GCB Symposium 2018 | Program: Morning Sessions

08h30–09h45 | Talks I & Poster Flash I

«Biological Systems» | Department of Physiology, Room 258, 2nd floor

Chair: Prof. Dr. Petra Roosje, Department of Clinical Veterinary Medicine, Division of Dermatology, Vetsuisse Faculty Bern

«Biological Systems» Talks I | T-001 to T-004

08h30 Seiraina Beyeler, Department for BioMedical Research, Pulmonary Medicine, and Department of Pulmonary Medicine, Inselspital, Bern University Hospital

T-001 Attenuated Adverse Health Effects of Occupational Exposure to Multi-Walled Carbon Nanotubes in Chronic Obstructive Pulmonary Disease Monitored in vitro and in vivo

08h45 Joaquim Blanch Salvador, Department of Physiology

T-002 IP3-Induced SR-Ca2+ Release Functions as an Anti-Arrhythmogenic Mechanism in Ventricular Myocytes

09h00 Norbert Krebs, Department of Physiology

T-003 Neuropathic Pain Impairs Spike-Timing Dependent Long-Term Depression in Layer 5 Pyramidal Neurons of the Anterior Cingulate Cortex

09h15 Nicolas Melin, Department for BioMedical Research, Visceral and Transplantation Surgery

T-004 Radiation Induced Liver Disease Mouse Model: A Promising Step Towards Understanding of Normal Liver Tissue Toxicity

«Biological Systems» Poster Flash I

09h30 Presenters and Poster Numbers:

A-001 Maria Arnold
A-005 Romina Cabra
A-006 Etienne de Coulon
A-009 Momota Rani Debi
A-012 Laura Facchin
A-013 Carolina Garcia-Poyatos
A-015 Jacopo Gavini
A-007 Echrak Hichri

For titles of presentations, see Poster Session A, pp. 13-14.
Chair: Prof. Dr. Dominik Obrist, ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE)

«Biomedical Engineering» Talks I | T-005 to T-008

08h30 Ioannis Vogiatzis Oikonomidis, Institute of Anatomy, and Swiss Light Source, Paul Scherrer Institute, Villigen
T-005 A 3D Microscopic Journey to the Lung: One of the Most Complexly Structured Mammalian Organs

08h45 Elena Kreutzer, Department of Physiology
T-006 Natural Gradient for Spiking Neurons

09h00 Farouk Chrif, ARTORG Center for Biomedical Engineering Research, Gerontechnology and Rehabilitation Group, and Institute for Rehabilitation and Performance Technology, Bern University of Applied Sciences
T-007 Investigation of Cardiopulmonary Exercise Testing Using a Dynamic Leg Press and Comparison with a Cycle Ergometer

09h15 Stergios Christodoulidis, ARTORG Center for Biomedical Engineering Research, Diabetes Technology
T-008 Segmentation of Pathological Lung Tissue Using Deep Convolutional Neural Networks

«Biomedical Engineering» Poster Flash I

09h30 Presenters and Poster Numbers:
   A-021 Lukas Bereuter
   A-025 Simon Habegger
   A-028 Serife Seda Kucur
   A-030 Pascal Leimer
   A-024 Kristin Völk
   A-031 Michael Müller

For titles of presentations, see Poster Session A, pp. 14-15.
«Biomedical Sciences» | DCB, Room S481, 4th floor South

Chair: **Prof. Dr. Frank Stüber**, Department for BioMedical Research & Department of Anaesthesiology and Pain Therapy, Inselspital, Bern University Hospital

«Biomedical Sciences» Talks I | T-009 to T-012

08h30  **Silje Ekroll Jahren**, ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE)
T-009  Can Bioprosthetic Valve Thrombosis Be Promoted by Aortic Root Morphology? An *in vitro* Study

08h45  **Catrina Mugglin**, Institute of Social and Preventive Medicine
T-010  Site Capacity to Screen for and Manage Renal Dysfunction Among HIV-Infected Persons Receiving Care in Low- and Middle-Income Countries (LMICs)

09h00  **Simon Wüest**, Competence Center in Biomedical Space Research and Medical Engineering, Lucerne School of Engineering and Architecture, Lucerne University of Applied Sciences and Arts, Horw
T-011  Electrophysiological Measurements During a Sounding Rocket Flight

09h15  **Inga Siebke**, Department of Physical Anthropology, Institute of Forensic Medicine
T-012  Living in Stone Age Switzerland—A Continuous Study of 5000 Year Old Human Bones from Switzerland

«Biomedical Sciences» Poster Flash I

09h30  **Presenters and Poster Numbers:**
   A-038  Elena Wernicke von Siebenthal
   A-035  Christina Rufener
   A-036  Camille Madeleine Carmen Raoult
   A-032  Jens Michael Becker
   A-034  Katharyn Jean Mitchell
   A-037  Ann-Catherine Schwinn
   A-033  Fay Joanne Sauer

For titles of presentations, see Poster Session A, pp. 15-16.
«Cell Biology» | DCB, Room EG16, ground floor North

Chair: **Prof. Dr. Mario P. Tschan**, Institute of Pathology, Division of Experimental Pathology

«Cell Biology» Talks I | T-013 to T-016

08h30  **Michel Dosch**, Department for BioMedical Research, Visceral Surgery Research Laboratory

T-013  Macrophages Regulate Outcome of Sepsis via Connexin 43 Dependent ATP Release

08h45  **Dorota Magdalena Dudka**, Department for BioMedical Research, Radiation Oncology, and Department of Radiation Oncology, Inselspital, Bern University Hospital

T-014  Unravelling the Molecular Response to Dose-Rate and Delivery Time of Ionizing Radiation

09h00  **Olivier Friedli**, Institute of Pathology

T-015  The Role of Mitochondrial Uncoupling for T Lymphocyte Function

09h15  **Catherine Mooser**, Department for BioMedical Research, Mucosal Immunology

T-016  Dietary Influences on the Microbiota: New Insights Thanks to Gnotobiology and Next-Generation Sequencing Techniques

«Cell Biology» Poster Flash I

09h30  **Presenters and Poster Numbers:**

A-039  Rafet Ameti
A-048  Dolores N. Dina
A-052  Paul Engeroff
A-059  Nina Germič
A-040  Marleen Hanelt
A-055  Magdalena Hinterbrandner
A-050  Caroline Claire Krüger
A-043  Elisa Roesti

*For titles of presentations, see Poster Session A, pp. 16-17.*
«Molecular Biology & Biochemistry» | DCB, Room U113, basement

Chair: Prof. Dr. Torsten Ochsenreiter, Institute of Cell Biology

«Molecular Biology & Biochemistry» Talks I | T-017 to T-020

08h30 Stefan Reber, Department of Chemistry and Biochemistry
T-017 CRISPR-Trap: A Clean Approach for the Generation of Gene Knockouts and Gene Replacements in Human Cells

08h45 Olivier Biner, Department of Chemistry and Biochemistry
T-018 Superoxide Quenching Within the Membrane by E. coli Cytochrome b561

09h00 Francesca Coraggio, Institute of Cell Biology
T-019 Involvement of Epigenetic Factors and Metabolism in Pluripotency Maintenance in C. elegans

09h15 Michael Herren, Division of Experimental Clinical Research, Department of Clinical Research and Veterinary Public Health, Vetsuisse Faculty Bern
T-020 Non-Conservative Mutation in the Canine Distemper Virus Attachment Protein Disrupts Cell Invasion by Increasing the Intermolecular Interaction

«Molecular Biology & Biochemistry» Poster Flash I

09h30 Presenters and Poster Numbers:
A-060 Andrea Marco Amati
A-090 Thomas Schick
A-089 Andrea Salm
A-075 Iwona Maria Rzeszutek
A-085 Jonas Paul Koch
A-077 Leander Nicolas Wyss
A-063 Giuditta Annibaldis
A-084 Andreas Hemmerle

For titles of presentations, see Poster Session A, pp. 18-20.
09h45–10h15 | Coffee Break (Mensa Bühlplatz) & Poster Viewing
10h15–11h30 | Talks II & Poster Flash II

«Biological Systems» | Department of Physiology, Room 258, 2nd floor

Chair: Prof. Dr. Rupert Bruckmaier, Division of Veterinary Physiology, DCR-VPH, Vetsuisse Faculty Bern

«Biological Systems» Talks II | T-021 to T-024

10h15 Duilio Michele Potenza, Department of Physiology
T-021 Ablation of the RyR2-Ser2030 Phosphorylation Site Limits Changes in RyR2 Sensitivity During ß-Adrenergic Stimulation

10h30 Carolyn Trepp, Department for BioMedical Research, Ophthalmology, and Department of Ophthalmology, Inselspital, Bern University Hospital
T-022 Culture of Lgr5-Positive Cells from the Early Postnatal Murine Retina

10h45 Dominik Spicher, Department of Physiology
T-023 Predictive Plasticity in Dendrites: From a Computational Principle to Experimental Data

11h00 Chang Zhao, Department of Physiology
T-024 Value Learning in Drosophila Explain Odor Conditioning

«Biological Systems» Poster Flash II

11h15 Presenters and Poster Numbers:

B-106 Natalia Méndez Carmona
B-100 Marta Nowak
B-094 Marcos Sande-Melon
B-097 Andrés Sanz Morejon
B-095 Riccardo Sfriso
B-092 Felix Alexander Baier
B-107 Florian Traversi
B-111 Rahel Kathrin Wyss

For titles of presentations, see Poster Session B, pp. 21-22.
Chair: **PD Dr. Stavroula Mougiakakou**, ARTORG Center for Biomedical Engineering Research, Diabetes Technology

### «Biomedical Engineering» Talks II | T-025 to T-028

10h15 **Barna Errol Mario Becsek**, ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE)

**T-025** HPC FSI Framework for the Simulation of Cardiovascular Flow Systems

10h30 **André Döring**, Department for BioMedical Research, Magnetic Resonance Spectroscopy and Methodology (AMSM)

**T-026** Exploitation of Slow Macromolecular Diffusion for Baseline Estimation in MR Spectroscopy by 2D Simultaneous Fitting

10h45 **Sebastian Christoph Knell**, Clinic for Small Animal Surgery, Vetsuisse Faculty Zurich

**T-027** Morphometric Investigation of the Canine Caudal Cervical Intervertebral Space: An ex-vivo CT Study

11h00 **Michael Rieger**, Department of Physiology

**T-028** Panoramic Opto-Electrical Mapping and Stimulation (POEMS) of the Heart

### «Biomedical Engineering» Poster Flash II

11h15 **Presenters and Poster Numbers:**

- **B-122** Hadi Zolfaghari
- **B-120** Thomas Leonardo Gian-Luca Zanchin
- **B-121** Soheila Zeinali
- **B-119** Pauline G. V. Zamprogno
- **B-114** Laurent Lejeune
- **B-116** Till Lerch
- **B-112** Dimitrios Damopoulos

*For titles of presentations, see Poster Session B, pp. 22-23.*
Chair: **Prof. Dr. Nicola Low**, Institute of Social and Preventive Medicine

**«Biomedical Sciences» Talks II | T-029 to T-032**

10h15  **Hannah Ayrle**, Division Veterinary Pharmacology & Toxicology, Department of Clinical Research and Veterinary Public Health, Vetsuisse Faculty Bern, and Department of Livestock Sciences, Research Institute of Organic Agriculture (FiBL), Frick

**T-029** Effects of an Oral *Echinacea purpurea* (L.) MOENCH Alcoholic Spissum Extract in Calves—A Placebo-Controlled, Randomized, Double Blinded Study

10h30  **Kati Haenssgen**, Institute of Anatomy

**T-030** The Innervation of the Antireflux Barrier

10h45  **Maurane Riesen**, Institute of Social and Preventive Medicine

**T-031** Exploring Variation in Human Papillomavirus Vaccination Uptake: Multi-Level Spatial Analysis

11h00  **Elise Amélie Jeannerat**, Swiss Institute of Equine Medicine, Department of Clinical Veterinary Medicine, Vetsuisse Faculty Bern

**T-032** Proteome Analysis of Equine Oviductal Secretions Collected During Oestrus in Relation to the Major Histocompatibility Complex

**«Biomedical Sciences» Poster Flash II**

11h15  **Presenters and Poster Numbers:**

- B-128 Patricia Meyer
- B-129 Lukas Muri
- B-124 Nanina Anderegg
- B-123 Million Abraha
- B-126 Simone Cazzaniga
- B-127 Rahel Deborah May
- B-125 Christina Schindera

*For titles of presentations, see Poster Session B, p. 24.*
«Cell Biology» | DCB, Room EG16, ground floor North

Chair: Prof. Dr. Vincent Perreten, Institute of Veterinary Bacteriology, Department of Infectious Diseases and Pathobiology (DIP), Vetsuisse Faculty Bern

«Cell Biology» Talks II | T-033 to T-036

10h15 Miguel Palomino Segura, Institute for Research in Biomedicine, Università della Svizzera Italiana, Bellinzona
T-033 Role of Tracheal Inflammatory Dendritic Cells During Influenza Infection

10h30 Carmen Alexandra Sautter, Institute of Virology and Immunology, Department of Infectious Diseases and Pathobiology, Vetsuisse Faculty Bern
T-034 Susceptibility of Bona Fide Dendritic Cells to Porcine Reproductive and Respiratory Syndrome Virus

10h45 Núria Vizcaíno Revés, Small Animal Clinic, Department of Veterinary Clinical Medicine, Vetsuisse Faculty Bern
T-035 Polarization of Macrophages in Epidural Inflammation Induced by Canine Intervertebral Disc Herniation

11h00 Limei Wang, Department for BioMedical Research, Thoracic Surgery, and Division of General Thoracic Surgery, Inselspital, Bern University Hospital
T-036 Tumor-Associated CD90+ Mesenchymal Precursor Cells Are Part of an Immunosuppressive Tumor Microenvironment in Early-Stage Non-Small Cell Lung Cancer

«Cell Biology» Poster Flash II

11h15 Presenters and Poster Numbers:
B-138 Livia Niklaus
B-139 Lionel Rohner
B-142 Selina Moara Roth
B-143 Marcel Sorribas Olivera
B-145 Andrea Monika Spiri
B-150 Bettina Trueeb
B-136 Marie-Hélène Wasmer
B-137 Stefan Zahnd

For titles of presentations, see Poster Session B, pp. 24-26.
Chair: **Prof. Dr. Oliver Mühlemann**, Department of Chemistry and Biochemistry

**«Molecular Biology & Biochemistry» Talks II | T-037 to T-040**

10h15 **Cristina Hoehener**, Institute of Cell Biology  
**T-037** Dicer-Like Proteins with Sequence Cleavage Preference

10h30 **Eleonora Orlando**, Department for BioMedical Research, Radiation Oncology, and Department of Radiation Oncology, Inselspital, Bern University Hospital  
**T-038** Investigation of MET Oncogene Addiction and the MET-DDR Crosstalk: A Phosphoproteomic Approach

10h45 **Carmela Lussi**, Institute of Virology and Immunology, Department of Infectious Diseases and Pathobiology, Vetsuisse Faculty Bern  
**T-039** Site-Directed Mutagenesis of Pestiviral RNase and Its Effect on Innate Immune Evasion

11h00 **Axel Meyrat**, Department of Chemistry and Biochemistry  
**T-040** Mitochondrial Protonpower: Protonmotive Force and ATP Synthesis

**«Molecular Biology & Biochemistry» Poster Flash II**

11h15 **Presenters and Poster Numbers:**  
B-161 Francesca Florini  
B-159 Stephan Hirschi  
B-172 Tin Manh Ho  
B-171 Vaishnavi Shankar  
B-165 Alexandra Malbon  
B-167 Nicole Liechti  
B-153 Shikha Shikha  
B-180 Sara Vimercati

*For titles of presentations, see Poster Session B, pp. 26-28.*
11h30–13h00 & 13h30–15h00 | Poster Sessions

11h30–13h00 | Poster Session A

Posters A-001 to A-091
DCB, Foyer to Room U113 & Cafeteria, basement

12h30–13h15 | Lunch A (Mensa Bühlplatz)
13h15–14h00 | Lunch B (Mensa Bühlplatz)

*Presenting authors: Please follow color codes on Program Overview for your lunch time.*

13h00–13h30 | Poster exchange

*Posters of Session A will be removed & Posters of Session B will be displayed.*

13h30–15h00 | Poster Session B

Posters B-092 to B-182
DCB, Foyer to Room U113 & Cafeteria, basement

*List of posters: See following pages.*
11h30–13h00 | Poster Session A

Posters A-001 to A-091

Posters with an asterisk (*) are presented in Poster Flash I (see pp. 1-5).

«Biological Systems» A-001 to A-020

A-001* Maria Arnold, Department for BioMedical Research, Cardiovascular Surgery, and Department of Cardiovascular Surgery, Inselspital, Bern University Hospital
Molecular and Metabolic Mechanisms of Mechanical Postconditioning in an Isolated Rat Heart Model of Donation After Circulatory Death

A-002 Aniela Bittner, Division of Veterinary Pharmacology and Toxicology, Vetsuisse Faculty Bern
Interactions of Nanoparticles with the Blood-Brain Barrier

A-003 Noëlle Dommann, Department for BioMedical Research, Visceral and Transplantation Surgery
LIM Protein Ajuba Promotes Cancer Cell Proliferation and Survival in Hepatocellular Carcinoma

A-004 Sebastian Wangler, AO Research Institute, Davos
CD146 Positive Mesenchymal Stem Cells Possess a Superior Migration Potential Towards Induced Degenerative Intervertebral Discs

A-005* Romina Cabra, Department for BioMedical Research, Bone Biology & Orthopaedic Research, and Swiss National Center of Competence in Research, NCCR TransCure
The Role of Iron in the Development and Activity of Osteoclasts

A-006* Etienne de Coulon, Department of Physiology
Mechanosensitivity of Impulse Conduction in Cultured Cardiomyocyte Strands as Assessed with a Piezo Based Stretching Device

A-007* Echrak Hichri, Department of Physiology
Ephaptic Coupling in the Heart Is Potentiated by the Distribution of Sodium Channels in Clusters in the Intercalated Disc

A-008 Federica Maria Conedera, Department for BioMedical Research, Ophthalmology
Involvement of Müller Glia Cells in Retinal Degeneration/Regeneration in Zebrafish and Mouse

A-009* Momota Rani Debi, Institute of Animal Nutrition, Vetsuisse Faculty Zurich
Two Steps Fermentation Methods for Improving the Nutritive Value of Agro-Industrial By-Products (Rice Bran and Wheat Bran) for Poultry Through Anaerobic Fermentation Using Rumen Liquor

A-010 Daniela Hanke, Institute of Biochemistry and Molecular Medicine, and Department for BioMedical Research, Nephrology and Hypertension
Generation and Characterization of NHA1 (SLC9B1) KO Mice

A-011 Alexander Ernst, Institute of Anatomy
Epicardium Formation in the Zebrafish

A-012* Laura Facchin, Center for Experimental Neurology (ZEN), Department of Neurology, Inselspital, Bern University Hospital
Optogenetic Modulation of Sleep Slow Wave After Focal Ischemic Stroke
A-013* Carolina García-Poyatos, Institute of Anatomy
Discovering the Role of Respiratory Supercomplexes in Zebrafish

A-014 Gierin Thomi, Department for BioMedical Research, Prenatal Medicine, and Department of Obstetrics and Gynaecology, Inselspital, Bern University Hospital
Exosomes Derived from Wharton’s Jelly Mesenchymal Stem/Stromal Cells Have Anti-Inflammatory Effects on Neuroglia

A-015* Jacopo Gavini, Department for BioMedical Research, Visceral and Transplantation Surgery
Dysregulation of Lysosomal Compartment Potentiates the Anti-Tumor Effect of Sorafenib by Inhibiting Hepatocellular Carcinoma Progression

A-016 Sampada A. Kallo, Institute of Biochemistry and Molecular Medicine
Effect of Placental Cell Differentiation on Materno-Fetal Nutrient Transport

A-017 Carolina Herrera, Department for Farm Animals, Clinic of Reproductive Medicine, Vetsuisse Faculty Zurich, and Center for Clinical Studies, Vetsuisse Faculty Zurich
Efficiency of Preimplantation Genetic Diagnosis of Bovine in vitro Produced (IVP) Embryos Using Blastocoele Fluid or Embryonic Cells

A-018 Kristina Krempaska, Department for BioMedical Research, Pulmonary Medicine
Anti-Fibrotic Effects of Azithromycin Are Enhanced in Human Lung Fibroblasts from IPF Compared to Controls

A-019 Luca Marchetti, Theodor Kocher Institute
Cellular and Molecular Mechanisms Directing T-Cell Migration Across the Blood-Brain Barrier

A-020 Matthias F. Kraft, Swiss Institute of Equine Medicine, Department of Clinical Veterinary Medicine, Vetsuisse Faculty Bern, and Institute of Genetics, Vetsuisse Faculty Bern
An Integrated Analysis of microRNA and mRNA Expression Profiles from Horses with Severe Equine Asthma

«Biomedical Engineering» A-021 to A-031

A-021* Lukas Bereuter, Department of Cardiology, Inselspital, Bern University Hospital, and ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering Characterization and Implementation of Intra-Body Communication for Leadless Cardiac Multisite Pacemaker Systems

A-022 Tatiana Fountoukidou, ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory
Time Resolved OCT Images Evaluation for Online Control of Selective Retina Therapy

A-023 Thomas Kurmann, ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory
Simultaneous Recognition and Pose Estimation of Instruments in Minimally Invasive Surgery

A-024* Kristin Völk, Department of Physiology
A-025* Simon Habegger, Support Center for Advanced Neuroimaging (SCAN), Department of Diagnostic and Interventional Neuroradiology, Inselspital, Bern University Hospital
Prediction of Outcome by Imaging: An Automated Approach for Lesion Load Mapping

A-026 Florian Schmaranzer, Department of Orthopaedic Surgery and Traumatology, Inselspital, Bern University Hospital
Does Cartilage Composition Change After Joint Preserving Hip Surgery for FAI—Preliminary Data of a Prospective Comparative Longitudinal Study Using Delayed Gadolinium Enhanced MRI of Cartilage (dGMERIC) at 3 T

A-027 Maike Hoefemann, Department for BioMedical Research, Magnetic Resonance Spectroscopy and Methodology (AMSM)
What Is the Optimal Voxel Size for Single Voxel Magnetic Resonance Spectroscopy in Global Brain Pathology?

A-028* Serife Seda Kucur, ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory

A-029 Alberto Mantegazza, ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE)
In vitro Biomimetic Models of Brain Microvasculature to Investigate Red Cells Phase Separation and Blood Rheology

A-030* Pascal Leimer, Department of Physiology
Fast Learning Without Forgetting by Synaptic Consolidation

A-031* Michael Müller, Support Center for Advanced Neuroimaging (SCAN), Department of Diagnostic and Interventional Neuroradiology, Inselspital, Bern University Hospital, and Department of Neurology, Inselspital, Bern University Hospital
Examination of True and False Predictions of a Quantitative EEG Method to Support Epilepsy Surgery

«Biomedical Sciences» A-032 to A-038

A-032* Jens Michael Becker, Department of Clinical Veterinary Medicine, Clinic for Ruminants, Vetsuisse Faculty Bern
How Can Antibiotic Consumption and Mortality Be Reduced in the Swiss Veal Industry? A Novel Approach Reconsidering Transport and Housing

A-033* Fay Joanne Sauer, Swiss Institute of Equine Medicine, Department of Clinical Veterinary Medicine, Vetsuisse Faculty Bern
Evaluation of Management Factors and Personality Profiles of High-Level Sport Horses and Amateur Horses Regarding Their Association with the Response to an ACTH Stimulation Test

A-034* Katharyn Jean Mitchell, Clinic for Equine Internal Medicine, Equine Department, Vetsuisse Faculty Zurich
Heart Rate Variability in Horses During Exercise

A-035* Christina Rufener, Division of Animal Welfare, VPH Institute, Vetsuisse Faculty Bern
Creatures of Habit? Laying Hens Show Consistent Behavior Patterns in Aviary Systems
A-036* Camille Madeleine Carmen Raoult, Centre for Proper Housing of Ruminants and Pigs, Federal Food Safety and Veterinary Office, FSVO, Agroscope, Ettenhausen, and Division of Animal Welfare, VPH Institute, Vetsuisse Faculty Bern
Mood as Cumulative Expectation Mismatch: A Test of Theory Based on Data from Nonverbal Cognitive Bias Tests

A-037* Ann-Catherine Schwinn, Division of Veterinary Physiology, DCR-VPH, Vetsuisse Faculty Bern
Impact of Cholesterol Deficiency on Metabolism and Milk Production in Lactating Dairy Cows

A-038* Elena Wernicke von Siebenthal, Centre for Fish and Wildlife Health, Vetsuisse Faculty Bern
The Immunological Role of Reproductive Hormones in Rainbow Trout (Oncorhynchus mykiss)

«Cell Biology» A-039 to A-059

A-039* Rafet Ameti, Institute for Research in Biomedicine, Università della Svizzera Italiana, Bellinzona
Role of ACKR3 in Leukocyte Migration and the Microarchitecture of Secondary Lymphoid Organs

A-040* Marleen Hanelt, Division of Experimental Pathology, Institute of Pathology
Linking Metabolism and Inflammation in Macrophage Foam-Cells

A-041 Maryam Hussain, Institute of Pathology
Diet-Induced Obesity Potentiates IgE-Mediated Food Allergic Responses

A-042 Giuseppe Bombaci, Department for BioMedical Research, Hematology, and Department of Hematology, Inselspital, Bern University Hospital
The Leucine-Rich Repeats (LRR) Protein, Ribonuclease Inhibitor (RNH1) Limits the Inflammasome Activation

A-043* Elisa Roesti, Department for BioMedical Research, Immunology, and Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital
Active and Passive Immunization Against Type 2 Diabetes Mellitus

A-044 Elias D. Bührer, Department for BioMedical Research, Tumor Immunology
Splenic Red Pulp Provides a Secondary Stem Cell Niche for Chronic Myeloid Leukemia Stem Cells

A-045 Živa Frangež, Institute of Pharmacology
Transcriptional Regulation of Autophagy-Related Genes in Melanoma Development and Progression

A-046 Barbara D. Jakobs, Biotechnology Institute Thurgau (BIgT), University of Konstanz, Kreuzlingen
Development of Conformational Biosensors to Investigate CCR7 Signaling Pathways

A-047 Kim Klapan, Institute of Pharmacology
The Role of the p73-ATG5 Axis in Regulating Autophagy in Atopic Dermatitis and Psoriasis
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-048*</td>
<td>Dolores N. Dina, Clinical Immunology/Allergology, Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital</td>
<td>Involvement of the Adaptive Immune System in Metamizole-Induced Agranulocytosis</td>
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<tr>
<td>A-049</td>
<td>Stefan Emming, Institute for Research in Biomedicine, Università della Svizzera Italiana, Bellinzona</td>
<td>Mechanisms of Regulation of Human T Cell Activation and GM-CSF Production</td>
</tr>
<tr>
<td>A-050*</td>
<td>Caroline Claire Krüger, Division of Immunology, Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital</td>
<td>Influence of Bacterial RNA on Memory Generation Against Virus-Like Particles</td>
</tr>
<tr>
<td>A-051</td>
<td>Coralie Dessauges, Institute of Cell Biology</td>
<td>Deciphering a Prototypical MAPK Signaling Network at the Single Cell Level Using an Optogenetic Circuit</td>
</tr>
<tr>
<td>A-052*</td>
<td>Paul Engeroff, Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital</td>
<td>Recycling of IgE Immune Complexes in Human B Cells Facilitates Transfer of Antigen to Dendritic Cells for Antigen Presentation</td>
</tr>
<tr>
<td>A-053</td>
<td>Haitang Yang, Department for BioMedical Research, Thoracic Surgery, and Division of General Thoracic Surgery, Inselspital, Bern University Hospital</td>
<td>Inhibition of Hsp90 Overcomes Acquired Chemotherapeutic Resistance in KRAS-Mutant Lung Cancer by Abrogating eIF4E-Myc Signaling Axis</td>
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<tr>
<td>A-054</td>
<td>Quentin Haas, Institute of Pharmacology</td>
<td>Glycan-Checkpoint Inhibitor Unleashing CD8+ T Cells Against Cancer</td>
</tr>
<tr>
<td>A-055*</td>
<td>Magdalena Hinterbrandner, Department for BioMedical Research, Tumor Immunology</td>
<td>Accumulation of Thymic-Derived Regulatory T Cells in the Bone Marrow of Leukemia Mice Leads to Disease Progression and Immune Evasion</td>
</tr>
<tr>
<td>A-056</td>
<td>Pascal Ender, Institute of Cell Biology</td>
<td>Understanding Single Cell-Level MAPK Activation Dynamics for Manipulation of Neuronal Stem Cell Self-Renewal and Differentiation Fates</td>
</tr>
<tr>
<td>A-057</td>
<td>Alberto Mattei, Institute of Cell Biology</td>
<td>Signaling Mechanisms of Non-Genetic Cancer Drug Resistance in Melanoma</td>
</tr>
<tr>
<td>A-058</td>
<td>Leonhard von Meyenn, Department for BioMedical Research, Dermatology, and Department of Dermatology, Inselspital, Bern University Hospital</td>
<td>Studying Transient Cell Fate and Targets of IL-9-Producing T Helper Cells Using a GFP-Reporter Construct</td>
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<tr>
<td>A-059*</td>
<td>Nina Germič, Institute of Pharmacology</td>
<td>ATG5 Regulates Eosinophil Differentiation</td>
</tr>
</tbody>
</table>
A-060* Andrea Marco Amati, Department of Chemistry and Biochemistry
Towards Unidirectional Reconstitution of Membrane Proteins into Liposomes

A-061 Anina Bauer, Institute of Genetics, Vetsuisse Faculty Bern, and DermFocus Laboratory, University of Bern
Genetic Analysis of Genodermatoses: A de novo Variant in the ASPRV1 Gene in a Dog with Ichthyosis

A-062 Rohan Chippalkatti, Institute of Cell Biology
Mms19: A Mitotic Gene and a Novel Microtubule Associated Protein

A-063* Giuditta Annibaldis, Department of Chemistry and Biochemistry
Ribosome Profiling in Mammalian Cells to Reveal the Role of NMD Factors in Translation Termination

A-064 Odette Joëlle Bernasconi, Institute for Infectious Diseases
Decolonization Experiments with a Commercial Bacteriohpage Cocktail Lytic Against a Multidrug-Resistant Escherichia coli in a Chemostat Culture System

A-065 Lara Contu, Department of Chemistry and Biochemistry
Investigating the Role of NMD as an Innate Cellular Antiviral Defence Mechanism

A-066 Kristin Uth, Institute of Pathology
Regulation of CDX2 in Colorectal Cancer via Methylation and Histone Deacetylation

A-067 Simona Amodeo, Institute of Cell Biology
Characterization of the Hypothetical kDNA Kinetochore in Trypanosoma brucei

A-068 Magdalena A. T. Brunner, Institute of Animal Pathology, Vetsuisse Faculty Bern, and DermFocus Laboratory, University of Bern
Novel Insights into the Pathways Regulating the Canine Hair Cycle and Their Deregulation in Alopecia X

A-069 Anna Letko, Institute of Genetics, Vetsuisse Faculty Bern
Rare Forms of Canine Neurological Disorders in Leonberger Breed

A-070 Lukas Schneider, Department of Chemistry and Biochemistry
Mechanistic Insight into Function and Processing of a Ribosome-Associated ncRNA (rancRNA)

A-071 Shubha Bevkal Subramanyaswamy, Institute of Cell Biology
Investigation of the Multifaceted Alba-Domain Proteins in Trypanosoma brucei

A-072 Dominique Brunssen, Institute of Cell Biology
Non-Canonical Function of β-PheRS B5 Domain

A-073 Christoph Josi, Institute of Veterinary Bacteriology, Vetsuisse Faculty Bern
Bovine Epithelial in vitro Models for Mycoplasma bovis Infection

A-074 Céline Louise Boujon, Division of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern
Astrovirus Associated with Encephalitis in a Sheep—Indication of Cross-Species Transmission with Cattle

A-075* Iwona Maria Rzeszutek, Institute of Cell Biology
Investigating the Function of Spo11, MSH4, and MSH5 in the Genome Reorganization Process in Paramecium tetraurelia
A-076  **Michael Brilhante**, Institute of Veterinary Bacteriology, Vetsuisse Faculty Bern
Multidrug Resistance Plasmids in Entrovirulent *Escherichia coli* Strains from Diarrheic Pigs in Switzerland

A-077*  **Leander Nicolas Wyss**, Department of Chemistry and Biochemistry
Translation Regulation by Ribosome-Associated Non-Coding RNA in *Halofexx volcanii*

A-078  **Joana Carlevaro-Fita**, Department for BioMedical Research, RNA & Cancer (NCCR RNA & Disease), and Department of Medical Oncology, Inselspital, Bern University Hospital
A New Resource: The Cancer Long Non-Coding RNA Census

A-079  **Anca Liliana Cismaru**, Department of Clinical Chemistry, Inselspital, Bern University Hospital
Genetics of Metamizole-Induced Agranulocytosis: Development of a Resequencing Method for HLA Genes

A-080  **Annunziata Di Domenico**, Institute of Pathology
Epigenetic Changes in DAXXX and/or ATRX Negative Pancreatic Neuro-Endocrine Tumors

A-081  **David Miguel Ferreira Francisco**, Interfaculty Bioinformatics Unit, Department of Biology
BBBHub: An Expression Datahub for Brain Barriers

A-082  **Silvia Desy**, Department of Chemistry and Biochemistry
ATOM19, a Somewhat Special Subunit of the Protein Translocase of the Outer Mitochondrial Membrane in *Trypanosoma brucei*

A-083  **Mahmoud Hallal**, Department for BioMedical Research, Hematology, and Department of Hematology and Central Hematology Laboratory, Inselspital, Bern University Hospital
Characterization of Kinase Activity by Phosphoproteomics in Myeloid Cell Lines for Identification of Driving Oncogenic Pathways

A-084*  **Andreas Hemmerle**, Department of Chemistry and Biochemistry
The Role of CRALBP in the Chemistry of Vision

A-085*  **Jonas Paul Koch**, Department for BioMedical Research, Radiation Oncology, and Department of Radiation Oncology, Inselspital, Bern University Hospital
DNA-PK Regulates the Radiosensitivity and Oncogenicity of MET-Addicted Cancer Cell Lines via a Novel MET Phosphosite

A-086  **Seid Hamzic**, Department of Clinical Chemistry, Inselspital, Bern University Hospital
Dosing Variability in Fluoropyrimidine-Treated Cancer Patients: Preliminary Data of a Multicenter Cohort Study

A-087  **Michaela Poliakova**, Department for BioMedical Research, Radiation Oncology, and Department of Radiation Oncology, Inselspital, Bern University Hospital
Targeting MET Modulates Global Metabolic Pathways and Induces dNTPs Depletion in MET-Addicted Cellular Systems

A-088  **Federico Saltarin**, Institute of Cell Biology
Mapping Spatio-Temporal Rho GTPase Signaling Networks Through Acute Perturbation of Signaling Fluxes

A-089*  **Andrea Salm**, Institute of Biochemistry and Molecular Medicine
Bioprospecting for Anti-Chagas Medicinal Plants in Bolivia and Biological Evaluation
A-090*  **Thomas Schick**, Department of Chemistry and Biochemistry  
Fusion-Mediated Membrane Protein Incorporation into Giant Unilamellar Vesicles

A-091  **Jimmy W. L. Tan**, Department for BioMedical Research, Endocrinology/Diabetology/Metabolism, and Department of Pediatric Endocrinology, Inselspital, Bern University Children’s Hospital  
Characterization of a Novel Mutation in Human Growth Hormone: Insight into the Cause of Growth Hormone Deficiency

**Note:**  *Please remove posters of Session A and display posters of Session B during the Lunch Break, between 13h00 and 13h30.*
13h30–15h00 | Poster Session B

Posters B-092 to B-182

Posters with an asterisk (*) are presented in Poster Flash II (see pp. 7-11).

«Biological Systems» B-092 to B-111

B-092*  **Felix Alexander Baier**, Department for BioMedical Research, Visceral Surgery Research Laboratory
Tight Junction Proteins for Normal Liver Regeneration

B-093  **Andrea Buccarello**, Department of Physiology
Directional Effects of Accurately Controlled Uniaxial Strain on Action Potential Propagation in Cultured Cardiomyocyte Strands

B-094*  **Marcos Sande-Melon**, Institute of Anatomy, Developmental Biology and Regeneration Research Group, and Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain
Adult Sox10⁺ Cells Contribute to Myocardial Regeneration in the Zebrafish

B-095*  **Riccardo Sfriso**, Department for BioMedical Research, Cardiovascular Research
*In vitro* Assessment of Xenogeneic Complement and Endothelial Cell Activation Using a Microvascular Flow Model

B-096  **Samuel Buntschu**, Department of Physiology
Lesion-Dependent Plasticity of Spinal Cord Circuits *in vitro* With and Without Stem Cell Insertion

B-097*  **Andrés Sanz Morejon**, Institute of Anatomy, Developmental Biology and Regeneration Research Group, and Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain
Characterization of Novel Subtypes of Macrophages During Zebrafish Fin and Heart Regeneration

B-098  **Mariana Dias**, Theodor Kocher Institute
The Role of Brain-Barrier Tight Junctions in Neuroinflammation

B-099  **Mohsin Hassan**, Department for BioMedical Research, Hepatology
Depletion of Paneth Cells Is Associated with Decreased Portal Hypertension and Angiogenesis After Partial Portal Vein Ligation in Mice

B-100*  **Marta Nowak**, Institute of Veterinary Anatomy, Vetsuisse Faculty Zurich
Expression and Localization of the Canine Luteal and Hypophyseal Relaxin (RLN) System: Functional Implications for Luteal Function

B-101  **Katrin Voelter**, Equine Department, Division of Ophthalmology, Vetsuisse Faculty Zurich
Evaluation of a New Drug for Its Intraocular Fibrinolytic Efficacy in a Rabbit Model

B-102  **Dzhuliya Vihrenova Dzhonova**, Department for BioMedical Research, Cardiovascular Research
Intra-Graft Tacrolimus-Loaded Hydrogel—A Local Alternative to Systemic Immunosuppression in Composite Allografts?
**B-103** Silvia Erni, Institute for Infectious Diseases, and Department for BioMedical Research, Cluster for Regenerative Neuroscience, and Department for BioMedical Research, Laboratory of Inner Ear Research
ProteinY* as a Treatment Option for Hearing Loss Caused by Experimental Pneumococcal Meningitis

**B-104** Deborah Barbara Angela Sarah Maria Piffaretti, Laboratory for Biomedical Neurosciences (LBN), Department of Neurosurgery, Neurocenter of Southern Switzerland, Ente Ospedaliero Cantonale, Torricella-Taverne
Epithelial Growth Factor Receptor Expression Influences 5-ALA Induced Glioblastoma Fluorescence

**B-105** Larissa Kernen, Center for Fish and Wildlife Health, Vetsuisse Faculty Bern
Estrogen Regulation of Thymus and T Cell Differentiation in Teleost Fish: An Eco-Toxicological Perspective

**B-106** Natalia Méndez Carmona, Department for BioMedical Research, Cardiovascular Surgery, and Department of Cardiovascular Surgery, Inselspital, Bern University Hospital
Tolerance of Coronary Endothelium to Ischemia and Reperfusion: Studies in an Isolated Rat Heart Model of Donation After Circulatory Death

**B-107** Florian Traversi, Institute of Biochemistry and Molecular Medicine
Genetic Dissection of Notch Pathway’s Role in Mice Papillary Thyroid Carcinoma

**B-108** Duo Xu, Department for BioMedical Research, Thoracic Surgery, and Division of General Thoracic Surgery, Inselspital, Bern University Hospital
Increased Sensitivity to Apoptosis upon ER Stress-Induced Activation of the UPR in Chemotherapy-Resistant Malignant Pleural Mesothelioma

**B-109** Jonas Zaugg, Institute of Biochemistry and Molecular Medicine, and Swiss National Centre of Competence in Research (NCCR) TransCure, University of Bern
Gestational Diabetes Mellitus Affects Placental Iron Homeostasis

**B-110** Miguel Augusto Tavares Pereira, Institute of Veterinary Anatomy, Vetsuisse Faculty Zurich
Prostaglandin-Mediated Effects on Vascularization and Immunomodulation in Early Canine Corpus Luteum

**B-111** Rahel Kathrin Wyss, Department for BioMedical Research, Cardiovascular Surgery, and Department of Cardiovascular Surgery, Inselspital, Bern University Hospital
Mitochondrial Integrity at Early Reperfusion Predicts Post-Ischemic Cardiac Graft Recovery

**Biomedical Engineering** B-112 to B-122

**B-112** Dimitrios Damopoulos, Institute for Surgical Technology and Biomechanics
Automatic Localization of Lumbar Vertebral Landmarks in CT Images Using Context Features

**B-113** Stephan M. Gerber ARTORG Center for Biomedical Engineering Research, Gerontology and Rehabilitation Group
**B-114**  
*Laurent Lejeune*, ARTORG Center for Biomedical Engineering Research, Ophthalmic Technology Laboratory  
An Optimal Multi-Path Tracking Approach for Gaze-Based Ground Truth Annotation of Medical Sequences

**B-115**  
*Daniel Schneider*, ARTORG Center for Biomedical Engineering Research, Image-Guided Therapy  
Feasibility and Accuracy of Robotic Multi-Port Cochlear Implantation—Evaluation on a Phantom

**B-116**  
*Till Lerch*, Department of Orthopaedic Surgery and Traumatology, Inselspital, Bern University Hospital  
Semi-Automatic MRI-Based 3D Models of the Hip Joint Can Replace CT-Based 3D Models for Virtual Impingement Detection and Range of Motion Analysis for Patients with Femoroacetabular Impingement

**B-117**  
*Qingnan Sun*, ARTORG Center for Biomedical Engineering Research, Diabetes Technology  
Personalized Adaptive Basal-Bolus Insulin Algorithm Using Data from Glucose Meters and Continuous Glucose Monitoring Systems

**B-118**  
*Romy Sweda*, ARTORG Center for Biomedical Engineering Research, Cardiovascular Engineering (CVE), and Department of Cardiology, Inselspital, Bern University Hospital, and Institute of Cell Biology  
Conduction Speed on the Left Atrial Posterior Wall—Towards Non-Invasive Functional Substrate Assessment

**B-119**  
*Pauline G. V. Zamprogno*, ARTORG Center for Biomedical Engineering Research, Organs-on-Chip Technologies  
Development of a Lung Alveoli Array-on-Chip with a Collagen-Elastin Membrane

**B-120**  
*Thomas Leonardo Gian-Luca Zanchin*, Department of Cardiology, Inselspital, Bern University Hospital, and Massachusetts General Hospital, Harvard University, Boston, USA  
The Effect of Cardiac Risk Factors on Coronary Atherosclerosis Burden Among Patients Undergoing Percutaneous Coronary Intervention: A Multicenter Three Vessel Optical Coherence Tomography Study

**B-121**  
*Soheila Zeinali*, ARTORG Center for Biomedical Engineering Research, Organs-on-Chip Technologies  
Human Lung Microvasculature-on-Chip for Drug Testing: Anti-Angiogenic Efficacy of Nintedanib

**B-122**  
*Hadi Zolfaghari*, ARTORG Center for Biomedical Engineering, Cardiovascular Engineering (CVE)  
High Performance Computational Fluid Dynamics for Improving the Hemodynamics of Prosthetic Heart Valves
«Biomedical Sciences» B-123 to B-130

B-123* Million Abraha, Institute of Social and Preventive Medicine
Factors Associated with Antimicrobial Resistant Gonorrhoea Infections in Men Who Have Sex with Men in Switzerland: Case-Control Study

B-124* Nanina Anderegg, Institute of Social and Preventive Medicine
Immunodeficiency at the Start of Combination Antiretroviral Therapy in Low-, Middle- and High-Income Countries

B-125* Christina Schindera, Institute of Social and Preventive Medicine, and Division of Pediatric Hematology/Oncology, University Children’s Hospital Basel, and Department of Pediatrics, Inselspital, Bern University Children’s Hospital
Detection of Cardiac Dysfunction by Echocardiography in Swiss Childhood Cancer Survivors—A Pilot Study

B-126* Simone Cazzaniga, Department of Dermatology, Inselspital, Bern University Hospital, and Centro Studi GISED, Bergamo, Italy
Patterns of Chronic Hand Eczema: A Semantic Map Analysis of the CARPE Registry Data

B-127* Rahel Deborah May, Institute for Surgical Technology and Biomechanics
Primary Human Intervertebral Disc Cells Effect Bone Formation in Primary Human Osteoblasts

B-128* Patricia Meyer, Institute for Infectious Diseases
Regenerative Therapeutic Approaches for Ischemic Brain Damage After Cardiac Arrest: Development of an ex vivo Model to Evaluate Grafting of Neuronal Progenitor Cells

B-129* Lukas Muri, Institute for Infectious Diseases, and Department for BioMedical Research, Cluster for Regenerative Neuroscience
Improved Outcome by Combining Adjuvant Therapies in Experimental Pneumococcal Meningitis

B-130 Katayoun Taghavi, Institute of Social and Preventive Medicine
Diagnostic Accuracy of a Portable Colposcope, the Gynocular, for Detecting Pre-Cancerous Lesions of the Cervix: Systematic Review and Meta-Analysis

«Cell Biology» B-131 to B-151

B-131 Pascal Gasser, Department for BioMedical Research, Rheumatology, and Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital
An Engineered IgE-Fc Variant Inhibits Basophil Degranulation ex vivo

B-132 Stefanie Graeter, Institute of Pharmacology
Death Regulation of Neutrophil Subsets by Intravenous Immunoglobulin (IVIg)

B-133 Thomas Gruber, Institute of Pathology
Generation of Cross-Presenting DC for Immunotherapy of Melanoma
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-134</td>
<td>Aspects of Cellular Tropism and Innate Immune Response During Zika Virus Infection</td>
<td>Nathalie Jane Vielle, Federal Department of Home Affairs, Institute of Virology and Immunology, Mittelhäusern, and Department of Infectious Diseases and Pathobiology, Vetsuisse Faculty Bern</td>
</tr>
<tr>
<td>B-135</td>
<td>Effective HER2 Targeted Therapy Blocks Autophagy in Esophageal Adenocarcinoma Cells, While Treatment Resistance Is Associated with Autophagy Induction</td>
<td>(Ariane) Félice Janser, Institute of Pathology</td>
</tr>
<tr>
<td>B-136*</td>
<td>The IL-33/ST2 Pathway Contributes to Intestinal Cancer by Promoting Intratumoral Regulatory T Cell Accumulation</td>
<td>Marie-Hélène Wasmer, Institute of Pathology</td>
</tr>
<tr>
<td>B-137*</td>
<td>Digital Pathology Meets Mass Spectrometry: A Novel Approach to Biomarker Discovery in Formalin-Fixed Paraffin-Embedded Colorectal Cancer Tissue</td>
<td>Stefan Zahnd, Institute of Pathology</td>
</tr>
<tr>
<td>B-138*</td>
<td>Membrane Dynamics During the Liver Stage of <em>Plasmodium berghei</em></td>
<td>Livia Niklaus, Institute of Cell Biology</td>
</tr>
<tr>
<td>B-139*</td>
<td>FcεRI Cross-Linking Prolongs Survival of Human Basophils at Steady State and Under Intrinsic Apoptotic Stress</td>
<td>Lionel Rohner, Department of Clinical Chemistry, Inselspital, Bern University Hospital</td>
</tr>
<tr>
<td>B-140</td>
<td>ACSL3 Is Required for the Maintenance of Pancreatic Ductal Adenocarcinoma</td>
<td>Matteo Rossi Sebastiano, Institute of Pharmacology</td>
</tr>
<tr>
<td>B-141</td>
<td>Echinococcus multilocularis: From Drug Screenings to the Energy Metabolism</td>
<td>Reto Rufener, Institute of Parasitology, Vetsuisse Faculty Bern</td>
</tr>
<tr>
<td>B-142*</td>
<td>Radiosensitization Strategy Based on DNA-PK Inhibition in Head and Neck Cancer: Emphasis on HPV Status</td>
<td>Selina Moara Roth, Department for BioMedical Research, Radiation Oncology, and Department of Radiation Oncology, Inselspital, Bern University Hospital</td>
</tr>
<tr>
<td>B-143*</td>
<td>An Independent View at Vaccine Immunity in Feline Calicivirus Infection</td>
<td>Marcel Sorribas Olivera, Department for BioMedical Research, Gastroenterology/ Mucosal Immunology</td>
</tr>
<tr>
<td>B-144</td>
<td>Bumped Kinase Inhibitor 1294 Induced Formation of Multi-Nucleated Complexes in <em>Neospora caninum</em> and Transformation of Protein Expression</td>
<td>Pablo Winzer, Institute of Parasitology, Vetsuisse Faculty Bern</td>
</tr>
<tr>
<td>B-145*</td>
<td>An Independent View at Vaccine Immunity in Feline Calicivirus Infection</td>
<td>Andrea Monika Spiri, Department for Farm Animals, Clinical Laboratory, Vetsuisse Faculty Zurich, and Center for Clinical Studies, Vetsuisse Faculty Zurich</td>
</tr>
<tr>
<td>B-146</td>
<td>Validation of Novel Fingolimod Derivatives for EAE Therapy</td>
<td>Bisera Stepanovska, Institute of Pharmacology</td>
</tr>
<tr>
<td>B-147</td>
<td>Investigation of Transient Receptor Potential Melastatin Channel 4 (TRPM4) in Colorectal Cancer Cell Line HCT116</td>
<td>Paulina Stoklosa, Institute of Biochemistry and Molecular Medicine, and National Center of Competence in Research (NCCR) TransCure, University of Bern</td>
</tr>
<tr>
<td>B-148</td>
<td>Developing Virus Like Particles as a Platform for Allergy Therapy</td>
<td>Federico Storni, Division of Immunology, Department of Rheumatology, Immunology and Allergology (RIA), Inselspital, Bern University Hospital</td>
</tr>
</tbody>
</table>
B-149  **Lester Thoo**, Institute of Pathology  
mRNA Splicing and Epithelial Integrity

B-150*  **Bettina Trueb**, Institute of Veterinary Bacteriology, Vetsuisse Faculty Bern  
Tn- Sequencing of Generated *Mycoplasma hyopneumoniae* and *Mycoplasma hyorhinis* Mutant Libraries Reveals Non-Essential Genes of Porcine Mycoplasmas Differing in Their Pathogenicity

B-151  **Diego von Werdt**, Institute of Pathology  
Tissue Resident T Cells in the Intestinal Mucosa in Homeostasis and Inflammation

«Molecular Biology & Biochemistry» B-152 to B-182

B-152  **Pierre Balmer**, Division of Clinical Dermatology, Department of Clinical Veterinary Science, Vetsuisse Faculty Bern, and DermFocus Laboratory, University of Bern  
Unravel the Cellular and Molecular Role of the Methyltransferase SUV39H2 in Health and Skin Disease

B-153*  **Shikha Shikha**, Department of Chemistry and Biochemistry  
Role of tRNA Processing Enzymes in Mitochondrial Biogenesis of *T. brucei*

B-154  **Núria Bosch-Guiteras**, Department for BioMedical Research, RNA & Cancer (NCCR RNA & Disease), and Department of Medical Oncology, Inselspital, Bern University Hospital  
Optimization of CRISPR/Cas9 System for Highly Efficient Genomic Deletions

B-155  **Martina Stilinovic**, Department for BioMedical Research, Hematology, and Department of Hematology, Inselspital, Bern University Hospital  
Understanding the Role of Ribonuclease Inhibitor (RNH1) in Erythropoiesis

B-156  **Lucia Unger**, Swiss Institute of Equine Medicine, Department of Clinical Veterinary Medicine, Vetsuisse Faculty Bern  
Whole Blood miRNAs as Prognostic, Non-Invasive Biomarkers for Equine Sarcoid Disease

B-157  **Serafina Calarco**, Institute of Biochemistry and Molecular Medicine  
Designing a COX-2 Selective «Clickable» Fluorescent Probe

B-158  **Sandra Glasmacher**, Institute of Biochemistry and Molecular Medicine  
Peptide Endocannabinoids and Their Emerging Role as CB Receptor Modulators

B-159*  **Stephan Hirschi**, Institute of Biochemistry and Molecular Medicine  
Engineering a Chemical Switch into a Light-Driven Proton Pump

B-160  **Satish Kantipudi**, Institute of Biochemistry and Molecular Medicine  
Function of the Human Heteromeric Amino Acid Transporter 4F2hc-LAT2

B-161*  **Francesca Florini**, Institute of Cell Biology  
RHS Proteins: A Novel Multiprotein Family Involved in Transcriptional Regulation of *Trypanosoma brucei*

B-162  **Simone Graf**, Department of Chemistry and Biochemistry  
Proton Pumping bo3 Oxidase from *Vitreoscilla*

B-163  **Yulia Gonskikh**, Department of Chemistry and Biochemistry  
Effect of tRNAPro Half on Translation in Chinese Hamster Ovary Cells
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-164</td>
<td>Identification of Novel Enterotropic Astroviruses in Cattle</td>
<td>Michel Christoph Koch, NeuroCenter, Division of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern</td>
</tr>
<tr>
<td>B-165*</td>
<td>Immunological Alterations in the Mesenteric Lymph Node in Response to Naturally Acquired Feline Coronavirus Infection in Cats With and Without Feline Infectious Peritonitis</td>
<td>Alexandra Malbon, Institute of Veterinary Pathology, Vetsuisse Faculty Zurich, and Center for Clinical Studies, Vetsuisse Faculty Zurich</td>
</tr>
<tr>
<td>B-166</td>
<td>Study of the in vitro and in vivo Metabolism of the Tryptamine 5-MeO-Mipt Using Human Liver Microsomes and Real Case Samples</td>
<td>Katharina Elisabeth Grafinger, Institute of Forensic Medicine, Forensic Toxicology and Chemistry</td>
</tr>
<tr>
<td>B-167*</td>
<td>A Comparative Approach to Unravel Pathogenicity Factors of the Brain-Eating Amoeba N. fowleri</td>
<td>Nicole Liechti, Interfaculty Bioinformatics Unit, Department of Biology, and Swiss Institute of Bioinformatics, Bern, and Spiez Laboratory, Federal Office for Civil Protection, Spiez</td>
</tr>
<tr>
<td>B-168</td>
<td>Floral Morphology as a Pollination Syndrome Trait in Petunia Species</td>
<td>Tural Yarahmadov, Institute of Plant Sciences</td>
</tr>
<tr>
<td>B-169</td>
<td>The AAT7 Gene Family Facilitates Uptake of Small Neutral Amino Acids in Trypanosoma brucei</td>
<td>Alexander Christoph Haindrich, Institute of Plant Sciences</td>
</tr>
<tr>
<td>B-170</td>
<td>H2AX Depletion Promotes PARPi Resistance in BRCA2-Deficient Mouse Mammary Tumors</td>
<td>Martin Liptay, Institute of Animal Pathology, Vetsuisse Faculty Bern</td>
</tr>
<tr>
<td>B-171*</td>
<td>The Role of Eukaryotic Specific rRNA Expansion Segments in Protein Synthesis</td>
<td>Vaishnavi Shankar, Department of Chemistry and Biochemistry</td>
</tr>
<tr>
<td>B-172*</td>
<td>Noncanonical Functions of Phenylalanyl tRNA Synthetase</td>
<td>Tin Manh Ho, Institute of Cell Biology</td>
</tr>
<tr>
<td>B-173</td>
<td>CRISPR/Cas9-Based Knockout Screening for Long Non-Coding RNAs in Lung Cancer</td>
<td>Taisia Polidori, Department for BioMedical Research, RNA &amp; Cancer (NCCR RNA &amp; Disease), and Department of Medical Oncology, Inselspital, Bern University Hospital</td>
</tr>
<tr>
<td>B-174</td>
<td>Self-Assembly Properties of α-TTP Are Associated with Transport of Vitamin E Across the BBB</td>
<td>Stephan Martin Kammer, Department of Chemistry and Biochemistry</td>
</tr>
<tr>
<td>B-175</td>
<td>Exploring Social Motility of Trypanosoma brucei in vivo</td>
<td>Sebastian Millius, Institute of Cell Biology</td>
</tr>
<tr>
<td>B-176</td>
<td>Transcriptional Basis of Natural Transdifferentiation</td>
<td>Jaime Osuna Luque, Institute of Cell Biology, and Institut de Génétique et de Biologie Cellulaire et Moléculaire, University of Strasbourg, France</td>
</tr>
<tr>
<td>B-177</td>
<td>In silico Study of Human SRD5A1 and SRD5A2 Suggests that Underinvestigated SNPs Might Be Disease-Causing and Alter Androgen Biosynthesis</td>
<td>Efstathios Katharopoulos, Department for BioMedical Research, Endocrinology/ Diabetology/Metabolism, and Department of Pediatrics, Division of Endocrinology, Diabetology &amp; Metabolism, Inselspital, Bern University Hospital</td>
</tr>
</tbody>
</table>
B-178  **Fauzy Negiub Ali Nasher**, Institute for Infectious Diseases

*Streptococcus pneumoniae* Binds and Responds to Peptides Found in Ribosomal Proteins of Other Bacterial Species

B-179  **Lukas J. Troxler**, Institute for Infectious Diseases

Use of Nuclear Magnetic Resonance (NMR) Spectroscopy for Analysis of Pneumococcal Serotype and Biosynthetic Mechanism of Capsular Polysaccharide (CPS)

B-180*  **Sara Vimercati**, Division of Veterinary Pharmacology and Toxicology, Vetsuisse Faculty Bern

*In silico* Analysis of Genetic Variants of the Equine CYP3A94, CYP3A95, and CYP3A97 Genes

B-181  **Mirko Stauffer**, Institute of Biochemistry and Molecular Medicine

Engineering of a Proton-Driven Antibiotic Translocation Module

B-182  **Zizun Wang**, Institute of Biochemistry and Molecular Medicine

Abolition of the Dominant Negative Effect of Brugada Syndrome Variants in SCN5A

*Note:*  *Please remove posters of Session B during the afternoon Coffee Break, between 15h00 and 15h30.*
GCB Symposium 2018 | Program: Afternoon Sessions

DCB, Room U113, basement

15h00–15h30 | Coffee Break (Mensa Bühlplatz) & Poster Viewing/Poster Removal

*Posters of Session B will be removed during the afternoon Coffee Break*

15h30–16h00 | GCB Award for Best PhD Thesis

Chair: **Prof. Dr. Oliver Mühlemann**, Department of Chemistry and Biochemistry, President GCB

16h15–17h00 | Keynote Lecture

**Prof. Dr. Martin E. Schwab**
Brain Research Institute, University of Zurich, and Department of Health Sciences and Technology, ETH Zurich

«Neurobiological Mechanisms of Functional Recovery After Spinal Cord Injury or Stroke; the Long Way from the Lab Bench to the Clinic with a Neurite Growth Enhancing Therapy»

Chair: **Prof. Dr. Hans Rudolf Widmer**, Department of Neurosurgery, Inselspital, Bern University Hospital
17h15–18h15 | GCB Slam

Masters of Ceremonies: Crazy David & Nicola von Greyerz

Slammers in Order of Appearance

S-001  Hélène Clémentine Margareta Baudouin, Institute of Cell Biology
Mr Trypli Is Making BioID

S-002  Yanyun Gao, Department for BioMedical Research, Thoracic Surgery, and Division of General Thoracic Surgery, Inselspital, Bern University Hospital
Characterize the Function of Mitochondrial Activity in Lung Cancer Chemotherapy Resistance

S-003  Annik Imogen Gmel, Institute of Genetics, Vetsuisse Faculty Bern, and Agroscope – Swiss National Stud Farm, Avenches
The Application of Horse Shapes to Assess the Conformation Traits of Franches-Montagnes Stallions

S-004  Bülent Gözel, Division of Experimental Clinical Research, DCR-VPH, Vetsuisse Faculty Bern
Tales of Listeria monocytogenes: Hunting Virulence Factors Involved in Neurolisteriosis

S-005  Pascal Näf, Department for BioMedical Research, Tumor Immunology
Cell Wars

S-006  Merve Mutlu, Institute of Animal Pathology, Vetsuisse Faculty Bern
Identifying Mechanisms of Radiotherapy Response of BRCA1/p53-Mutated Mouse Mammary Tumors

S-007  Jessica Willi, Department of Chemistry and Biochemistry
The Rusty Ribosome Rally

S-008  Lukas Oesch, Department for BioMedical Research, Neurology, and Center for Experimental Neurology (ZEN), Department of Neurology, Inselspital, Bern University Hospital
REM Sleep Reactivation of Lateral Hypothalamus Neurons Associated with Goal-Oriented Behaviors Conditions Food Intake During Wakefulness
S-009  **Anna Sophie Ramsauer**, Institute of Virology, Vetsuisse Faculty Zurich, and Dermatology Department, Vetsuisse Faculty Zurich
Characterization of Equine Papillomavirus Type 2 *in vivo* and *in vitro*

S-010  **Justin A. Varholick**, Division of Animal Welfare, Veterinary Public Health Institute, Vetsuisse Faculty Bern
Phenotypic Variation and Social Dominance Rank Within and Between Cages in SWISS Mice

18h15 | Closing Remarks
**Prof. Dr. Oliver Mühlemann**, President GCB

18h30 | Apéro
*Everybody is invited to join in.*