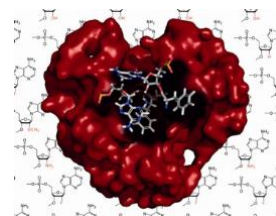


# Completed MSc theses in the specialization Biochemistry / Chemical Biology



## 2025

- **Saskia Meier.** 18.03.2025. Prof. N. Polacek  
Identification of small RNAs involved in bacterial fitness.
- **Melanie Küffer.** 04.03.2025. PD Dr. Carlos Ros  
Interaction of human parvovirus B19 with placental trophoblasts.
- **Stefanie Yeung.** 03.03.2025. Prof. D. Fotiadis & Prof. T. Lemmin  
Computational and Experimental Deorphanisation of the Membrane Transporter GosU.
- **Reto Czekalla.** 18.02.2025. Prof. P Luciani  
Lipid Mesophases for the administration of monoclonal antibodies to treat Ulcerative Colitis.

## 2024

- **Dominic Andenmatten.** 17.12.2024. PD Dr. E. Karousis  
Using Nsp1 as a tool to explore and combat the early steps of corona-virus infections
- **Sarah Egli.** 13.09.2024. Prof. O. Mühlemann  
Investigating the interactions and phosphorylation of SMG5 and SMG7.
- **Priyanka Thambythurai.** 30.08.2024. Prof. O. Mühlemann  
*In vitro* Investigation of Nonstop mRNA Decay.
- **Sarah Soom.** 30.08.2024. Prof. Ch. von Ballmoos  
ATP synthesis from air using a highly efficient oxygen-insensitive hydrogenase Huc.
- **Emilie Bäumlín.** 06.08.2024. Dr. E. Karousis  
Uncoupling the Functional Roles of Coronavirus Nsp1.
- **Chiamaka Onyia.** 27.07.2024. Prof. P. Vermathen  
Determination of Biomarkers in Liver Diseases using Ex vivo and In vivo NMR.
- **Thomas Robyr.** 16.07.2024. Prof. C. Largiader  
Establishment of a new method using dried blood spots for enabling a precision medicine approach to 5-Fluorouracil therapy and DPD enzyme activity assessment in plasma.
- **Fabienne Mollet.** 03.07.2024. Prof. S. Leidel  
Investigating the Impact of the Rps23 K62R Mutation on  $mcm^{5s^2}U_{34}$  deficient *Saccharomyces cerevisiae*.
- **Anojh Thevarasa.** 01.06.2024. Prof. M. Hediger  
Identification of solute carriers involved in drug resistance mechanisms in colorectal cancer.
- **Anissa Bartetzko.** 13.05.2024. Prof. B. Lundström-Stadelmann  
Two-sided approach for drug discovery against alveolar echinococcosis: Screening of the MMV Pandemic Response Box and characterization of the anaerobic energy metabolism in *Echinococcus multilocularis* as a potential therapeutic target.
- **Valentina Mulaku.** 30.04.2024. Prof. D. Fotiadis  
Assembly and characterization of an engineered light-driven proton pump system.
- **Noëlle Arnold.** 30.04.2024. Prof. Ch. von Ballmoos  
Interaction between Lefleuganan and Lipid Bilayers: Mechanism and Structural Requirements.

- **Kaja Stalder.** 07.02.2024. Prof. F. Paradisi  
Biocatalytic Synthesis of L-Pipecolic Acid by a Lysine Cyclodeaminase: Batch and Flow Reactors.
- **Devon Jakob.** 26.01.2024. Prof. A. Stocker  
Evolutionary Dive into the Retinoid Binding Pocket of the Cellular Retinaldehyde Binding Protein.
- **Ana Lucic.** 25.01.2024. Prof. P. Luciani  
Vaginal liposomal hydrogel for local pain management.

## 2023

- **Daja Krummenacher.** 15.09.2023. Prof. J. Furrer  
Phospholipid Bicelles as Topical Delivery Systems for Porphyrinic Photosensitizers.
- **Sofia Fulgencio.** 11.09.2023. Dr. A. Frei/Prof. J-L. Reymond  
Synthesis and Antibacterial Profiling of Rhenium(I) Complexes.
- **Stefan Täuber.** 05.05.2023. Prof. Ch. von Ballmoos  
Ionizable Charge Mediated Fusion in Minimal Bio-Energetic Membrane Mimicking Systems.
- **Ana-Marija Stanic.** 30.04.2023. Prof. Ch. von Ballmoos  
Establishment of CybB (b561) orientation in artificial membranes by *in vitro* attachment of a large soluble unit & additional enzyme characterizations.
- **Lukas Lötscher.** 04.04.2023. Prof. N. Polacek  
Spliced leader RNA shortening upon nutritional starvation stress in *Trypanosoma brucei*.
- **Sarah Ochsenbein.** 27.03.2023. Prof. V. Thiel  
Zoonotic tales of HCoV-229E and MERS-CoV: CoV evolution at the interface of camels and humans.
- **Sofia Lena Hutter.** 20.03.2023. Prof. F. Paradisi  
Construction of a Bi-Functional Fusion Protein for Enhanced *in situ* Regeneration of Alanine for Transaminase Catalyzed Reactions.
- **Carmela Esposito.** 16.03.2023. Prof. A. Schneider  
Insights into the function of the ambiguous TIM complex components TbTim50 and TbTim54 in *Trypanosoma brucei*.
- **Ustina Martysiuk.** 09.03.2023. Prof. J.-M. Nuoffer  
Bioenergetic evaluation of MDH2 deficiency in fibroblasts.
- **Nik Lüpold.** 08.02.2023. Prof. F. Paradisi  
Biosynthesis of Acylated Building Blocks for Industrial Applications Using an Acyl Transferase from *M. Smegmatis*.
- **Mira Hasler.** 01.02.2023. Prof. B. Zuber  
Reconstitution of the Synaptic Vesicle Machinery and Development of a New *InVitro* Membrane Labelling Method  
Building Blocks for Industrial Applications Using an Acyl Transferase from *M. Smegmatis*.

## 2022

- **Deema Alsalih.** 15.09.2022. Prof. T. Ochsenreiter  
Characterization of unknown proteins at the antipodal sites.
- **Laura Monte.** 13.09.2022. Prof. F. Paradisi  
Synthesis of PLP analogues and production of a semi-synthetic transaminase.

- **Sheena Chaudhry.** 30.06.2022. Prof. B. Lundström-Stadelmann  
Drug testing against *Echinococcus multilocularis*.
- **Benaja Stolz.** 22.06.2022. Prof. A. Stocker  
 $\alpha$ -Tocopherol transfer protein oligomerization and potential physiological implications.
- **Stephanie Eschenbacher.** 23.05.2022. Prof. D. Fotiadis  
Expression and Characterization of Two Bacterial Orphan Membrane Proteins.
- **Yannick Bärtschi.** 30.04.2022. Prof. Ch. von Ballmoos  
Impact of Lateral Distance between *E. coli* ATP Synthase and Cytochrome bo<sub>3</sub> Oxidase on ATP Synthesis Rate
- **Michael Cibien.** 30.04.2022. Prof. P. Luciani  
Bioactive vesicles-in-hydrogel for the treatment of inflammatory bowel disease.
- **Ana Nikolov.** 31.03.2022. Prof. Ch. von Ballmoos  
Membrane protein reconstitution: a novel method and its application in the cell-mimicking ATP producing system.
- **Laila Fankhauser.** 31.03.2022. Prof. N. Polacek  
tRNA Fragments in Stationary Phase *E. coli*.
- **Jérémie Reusser.** 21.03.2022. Prof. F. Paradisi  
Tryptophanase and Tryptophane decarboxylase – a biocatalytic path to tryptamines.
- **Micha Marti.** 15.03.2022. Prof. Ch. von Ballmoos  
A drying approach to Membrane Protein Reconstitution into Giant Unilamellar Vesicles & Advances towards membrane-proximity resolved pH determination.
- **Quentin Bugnon.** 04.02.2022. Prof. J. Furrer / PD Dr. M. Hilty  
SAR study of the antibacterial activity of Thiolato-Bridged Dinuclear Ruthenium(II)-Arene complexes.
- **Jana Leuenberger.** 03.02.2022. Prof. B. Zuber  
Investigating the liquid-liquid phase like properties of Rab3A.
- **Alina Castillo.** 21.01.2022. Prof. J.-M. Nuoffer  
Evaluation of MitoEAGLE protocols in different mitochondrial deficient fibroblast cell lines.
- **Jana Leuenberger.** 21.01.2022. Prof. J.-M. Nuoffer  
Bioenergetic and metabolomic characterization of mitochondrial defects in human skin fibroblasts under galactose stress condition using Seahorse real-time cell metabolic analyzer and <sup>1</sup>H HR-MAS NMR spectroscopy.
- **Patrick Roth.** 14.01.2022. Prof. D. Fotiadis  
Functional and structural characterization of the glucose-specific PEP-phosphotransferase system transporter.

## 2021

- **Nina Kläy.** 15.09.2021. Prof. O. Mühlemann  
Human SMG6 interacts with the 80S ribosome via its unstructured N-terminal domain.
- **Calvin Klein.** 06.09.2021. Prof. F. Paradisi  
Characterization of a Thymidine Phosphorylase for the Synthesis of Nucleoside Analogs.
- **Audrey Galé.** 02.09.2021. Prof. H. von Tengg-Kobligk  
Cellular uptake of Trithiolato-Bridged Dinuclear Ruthenium(II) complexes and cisplatin in A24 cancer cells and related resistant cell lines.

- **Sven Baumann.** 17.08.2021. Prof. em. M. Hediger  
Homology-based 3D structure of human ZIP8 and characterization of the metal binding site.
- **Philip Stettler.** 29.06.2021. Prof. A. Schneider  
Insights into TAC biogenesis: TAC40, TAC42 and TAC60 form preassembled complexes & Protein interaction networks postulate two novel TIM complex-associated factors in *Trypanosoma brucei*.
- **Gabriel Klesse.** 03.06.2021. Prof. em. M. Hediger  
Investigating mitochondrial solute carriers and their role in calcium flow across membrane contact sites.
- **Roman Memedovski.** 31.05.2021. Prof. B. Lundström-Stadelmann  
Investigation of the mechanism of action of novel potential chemotherapeutic agents against the parasite *Echinococcus multilocularis*.
- **Stefan Moning.** 30.04.2021. Prof. Ch. von Ballmoos  
Proteoliposome- Orientation of model membrane proteins in liposomes.
- **Stephan Berger.** 30.04.2021. Prof. Ch. von Ballmoos  
Proteoliposome-based in vitro characterization of the human sodium/hydrogen exchanger NHA2 expressed in HEK293 cells.
- **Nicolas Fabian Küng.** 30.04.2021. Prof. U. Amstutz  
Donor-Derived Cell-Free DNA in Solid Organ Transplant Recipients: Focus on Detection in Urine, and on Optimization and Comparison of Quantification Methods.
- **Tobias Kämpfer.** 22.04.2021. Prof. P. Vermathen  
1H HR-MAS NMR Based Metabolic Profiling of Cells in Response to Treatment with the Photosensitizer Chlorin e4 with and without Polymeric Carrier Systems.
- **Valentina Pecoraro.** 08.04.2021. Prof. N. Polacek  
Ribosome-associated ncRNAs in human cells.
- **Julian Imhof.** 16.03.2021. Prof. D. Fotiadis  
Conversion of chemical energy into an electrochemical potential by an engineered Proteorhodopsin-NanoLuc liposome system
- **Nina Krauer.** 12.03.2021. Prof. N. Polacek  
The ribosome as a hub - ribosomal RNA expansion segments and their role in factor recruitment.
- **Mauro Fischli.** 11.03.2021. Prof. A. Schneider  
RNP Surveillance and Maturation - Insight into Mitoribosomal Quality Control in *Trypanosoma brucei*.
- **Julia Locher.** 08.03.2021. Prof. D. Fotiadis  
Expression, clone selection, and functional characterization of SLC16 family transporters in *Pichia pastoris*.
- **Thierry Paschoud.** 21.02.2021. Prof. G. Konstantinidou  
Lipid metabolism mediated vulnerabilities in non-small cell lung cancer.
- **Cornelia Bircher.** 19.02.2021. PD Dr. C. Ros  
Erythroparvovirus VP1u. The Conserved RBD in the VP1u of Erythroparvovirus determines the erythroid-specific internalization.
- **Lena Grollmus.** 25.01.2021. Prof. O. Mühlemann  
Generating human iPSCs stably expressing an inducible system for conditional knockdown and rescue of NMD-factors.
- **Raphael Zurbriggen.** 15.01.2021. Prof. B. Lundström Stadelmann  
Inhibition of the *Echinococcus multilocularis* energy metabolism.

## 2020

- **Apimanju Jeyaprakash.** 12.10.2020. Prof. S. Schürch  
Investigation of the interaction and fragmentation mechanisms of molybdocene dichloride with biological ligands.
- **Mariia Borsuk.** 02.08.2020. PD Dr. J.-M. Nuoffer  
Modelling Urea Cycle Disorders and Evaluation of New Therapeutic Approaches by Using Patient-Derived Induced Pluripotent Stem Cell- Hepatocytes.
- **John Marc Sigrist.** 17.05.2020. Prof. A. Stocker  
Evolutionary Investigation of the Cellular Retinaldehyde Binding Protein (CRALBP) in different Taxa.
- **Michelle De Lorenzo Cardinal.** 26.04.2020. Prof. N. Polacek  
Generation of tethered ribosomes in *Saccharomyces cerevisiae*.
- **Jonas Luginbühl.** 19.04.2020. Prof. I. Roditi  
Genes required for adaptation and transmission in African trypanosomes.
- **Sarah Krummenacher.** 17.04.2020. Prof. Ch. von Ballmoos  
Tweaking the redox potential of cells. Characterization of the transhydrogenase from *N. cinerea* and *E. coli*.
- **Lukas Rimle.** 17.04.2020. Prof. Ch. Von Ballmoos  
Development of a novel method to determine membrane protein orientation in a cell mimicking system.
- **Liya Arackal.** 02.04.2020. PD Dr. J.-M. Nuoffer  
Establishment of a UPLC-MS/MS method for quantification of glycosaminoglycan disaccharides as biomarkers for mucopolysaccharidosis.
- **Marcel Sigrist.** 01.04.2020. Prof. B. Zuber  
Purification of Nicotinic Acetylcholine Receptors for Structural Analysis by Cryo-EM.
- **Lukas Probst.** 04.03.2020. PD Dr. C. Ros  
Receptor interactions of parvovirus B19 on the surface of erythroid cells.
- **Christoph Meyer.** 14.02.2020. PD Dr. J. Furrer  
Impact of drug delivery systems on cell-uptake and photo-physical properties of chlorin e6-based photosensitizers.
- **Martyna Kazmierczak.** 10.02.2020. Prof. Ch. Albrecht  
Establishment and characterization of amino acid transport deficient placental BeWo cells generated by CRISPR/Cas9.
- **Nadine Noti.** 03.02.2020. PD Dr. J.-M. Nuoffer  
Investigating the importance of the Q-cycle in cellular bioenergetics and mitochondrial disorders.

## 2019

- **Tobias Blatter.** 01.11.2019. Prof. C. von Ballmoos  
The quinone binding site of cytochrome b561 from *Escherichia coli*.
- **Meike Wieser.** 12.09.2019. Prof. C. von Ballmoos  
Towards a single-molecule method to determine the orientation of *E. coli* bo3 oxidase.
- **Martin Schori.** 30.05.2019. Prof. C. von Ballmoos  
Lipid-dependent activity of NDH-2.

- **Adrian Hauri.** 17.05.2019. Prof. A. Stocker  
In search of the receptor of alpha-tocopherol transfer protein.
- **Livia Grimm.** 30.04.2019. PD Dr. U. Amstutz  
Identification of associations between classical HLA genes and metamizole-induced neutropenia using targeted next-generation sequencing.
- **Anna-Maria Stocker.** 02.04.2019. Prof. B. Zuber  
Production of covalently circularized nanodiscs for structural studies of pore-forming protein in lipid bilayer.
- **Philipp Müller.** 01.04.2019. Prof. Ch. von Ballmoos  
Characterization of the eukaryotic sodium-proton exchanger NHA2
- **Tatjana Zoller.** 29.03.2019. Prof. R. Johnson  
Identification of a Cytosolic Localization Domain in the LncRNA RNaseH1 AS1.
- **Marina Troxler.** 19.03.2019. Prof. M. Hediger  
Structure-function studies of the human divalent metal ion transporter 1.
- **Andrea Marti.** 22.02.2019. PD Dr. C. Ros  
Human parvovirus B19 – An insight into the molecular mechanisms governing antibody-dependent neutralization and virus uncoating.
- **Fabian Burri.** 04.02.2019. PD Dr. J.-M. Nuoffer  
Evaluation of ROS and scavenger systems in mitochondrial disorders.

## 2018

- **Kevin Maina Muli.** 28.09.2018. Prof. A. Huwiler  
Mechanisms of regulation of the profibrotic connective tissue growth factor (CTGF) by protein kinase C in fibroblast cultures.
- **Damian Nydegger.** 27.08.2018. Prof. M. Hediger  
Impact of oncogenic KRAS mutations on the expression of neutral amino acid transporters and their role in colon cancer progression.
- **Melanie Waser.** 14.05.2018. Prof. N. Polacek  
Functional characterization of a non-coding RNA in the haloarchaeon *Haloferax volcanii*.
- **Lukas-Adrian Gurzeler.** 24.04.2018. Prof. O. Mühlemann  
*In vitro* study of translation termination in the context of nonsense-mediated mRNA decay.
- **Roman Mahler.** 13.04.2018. Prof. C. von Ballmoos  
Towards a synthetic respiratory chain: Functional co-reconstitution of bc1 complex and cytochrome c oxidase from *Rhodobacter sphaeroides*.
- **Aymar Abel Ganguin.** 25.03.2018. Prof. C. von Ballmoos  
Towards an artificial respiratory chain.
- **Corinne van Känel.** 22.03.2018. Prof. A. Schneider  
Elucidating the import motor for mitochondrial protein import in *Trypanosoma brucei*.
- **Claudia Eichenberger.** 22.03.2018. Prof. A. Schneider  
Elucidating Characterization of a putative MICOS complex in *Trypanosoma brucei*.
- **Julia Schnider.** 19.03.2018. Prof. O. Mühlemann  
Endogenous tagging of UPF1.
- **Luca Dick.** 19.03.2018. Prof. A. Hemphill / Dr. B. Lundström-Stadelmann  
New treatments against alveolar echinococcosis.

- **Sergio Di Pancrazio.** 14.03.2018. Dr. M. Ruepp / Prof. O. Mühlemann  
Determining the essential autoregulatory domain of Fused in Sarcoma and their role in Amyotrophic Lateral Sclerosis.
- **Luca Degano.** 14.03.2018. Dr. M. Ruepp / Prof. O. Mühlemann  
Towards establishing in vitro disease models of Amyotrophic Lateral Sclerosis and Spinal Muscular Atrophy & Investigating a proposed interaction of FUS with LRSAM1 in health and disease.
- **Pascal Bartlome.** 12.03.2018. Prof. A. Stocker/Prof. R. Häner  
Crystallographic analysis of phenanthrene-modified DNA in complex with two binding domains of BpuJI endonuclease.
- **David Müller.** 09.02.2018. Prof. M. Bachmann  
Isolation of a human monoclonal antibody against IL-1beta derived from an IL-1beta-immunized type 2 diabetes patient by phage display.
- **Nathalie Fischer.** 31.01.2018. Prof. D. Fotiadis  
Optimisation of a chemically switchable light-driven proton pump and assessment of a fluorescent thiol-reagent as molecular switch
- **Jan Bieri.** 16.01.2018. PD Dr. C. Ros  
The role of globoside in parvovirus B19 infection.

## 2017

- **Michel Boinay.** 14.09.2017. PD Dr. C. Ros  
Cutthroat trout Virus - Characterization of a pseudo-envelope virus.
- **Sreoshee Rafiq.** 31.07.2017. Prof. I. Roditi  
African Trypanosomes: Insights into differentiation and drug discovery.
- **Michel Fasnacht.** 16.06.2017. Prof. N. Polacek  
Investigation of a potential ribosome-associated noncoding RNA.
- **Laurent Gillioz.** 31.03.2017. Prof. O. Mühlemann  
Methods for characterization of mRNP composition.
- **Yannic Müller.** 17.03.2017. Prof. A. Stocker  
Isolation and characterization of a respiratory supercomplex in *Caldalkalibacillus thermarum* strain TA2.A1.
- **Dominic Schärer.** 17.03.2017. Prof. A. Stocker  
Expression and crystallisation of Nostoc Carotenoid Cleavage Dioxygenase (NosCCD).
- **Rahel Kräuchi.** 14.03.2017. Prof. O. Mühlemann / Dr. M. Ruepp  
A novel autoregulatory mechanism of Fused in Sarcoma.
- **Beatrice Steiner.** 14.03.2017. Prof. A. Stocker  
The role of CRALBP in pigment regeneration in the eye.
- **Simon Metzger.** 14.03.2017. Dr. M. Ruepp / Prof. O. Mühlemann  
The binding orientation of epibatidine at the alpha7 nACh receptor & Towards understanding the binding of TFB-TBOA to the glutamate transporter EAAT2
- **Nicolas Dolder.** 10.03.2017. Prof. C. von Ballmoos  
Monitoring transcription by FRET to investigate the membrane-bound transcription regulator BcrR.
- **Alessio Loffreda.** 23.02.2017. Prof. C. Kempf / PD Dr. C. Ros  
Parvovirus B19: Early intracellular steps associated with nuclear entry.

- **Sara Bonetti.** 31.01.2017. Prof. D. Fotiadis  
Functional Characterisation of a Bacterial Solute Transporter using Thermostability and Uptake Assays.
- **Damian Hertig.** 05.01.2017. PD. Dr. J. Furrer / PD Dr. J.-M. Nuoffer  
Metabolomic analysis of OXPHOS deficient and normal fibroblasts with Seahorse-live cell metabolic analyser and HR-MAS-NMR.

## 2016

- **Thomas Roder.** 01.08.2016. Prof. M. Erb  
The Role of *Melolontha melolontha* Glucosidases in the Interaction with a Major Defensive Metabolite of *Taraxacum officinale*.
- **Eveline Jäger.** 01.07.2016. Prof. C. von Ballmoos  
Oligomerization study of the membrane-bound transcription regulator BcrR.
- **Stephan Engel.** 31.05.2016. Prof. O. Mühlemann  
Establishing a fluorescence-based screening assay to identify new mammalian NMD factors.
- **Claudia Castro Jaramillo.** 31.05.2016. Prof. O. Mühlemann / Dr. S. Simon  
Establishment of a cellular FcRn transcytosis assay and its correlation with in vivo pharmacokinetics of antibodies.
- **Kevin Kammermann.** 22.04.2016. Prof. N. Polacek  
Investigating the minimal vault RNA sequence required for mediating the anti-apoptotic effect of vault RNA1-1.
- **Christoph Wenger.** 22.04.2016. Prof. A. Schneider  
Characterization of three novel tiny Tims in *Trypanosoma brucei*.
- **Sabina Deutschmann.** 14.04.2016. Prof. C. v. Ballmoos  
The ATP synthase of *Vibrio cholerae* - the missing link between proton and sodium bioenergetics?
- **Daniel Jutzi.** 01.04.2016. Prof. O. Mühlemann / Dr. M. Ruepp  
Uncovering the RNA-binding specificity of Fused in Sarcoma.
- **Sabine Rihs.** 01.04.2016. Prof. J. Gertsch  
ABHD12 - Characterization of the enzyme and novel inhibitors.
- **Mathilde Willemin.** 12.03.2016. Prof. A. Schneider  
Novel components required for mitochondrial DNA segregation in *Trypanosoma*.
- **Priska Auf der Maur.** 01.03.2016. Prof. M. Tschan  
DAPK2 in HER2 inhibitor-induced cell death and autophagy pathways.
- **Nicolas Wenger.** 29.02.2016. Prof. M. Hediger  
Screening of Orai isoform-specific modulators and redox regulation of STIM2.
- **Thi Thu Hang Chau.** 23.02.2016. Prof. R. Häner  
Protein co-crystallization of chromophore-modified DNA.
- **Marcel Trefny.** 14.02.2016. Prof. H-U. Simon  
Mitochondria and cellular energetics of human dermal stem cells.



## 2015

- **Melanie Brügger.** 02.12.2015. Prof. B. Engelhardt  
Cytoprotective function of intracellular serpins in mast cells.
- **Sévérine Vock.** 10.11.2015. Prof. A. Schneider  
Universally conserved mitochondrial outer membrane protein *TbGem1* is a mitochondrial morphology factor in *T. brucei*.
- **Andreas Hemmerle.** 11.03.2015. PD Dr. A. Stocker  
The role of CRALBP in the chemistry of vision.
- **Jessica Willi.** 27.08.2015. Prof. N. Polacek  
Atomic mutagenesis of the ribosome: oxidation of conserved bases in the peptidyl transferase center.
- **Jathana Vaithilingam.** 03.08.2015. PD Dr. A. Stocker  
Investigations on the transport function of SPF.
- **Chiarina Di Tommaso.** 03.07.2015. Prof. C. Kempf  
The Lock and Key Principle of B19V.
- **Basil Gränicher.** 01.07.2015. Prof. E. Sigel  
ClC Chloride Channels and Antiporters in *Trypanosoma brucei*.
- **Joel Bourquin.** 24.06.2015. Prof. O. Mühlemann  
Cross-linking and immunoprecipitation study with a helicase deficient UPF1 mutant.
- **Julia Bruggisser.** 15.06.2015. Prof. A. Schneider  
Biogenesis of an outer mitochondrial membrane protein in *T. brucei*.
- **Chantal Geiser** 04.05.2015. PD Dr. S. Schürch  
Isolation of Dystrophin from Murine Muscle Tissue and Characterization using LC-MS/MS.
- **Mirko Stauffer.** 14.04.2015. Prof. D. Fotiadis  
Heterologous Expression and Functional Analysis of Membrane Transporters in *Pichia pastoris* and *Escherichia coli*.
- **Katrin Freiburghaus.** 02.04.2015. Prof. E. Vassella  
Functional analysis of dihydropyrimidine dehydrogenase variants – bridging the gap between genotype and phenotype.
- **Stephan Egger.** 31.03.2015. Prof. J.-L. Reymond  
Design, Synthesis and Application of Bicyclic Peptides.
- **Astrid Wiederkehr.** 23.03.2015. Prof. E. Vassella  
Impact of DAXX Loss on Cell Survival and DNA Methylation in Pancreatic Neuroendocrine Tumours.
- **Stephan Kammer.** 16.03.2015. PD Dr. A. Stocker  
Determination of the Interaction Energies of  $\alpha$ -TTP Mutants.
- **Christoph Matti.** 11.03.2015. PD Dr. R. Lyck  
The role of the CXCL12-CXCR4-CXCR7 axis in the extravasation of CD4<sup>+</sup> T effector memory cells across the blood brain barrier.
- **Antonio Gusberti.** 11.03.2015. Prof. M. Altmann  
The importance of the C-terminus of p20.
- **Lukas Schneider.** 09.03.2015. Prof. N. Polacek  
Ribosome associated non-coding RNAs and their functional roles on the translational level.

- **Seline Züricher.** 13.02.2015. Prof. C. Kempf  
The role of ubiquitin in internalization and sorting of MVM.
- **Daniel Hauser.** 10.02.2015. PD Dr. R. Lyck  
Molecular mechanisms allowing cancer cells to breach the Blood-Brain-Barrier.
- **Stephan Hirschi.** 10.02.2015. Prof. D. Fotiadis  
Electron crystallographic structure determination and functional applications of membrane proteins.
- **Yulia Gonskikh.** 29.01.2015. Prof. N. Polacek  
Small non-coding RNA associated with the ribosome in *T. brucei*.

## 2014

- **Jolanda Stettler.** 01.10.2014. Prof. O. Mühlemann  
Characterization of the interaction of FUS with U1 snRNP and U11/12 di-snRNP.
- **Mark Andreas Rau.** 22.08.2014. Prof. J. Gertsch  
The search for plant-derived substances modulating the endocannabinoid system.
- **Aurelio Leandro Jenni.** 21.08.2014. Prof. P. Bütikofer  
Degradation of N-acylethanolamines as a Source of Ethanolamine in *Trypanosoma brucei*.
- **Melanie Glauser.** 31.07.2014. Prof. A. Schneider  
Gem1, a universally conserved mitochondrial outer membrane protein, important for mitochondrial morphology in *T. brucei*.
- **Michael Herren.** 28.07.2014. PD Dr. A. Stocker  
Expression and crystallization of NosCCD, a Carotenoid Cleavage Dioxygenase of Nostoc.
- **Thomas Schick.** 27.07.2014. Prof. A. Stocker  
Structural studies on Aurora A kinase inhibitors.
- **Monika Christen.** 16.06.2014. PD Dr. A. Stocker  
Structural and Biophysical Investigations on Superantigen Protein Factor in Complex with its Natural Ligands Squalene and 2,3-Oxidosqualene.
- **Maurus Beeli.** 01.04.2014. Prof. C. Leumann  
Synthesis and base pairing properties of 5-hydroxy-2'-deoxycytidine.
- **Evelyn Hurni.** 21.03.2014. Prof. E. Sigel  
Relative positioning of the gamma2-subunit to ligands of the benzodiazepine-binding site of GABAA-receptors.
- **Nicola Rusca.** 13.03.2014. Prof. N. Polacek  
Atomic mutagenesis of the ribosome: Elucidation of the E-site base pair 2395-2421.
- **Leander Wyss.** 10.03.2014. Prof. N. Polacek  
Genomic knock-out of ribosome-associated RNAs in the archaeon *H. volcanii*.
- **Andrea Marco Amati.** 23.01.2014. Prof. M. Hediger  
The influence of amino acid transporter SNAT2 (SLC38A2) in colon cancer.
- **Marcus von Nordheim.** 08.01.2014. Prof. C. Kempf  
Requirements for binding and internalization of parvovirus B19.

## 2013

- **Sanja Kostic.** 20.12.2013. Prof. C. Leumann  
Synthesis and development of new tricyclo-thymine analogue for improving cellular uptake of oligonucleotides.
- **Olivier Biner.** 25.10.2013. Prof. J. Schaller  
Isolation and characterisation of a hyaluronidase from the venom of the spider *Cupiennius salei*.
- **Sofia Pavlidou.** 30.09.2013. Prof. B. Engelhardt  
Role of leukocyte adhesion molecule ICAM-1 during cerebral ischemia and reperfusion.
- **Anna Cristina Albisetti.** 14.06.2013. Prof. A. Schneider  
Myristoylation und palmitoylation determine the subcellular localization of TRL.
- **Berlini Nadesalingam.** 14.06.2013. Prof. B. Engelhardt  
Role of endothelial ALCAM for extravasation of encephalitogenic CD4+ T cells across the blood brain barrier.
- **Patrick Sproll.** 07.06.2013. PD. Dr. A. Pandey  
In-silico analysis of P450 oxidoreductase single nucleotide polymorphisms.
- **Martin Schmid.** 20.05.2013. Prof. A. Schneider  
Phenotypical characterization of Metaxins and TbTim17 in *Trypanosoma brucei*.
- **Matthias Dreier.** 18.05.2013. Prof. O. Mühlemann  
Generation of stable cell lines for investigation of nuclear nonsense-mediated mRNA decay (NMD) effects by live-cell imaging.
- **Mirelle Borges Dias Schnetzer.** 04.05.2013. Prof. M. Altmann  
Influence of p20 on protein synthesis in *S. cerevisiae*.
- **Maryam Syed.** 26.04.2013. Prof. O. Mühlemann  
Therapeutic suppression of nonsense mutations in thrombotic thrombocytopenic purpura: evaluation of the two readthrough promoting drugs ataluren and amlexanox.
- **Michel Plattner.** 15.03.2013. PD Dr. A. Stocker  
Changing stereo specificity of alpha tocopherol transfer protein.
- **Aurélie Allemann.** 03.03.2013. Prof. C. Kempf  
Killing MVM softly.
- **Remo Leisi.** 06.02.2013. Prof. C. Kempf  
Parvovirus B19: A transformer enters the cell.
- **Ricardo Visini.** 24.02.2013. Prof. J-L. Reymond  
Investigation of mutants of PA-II to dinf monomeric PA-IL.
- **David Kalbermatter.** 18.02.2013. PD Dr. D. Fotiadis.  
Biochemical and Structural Characterization of the glucose PTS Transporter IIC Domain from *Escherichia coli*.

## 2012

- **Sarron Sellappah.** 14.12.2012. Prof. J. Schaller  
Recombinant expression and structural studies of CsTx-20, a peptide from the venom of the spider *Cupiennius salei*.
- **Lukas Hofmann.** 30.11.2012. PD Dr. A. Stocker  
Structural Investigation of Supernatant Protein Factor and its Natural Ligands.

- **Nicolas Yannic Langenegger.** 17.09.2012. Prof. J. Schaller  
Isolation and characterisation of the CSTX-13 processing protease.
- **Valentin Flury.** 14.05.2012. Prof. O. Mühlemann  
Quantitative interactomics of UPF1, a key player in nonsense-mediated mRNA decay (NMD).
- **Nico Ruprecht.** 17.02.2012. Prof. C. Kempf  
B19 virus: My journey into the cell.
- **Raphael Wolfisberg.** 17.02.2012. Prof. C. Kempf  
Changing the surface of parvovirus B19.

## 2011

- **Markus Probst.** 31.12.2011. Prof. R. Häner  
The DNA three-way junction as a mould for tripartite chromophore assembly.
- **Stefanie Sophie Buschor.** 16.08.2011. Prof. J-L. Reymond  
Synthesis and biological testing of cell penetrating peptide dendrimers.
- **Stefanie Hofer-Reyes.** 15.08.2011. Prof. S. Christen  
Changes in hippocampal BDNF levels following experimental pneumococcal meningitis in relation to infectious dose.
- **Isabelle Glauser.** 14.03.2011. Prof. A. Schneider  
Tyrosyl-tRNA synthetase and Tyrosyl-tRNA synthetase-like proteins in *Trypanosoma brucei*.
- **Stefanie Graeter.** 01.03.2011. Prof. M. Hediger  
The role of the human vanilloid transient receptor potential calcium channel hTRPV6 in prostate cancer development.
- **Walter Aeschimann.** 21.01.2011. PD Dr. A. Stocker  
Changing the substrate specificity of  $\alpha$ -TTP by model inspired site-directed mutagenesis.

## 2010

- **John Choy.** 13.12.2010. PD Dr. A. Stocker  
Study of subcellular localization of alpha-tocopherol transfer protein and supernatant protein factor.
- **Simon Middendorp.** 18.11.10. Prof. E. Sigel  
Possible contribution of the delta subunit to the formation of an agonist site in GABA (A) receptors.