M. Erb
Genetic Basis of Benzoxazinoid Resistance in *Photorhabdus* Bacteria.

- **Eliane Dubois.** 01.05.2018. Prof. C. Largiadèr / PD. Dr. U. Amstutz
FINE-MAPPING OF THE CES1 LOCUS - Associating capecitabine-related toxicity with structural variants and SNPs of CES1.
- **Severin Michael Mosimann.** 27.04.2018. Prof. M. Tschan
A non-catalytic function of fatty acid synthase in acute myeloid leukemia cell differentiation.
- **Lyna Kabbani.** 10.04.2018. Prof. M. Nowacki
Ectopically expressing PiggyMac in Paramecium using a heat-inducible system.
- **Silvan Piller.** 02.04.2018. Prof. D. Rentsch
Functional characterization of Trypanosoma brucei amino acid transporters TbAAT2.1, TbAAT2.2, TbAAT2.3 and TbAAT10.2.
- **Daria Iellamo.** 19.03.2018. Prof. V. Heussler
Investigating the role of autophagy in drug-tolerant Brca1-mutated mouse mammary tumor cells.
- **Carmen Disler.** 19.03.2018. Prof. V. Heussler
Analysis of loss of Lrrc8a/d or Naa60 as a mechanism of Pt drug resistance in BRCA-deficient mouse mammary tumor cells.
- **Dominique Imhof.** 19.03.2018. Prof. V. Heussler
Incorporation of host cell LC3 into parasitophorous vacuole membrane of *Plasmodium berghei*-infected Hela cells is not dependent on the autophagy nucleation complex.
- **Nina Suter.** 19.03.2018. Prof. P. Bütikofer
Characterization of Cardiolipin-dependent proteins in *Trypanosoma brucei*.
- **Rebecca Brogli.** 16.03.2018. Prof. N. Polacek
A tRNA half modulates translation as stress response in *Trypanosoma brucei*.
- **Sasa Pavlovic.** 14.03.2018. Prof. R. Charles
Testing involvement of genes in progression from papillary to anaplastic thyroid cancer.
- **Murielle Golomingi.** 05.03.2018. Prof. V. Heussler
High-throughput liver stage phenotyping screen of *P. berghei* knockout parasites and investigation of three identified candidate genes.
- **Francis Brühlmann.** 05.03.2018. Prof. V. Heussler
Characterizing the role of two different genes during *Plasmodium berghei* life cycle.
- **Anja Mühlemann.** 20.02.2018. Prof. C. Largiadèr
Phenotypic characterisation of toxicity risk-variants in fluoropyrimidine-metabolising enzymes using *in vitro* approaches.
- **Sujana Sivapatham.** 15.02.2018. Prof. J. Stein
Image-based analysis of dynamic T cell behavior in virus-infected lymph nodes.
- **Lisa Barmettler.** 09.01.2018. Prof. S. Gallati
CF-like disorders: Identification of disease causing and modifier genes.

2017

- **Nicoleta Anghel.** 30.12.2017. Prof. A. Hemphil
Chemotherapy against *Neospora caninum*: study on different compounds efficacy.
- **Therese Solberg.** 15.12.2017. Prof. M. Nowacki
Characterization of the developmental Ptiwi proteins in *Paramecium tetraurelia*.
- **Eleftheria Girousi.** 01.12.2017. PD Dr. J. Furrer
Probing cellular uptake of different delivery approaches for porphyrinic photosensitizers.

- **Monika Büttler.** 15.03.2017. Prof. T. Ochsenreiter
Structural analysis of the mitochondrial and nuclear genome of *T. brucei*
- **Lara Girod.** 07.03.2017. Prof. V. Enzmann / Dr. S. Kleinlogel
Unravelling the origin of the photoreceptor's dark current.
- **Jasmin Kernen.** 07.03.2017. Prof. S. Leib / Dr. S. Kleinlogel
Establishing an in vitro model of neuromuscular junction with optogenetic induction of the synaptic transmission: A future tool for the detection of *Clostridium botulinum* neurotoxins.
- **Nicolas Jan Niklaus.** 28.02.2017. Prof. M. Tschan
The role of DMTF1 isoforms during cisplatin resistance, migration, and autophagy in breast cancer cells.
- **Simon April.** 22.02.2017. Prof. H.-U. Simon
The role of glycolytic and mitochondrial bioenergetics in adult stem cell differentiation.
- **Alexander Zulliger.** 31.01.2017. Prof. E. Vassella
MicroRNA miR-125b mediates chemoresistance in glioma cell lines by inducing autophagy.
- **Iris Sandra Hug.** 24.01.2017. Prof. M. Nowacki
Characterisation of iesRNA precursors in *Paramecium tetraurelia*.
- **Fabienne Chantal Berger.** 23.01.2017. Prof. E. Vassella
miR-19b is a mediator of EGFR signaling in non-small cell lung cancer.

2016

- **Efstathios Katharopoulos.** 16.09.2016. Prof. V. Enzmann
Developmental pathways involved in Müller cell activation and differentiation *in vitro*.
- **Derya Keller.** 30.07.2016. Prof. V. Heussler
Characterization of *P. berghei* SBP1 and MAHRP1a dependent receptor ligand interactions.
- **Ivan Abegglen.** 11.05.2016. Prof. B. Suter
Investigating the Nuclear Localization of PheRS
- **Thomas Gruber.** 13.05.2016. PD R. Lyck
Role of the α 4-integrin/VCAM-1 interaction for melanoma cell extravasation across primary lung endothelial cells.
- **Stefan Berger.** 25.03.2016. Prof. N. Polacek
Non-coding RNAs in bacterial heterogeneity.
- **Vera Reber.** 16.03.2016. Prof. V. Heussler
CRISPR-Cas9 allows genetic manipulation of autophagy in potential host cells of *P. berghei* sporozoites.
- **Thomas Gfeller.** 16.03.2016. Prof. P. Meister
Tissue specific DamID in *Caenorhabditis elegans* with Cre/lox and TaDa.
- **Seid Hamzic.** 30.03.2016. Prof. C. Largiadèr
Genetic and phenotypic analysis of capecitabine metabolizing enzymes - a closer look at CES and CDA.
- **Silvan Gisler.** 15.03.2016. Prof. M. Nowacki
Characterization of Slide domain-containing protein (SDCP) during macronuclear development in *Paramecium tetraurelia*.
- **Simona Amodeo.** 01.03.2016. Prof. T. Ochsenreiter
Identification of novel proteins involved in mitochondrial genome maintenance in *Trypanosoma brucei*.

- **Abilashan Sithampari.** 31.01.2016. Prof. Ch. Müller
Characterization of a Nrf2-dependent macrophage population and investigation of fatty acid-induced interleukin-1 secretion of macrophages.
- **Michelle Bühler.** 29.02.2016. Prof. O. Mühlemann
NMD triggering features in the genomic RNA of Semliki Forest virus.

2015

- **Andrés Gutiérrez Garcia.** 11.12.2015. Prof. E. Moreno
Brain regeneration and behavior: Finding regulators of adult neural stem cell activation in *Drosophila*.
- **Nicole Wirth.** 01.10.2015. Prof. E. Vassella
Chemoresistance in Glioblastomas: The role of micro-RNAs.
- **Janique Selina Bertschi.** 15.05.2015. Prof. Ch. Albrecht
Modeling bovine lactation in vitro: A cytoskeletal, cell morphological and functional characterization of bovine mammary epithelial cells in various culture systems.
- **Tanja Rütli.** 09.04.2015. Prof. I. Roditi
African trypanosomes: Insights into differentiation and drug discovery.
- **Lu Hostettler.** 01.04.2015. Prof. Ch. Albrecht
Expression of membrane transport proteins in the human placenta in pathological pregnancy and under endoplasmatic reticulum stress.
- **Marco Schaffner.** 24.03.2015. Prof. V. Heussler
Visualization of the parasite plasma membrane through the entire Plasmodium life cycle.
- **Matthias Kraft.** 23.03.2015. Prof. M. Nowacki
Characterization of Early-Expressed Piwi Proteins Involved in Developmental Genome Rearrangement in *Paramecium tetraurelia*.
- **Gian-Reto Lohrer.** 16.03.2015. Prof. D. Schümperli
How Cleavage Stimulation Factor 64kDa isoforms (might) trigger neuronal differentiation.
- **Selina Niggli.** 16.03.2015. Prof. Beat Suter
Investigating a putative cell cycle control function of *Mms19* in *Drosophila*.
- **Julia Müller.** 16.03.2015. Prof. E. Moreno
The role of the extracellular matrix during cell competition and the generation of *fwe(KO; fwe^{Ubi-HA})* knock-in flies.
- **Barbara Topfel.** 16.03.2015. Prof. E. Moreno
Flower and Aging: Is the Cell Fitness Marker Flower an Applicable Biomarker for Aging in Humans?
- **Janic Teutsch.** 16.03.2015. Prof. V. Heussler
Regulation of autophagy in Plasmodium-infected hepatocytes.
- **Livia Niklaus.** 16.03.2015. Prof. V. Heussler
Autophagic Processes During The Liver Stage Of Plasmodium berghei.
- **Lorena Hulliger.** 10.03.2015. Prof. S. Saxena
SCA1 – A Search for Interaction Partners of Ataxin-1 and Studies on the Dynamics of Ataxin-1 Containing Nuclear Inclusions.

- **Marisa Cordeiro Brana.** 06.03.2015. Prof. S. Saxena
Investigating the interplay between the ERAD-UPS pathway and autophagy in amyotrophic lateral sclerosis (ALS).
- **Eva Keller.** 18.02.2015. Prof. S. Saxena
Mice with Spinocerebellar Ataxia Type 1 Exhibit Early Synaptic Dysfunctions and Alterations in the Climbing Fiber-Purkinje Cell Circuit Long Before Onset of First Symptoms.
- **Alisha Marti.** 12.02.2015. Prof. P. Meister
Developmental regulation of gene intranuclear positioning: Does location matter?
- **Christina Künzli.** 06.01.2015. Prof. S. Saxena
Characterizing the physiological role of C9orf72.
- **Stephan Brunner.** 05.01.2015. Prof. C. Largiadèr
Genotypic Characterization of Human Serum Albumin in Cirrhotic Patients.

2014

- **Jonas Heim.** 20.11.2014. Prof. E. Vassella
Identification of miR-125-specific mRNA targets by affinity purification of miRNA target mRNAs.
- **Matthias Rubin.** 05.10.2014. Prof. B. Suter
Phenylalanyl-tRNA synthetase: on the hunt for new interactors.
- **Martin Jakob.** 16.09.2014. PD Dr. T. Ochsenreiter
Quantitative description of mitochondrial dynamics during differentiation in *Trypanosoma brucei*.
- **Nadia Widmer.** 01.09.2014. Prof. N. Polacek
The ribosome as target for regulatory non-coding RNAs in yeast.
- **Benjamin Buchs.** 30.06.2014. PD Dr. M. Wolf
The Role of CXCL14 in Cell Culture Supernatants's Antimicrobial "Super Activity".
- **Nicholas Doiron.** 14.05.2014. Prof. T. Ochsenreiter
TAC102 is involved in mitochondrial DANN inheritance in *Trypanosoma brucei*.
- **Christoph Josi.** 31.03.2014. Prof. O. Mühlemann
Protein-protein interaction studies of nonsense-mediated mRNA decay (NMD) factors involved in mRNA degradation.
- **Rahel Wacker.** 24.03.2014. Prof. V. Heussler
Transcription Factor Eb, a master regulator of autophagy, in *Plasmodium berghei*-infected liver cells.
- **Lisa Maria Bracher.** 17.03.2014. Prof. D. Schümperli
Investigation of a direct protein interaction between the Survival of Motor Neuron protein and the RNA binding protein HuR.
- **Esther Griesbach.** 17.03.2014. Prof. D. Schümperli
mRNA 3' end processing: Mammalian Cleavage Factor I and the co-regulation between its subunits & The role of polyadenylated replication-dependent histone mRNAs.
- **Lea Hofer.** 17.03.2014. Prof. V. Heussler
Inner membrane complex development in *Plasmodium berghei* liver stage parasites.
- **Cristina Höhener.** 17.03.2014. Prof. M. Nowacki
Pie2, a novel protein involved in developmental genome remodeling in *Paramecium*.
- **Patricia Meyer.** 17.03.2014. Prof. E. Moreno
Cell competition markers in tissue regeneration.

- **Barbara Sele.** 17.03.2014. Prof. E. Nagoshi
Toward identification of Fer2 downstream target genes.
- **Fiona Barbara Daly.** 01.03.2014. Prof. E. Nagoshi
Function of *C. elegans* Fer2 homolog in dopaminergic neurons : a genetic study of Parkinson's Disease.
- **Sabrina Sofia Burgener.** 19.02.2014. Prof. C. Benerafa
Serp1B1 and SerpinB6 act as cytoprotective molecules against Cathepsin G-induced cell death in human and mouse pulmonary epithelial cells.
- **Lavinia Furrer.** 10.02.2014. Prof. D. Schümperli
Generating functional AAV vectors containing U7 snRNA derivatives for SMA gene therapy.
- **Lukas Muri.** 07.02.2014. Prof. S. Leib / Dr. S. Kleinlogel
Optogenetic Induction of Apoptosis in Squamous Cell Carcinoma: A novel extension of optogenetic applications to the field of cancer research.
- **Michael Perny.** 06.02.2014. Prof. S. Leib / Dr. S. Kleinlogel
Killing human melanoma with light: Optogenetics as a new therapeutic approach in melanoma skin cancer.
- **Sandra Huber.** 31.01.2014. Prof. V. Heussler
Studies on the interaction of host cell microtubules with the *Theileria* schizont surface in infected bovine macrophages.
- **Samuel Aeschlimann.** 17.01.2014. Prof. M. Nowacki
Draft genome assembly of the highly fragmented macronucleus of *Stylonychia lemnae*.

2013

- **Martin Zumoberhaus.** 27.11.2013. Prof. D. Rentsch
Charakterisierung der EMS Mutante B5.3-03g und sechs verschiedener Ökotypen von *Arabidopsis thaliana* auf Peptid Medium.
- **Olena Stübi-Bondarenko.** 25.11.2013. Prof. E. Vassella
miR-19b, miR-135b and miR-630 are implicated in the regulation of PI 3-kinase activity, migration and cell cycle control in NSCLC.
- **Ulrich Baumgartner.** 06.11.2013. Prof. E. Vassella
MicroRNA miR-125b constitutively activates the NFκB pathway by targeting NKIRAS2 and TNFAIP3 in glioma cell lines.
- **Antonietta Russo.** 21.10.2013. Prof. M. Nowacki
Characterization of MutS protein involved in *Paramecium tetraurelia* development.
- **Matthias Andreas Rölli.** 12.09.2013. Prof. V. Heussler
Identification and Characterisation of a Phospholipase Involved in *Plasmodium berghei* Egress from host Hepatocytes.
- **Daniel de Quervain.** 27.08.2013. Prof. D. Dobbelaere / Prof. I. Roditi
Establishing a stable transgenic TaC12 cell line using Transcription Activator-Like Effector Nucleases and a HIV-1 based lentiviral vector system.
- **Nicole Lüscher.** 27.08.2013. Prof. S. Gallati
Polar body diagnostics - implementation and evaluation of CTRF mutation testing.
- **Michel André Robert Mercier.** 27.08.2013. Prof. P. Bütikofer
How is the *Theileria annulata* protein p104 associated with the schizont membrane?

- **David Büchel.** 08.08.2013. Prof. E. Moreno
Genetic and functional analysis of the EF-Hand protein Azot.
- **Nicole Stöcklin.** 31.07.2013. Prof. S. Gallati
Detection of CF mutations in circulating cell-free fetal DNA.
- **Jérôme Däppen.** 27.07.2013. Prof. O. Mühlemann.
Quantitative interactomics of FUS and three of its ALS-associated mutants.
- **Aditi Singh.** 12.06.2013. Prof. M. Nowacki
Functional Analysis of Chromatin Modification in DANN elimination during development of *Paramecium tetraurelia*.
- **Colin Tièche.** 26.04.2013. Prof. E. Moreno
New insights into azot, myoglianin and the role of calcium during cell competition.
- **Bogdan Schaller.** 23.04.2013. Prof. B. Suter
Novel targets of the BicD/Egl mRNA localization machinery.
- **Stéphanie Meier.** 21.04.2013. Prof. I. Roditi
The Exon-exon junction complex in *Trypanosoma brucei*.
- **Philip Bindu.** 15.04.2013. Prof. E. Moreno
Biochemical analysis of genes involved in cell competition.
- **Simon Bärffuss.** 10.04.2013. PD Dr. A. Stocker
Spectroscopic investigation of functional characteristics of disease-causing CRALBP-mutants.
- **Urs Eugster.** 04.04.2013. Prof. P. Bütikofer
Characterization of a putative phospholipid flippase in *Trypanosoma brucei*.
- **Alessandra Messikommer.** 18.03.2013. Prof. E. Moreno
New insights into cell competition and the anterior-posterior compartment boundary in *Drosophila* wing discs.
- **Christin Hohl.** 12.03.2013. Prof. S. Gallati
Heterogeneity of Cystic Fibrosis (CF) phenotype: Influence of compound-heterozygous genotypes.
- **Silvia Desy.** 05.02.2013. Prof. A. Schneider
Import of macromolecules into mitochondria of *Trypanosoma brucei*.
- **Marc Benjamin Eric Bigler.** 25.01.2013. Prof. S. Gallati
The role of Mitochondria in Energy Requirement and Oxidative Stress of CF patients.

2012

- **Dominique Furrer.** 14.09.2012. Prof. M. Nowacki
In vitro characterization of Nowa1 protein from *Paramecium tetraurelia*.
- **Mirjam Frischknecht.** 28.08.2012. Prof. T. Leeb
Identification of a *COL11A2* mutation in Labrador Retrievers with disproportionate dwarfism.
- **Niran Maharjan.** 23.07.2012. Prof. S. Saxena
Towards understanding the interactome of misfolded SOD1 in mouse model of Amyotrophic Lateral Sclerosis (ALS).
- **Markus Muehlemann.** 30.05.2012. Prof. D. Dobbelaere
The role of the microtubule plus-end associated protein EB1 in *Theileria*-host cell interactions.
- **Lorenz Jenny.** 12.04.2012. Prof. I. Roditi
Genome-wide screens for drug resistance genes in *Trypanosoma brucei*.

- **Daniel Wüthrich.** 20.03.2012. PD Dr. T. Ochsenreiter
Regulation of translation during the differentiation from blood to insect form *Trypanosoma brucei*.
- **Roger Fricker.** 21.02.2012. Prof. D. Schümperli
Towards improving the SMA therapy by U snRNA derived tools.
- **Madlene Bohren.** 27.01.2012. Prof. V. Heussler
Characterisation of phosphodiesterase D in *Leishmania major* and *Trypanosoma brucei*.
- **Christof Bendicht Wyss.** 20.01.2012. Prof. B. Engelhardt
The Role of ALCAM (CD166) T cell Extravasation across the Blood-Brain Barrier.

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2011

- **Sandra Wltschinger.** 31.10.2011. Prof. M. Altmann
Complementation studies on chimeric forms of eukaryotic elongation factor 1a (eEF1a) in *Saccharomyces cerevisiae*.
- **Veronika Herzog.** 30.09.2011. Prof. O. Mühlemann
Mechanistic insights and disease-related aspects of nonsense-mediated mRNA decay in human cells.
- **Yimu Wang.** 31.08.2011. PD Dr. T. Ochsenreiter
Splicing or stabilit? A struggle from generation to decay between alternatively spliced tRNA synthetase isoforms in *Trypanosoma brucei*.
- **Adrian Segiser.** 24.07.2011. Prof. D. Dobbelaere
Interaction and characterization studies of *Theileria annulata* T. parva microneme-rhoptry antigen p104.
- **Romina Theiler.** 01.06.2011. Prof. D. Dobbelaere
Theileria surface proteins and their reaction with microtubule-associated proteins.
- **Simone Carla Rufener.** 31.05.2011. Prof. O. Mühlemann
Mechanical and clinical aspects of nonsense-mediated mRNA decay.
- **Carolina Duarte Garcia.** 12.05.2011. Prof. D. Schümperli
Subcellular location of insulin-like growth factor 2 antisense transcripts in mouse C2C12 cells.
- **Philipp Odermatt.** 14.04.2011. Prof. D. Schümperli
Induction of SMN exon 7 skipping by U7-derived constructs in pig and monkey cells.
- **Sven Bieli.** 02.02.2011. Prof. C. Kempf
Nuclear targeting of human parvovirus B19.
- **Judith Schranz-Zumkehr.** 17.01.2011. PD Dr. T. Ochsenreiter
Mitochondrial Kinases in *Trypanosoma brucei*.
- **Christin Bolze.** 15.01.2011. PD Dr. A. Stocker
Trypanosomal tryptophanyl-tRNA synthetases: Characterisation of novel drug targets for the treatment of sleeping sickness.
- **Stefanie Kauer.** 15.01.2011. PD Dr. A. Stocker
Cloning, Expression and Purification of Human 11-cis-Retinal Dehydrogenase.

2010

- **Ji Hye Kim.** 09.09.2010. Prof. D. Schümperli
Analysis of candidate genes of spinal muscular atrophy (SMA) pathogenesis.
- **Roman Schwob.** 04.09.2010. Prof. E. Müller
Keratinocyte migration and wound re-epithelialization in pemphigus vulgaris.
- **Dagmar Kuhn.** 31.07.2010. Prof. B. Rothen-Ruthishauser
Caveolin-mediated endocytosis as the main uptake mechanism of polymer-coated gold nanoparticles by human lung cells in vitro.