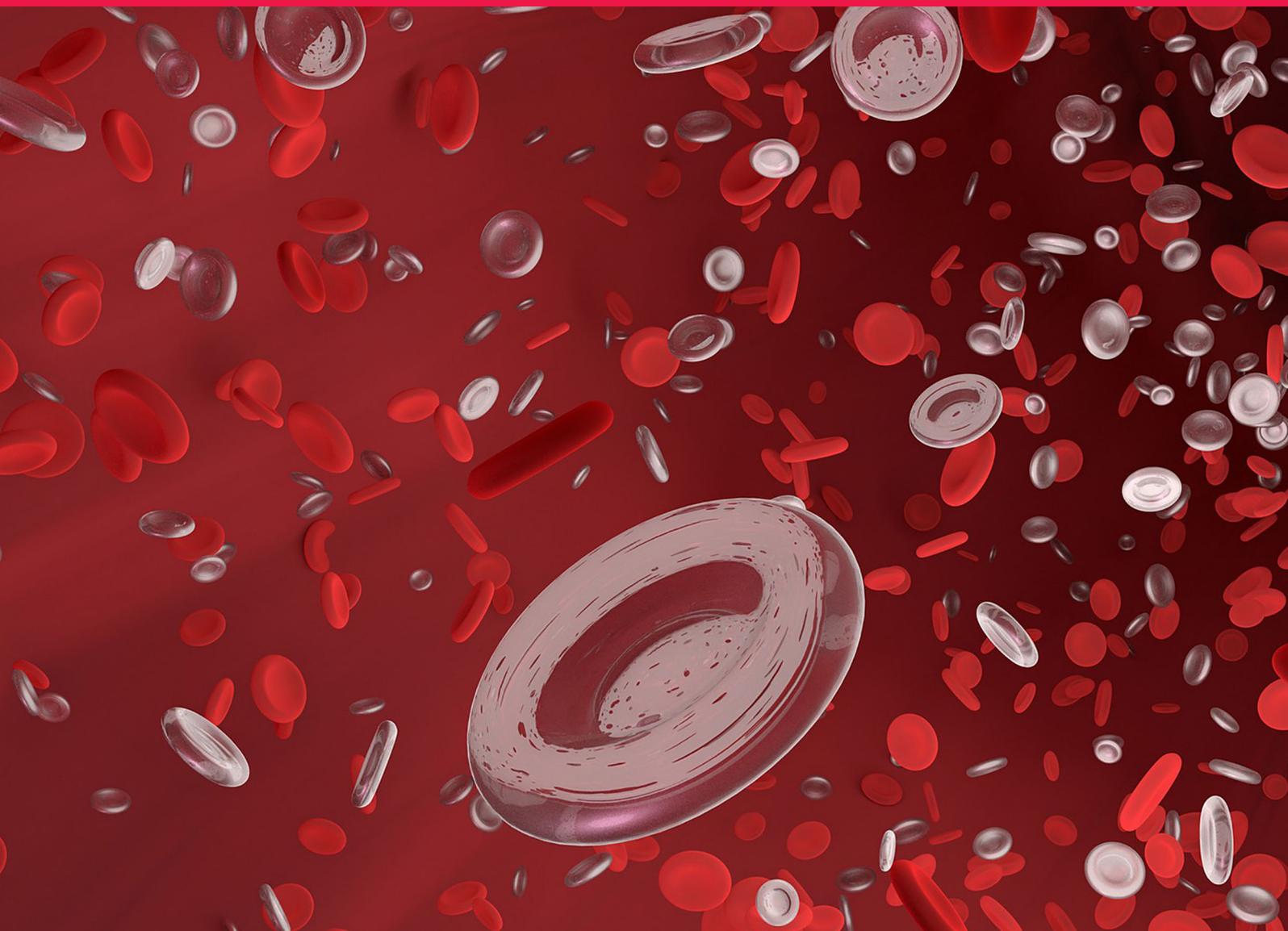


GCB Symposium 2021 Program

Thursday, January 28, 2021



Links & Moderators GCB Symposium:

Use the Unibe instructions - install Zoom

Opening, Keynote, Award Closing - <https://unibe-ch.zoom.us/s/95041746853>

- If you are prompted for a password, enter **GCB2021**

Logout of Opening Session and Login to your session below.

- No password necessary.

Talks II & II and Poster Flash I & II:

Samuel: **Biological Systems** - <https://unibe-ch.zoom.us/j/9662615384>

Giuseppe: **Biomedical Engineering** - <https://unibe-ch.zoom.us/j/99660391339>

Narayan: **Biomedical Sciences** - <https://unibe-ch.zoom.us/j/96616062610>

Stephan: **Cell Biology** - <https://unibe-ch.zoom.us/j/91985045176>

Nicole: **Molecular Biology & Biochemistry** - <https://unibe-ch.zoom.us/j/92986286277>

Poster Sessions A & B GatherTown - CHROME or Firefox Browsers:

https://gather.town/app/0kIBcNsawjh6NhOR/GCB_2021

Program (page turnable online booklet):

<https://www.yumpu.com/s/kxQDvYhrCl9bTWgU>

Keynote, Award Closing - <https://unibe-ch.zoom.us/s/95041746853>

- If you are prompted for a password, enter **GCB2021**

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<https://www.conftool.net/gcb-symp/>

GCB Symposium 2021

Welcome Address

Welcome

Dear Participants -

Dear Guests -

We are proud and very pleased to invite you to the first ever virtual GCB Symposium. The year 2020 has been truly exceptional, marked by the first world wide pandemic, that did overwhelm us all and required from all of us constant adaption to new rules, regulations and lonely thesis defences in a ridiculous big room with only the thesis committee members around, often via Zoom-unprecedented indeed. It saddens us not to be able to chat with you in person during the apero as usual, but hopefully we can catch up with you in summer with a BBQ should the COVID-19 situation be allowing it.

I would like to express my most sincere thanks to all of you, PhD students, mentors, supervisors, co-advisors and external co-referees and the PhD committee members as well as the wonderful GCB team. THANK you for having adapted so smoothly to not only the new promotion regulations of the GCB since February 1st but also to the ever changing regulations in this pandemic. Thank you for your on going commitment and dedication to the GCB. I believe I can safely speak for us all and say we never had to work so hard to guarantee the "normal business" to go on.

At the start of 2021, nearly 500 doctoral students from numerous countries worldwide are enrolled in the GCB. Over the course of last year, we registered 157 new applicants and celebrated 109 graduations. This year, 276 students have registered: 40 poster talks, 100 poster flashes a total of 236 poster presentations. The GCB's more advanced students will present their research work in a talk or a poster, many with an additional «Poster Flash» presentation,s and thus yet again break the record of all previous GCB Symposium participations.

Traditionally our annual meeting aims to bring together all PhD students enrolled in the GCB together with their supervisors, co-advisors, and

mentors. The symposium is a showcase for the broad spectrum of research going on within the interdisciplinary GCB, encompassing areas of the molecular life sciences, biomedical sciences, epidemiology, and biomedical engineering, and thus promotes extensive scientific exchange and networking among participants. As the largest and oldest Graduate School at the University of Bern, the GCB thesis projects are carried out at the laboratories of the three participating faculties (Faculty of Medicine, Faculty of Science, and Vetsuisse Faculties, Bern and Zurich) or at affiliated institutions. In 2020, these included, among others: the Institute for Research in Biomedicine (IRB) in Bellinzona, the Biotechnology Institute Thurgau (BITg) in Kreuzlingen, the Empa (Swiss Federal Laboratories for Materials Science and Technology, various divisions and sites), Agroscope (various divisions and sites), the Swiss Paraplegic Research in Nottwil, the AO Research Institute in Davos, and the RMS Foundation in Bettlach.

The GCB enjoys the continuous support of the Executive Board of the University of Bern and the Deans of the three involved faculties. This year, in particular, we have had the good fortune to team up with Prof. Tobias Nef, and Dr. Stephan Gerber from ATORG to "relocate" this event to a virtual platform. The GCB owes a debt of gratitude to them and to their colleagues at ATORG for designing, organizing and managing the technical aspects of the online forum.

I am very much looking forward to learning in more detail about the ongoing research, to congratulate the awardee of the GCB prize 2020 and to opening the next chapter of the GCB with our new president in charge – Prof. Rupert Bruckmaier, from the Vetsuisse Bern.

PD Dr. Monica Schaller,
GCB Coordinator



Gather Town Main Hall

About the (Virtual) Program and Venues

Although, the general format remains recognizably similar, there are a few noteworthy exceptions. The presentations will be made through virtual sessions which will be streamed using the Zoom platform. Poster Talks, Flashes and presentations from current GCB PhD students will form the core of the event. The GCB Award for the best PhD Thesis - 2020 will be honored.

We are humbled by the opportunity to have the honor of this year's three esteemed keynote speakers; all active in the fight against the spread of the SARS-CoV-2 virus strains. As we close the day, we will formally thank outgoing GCB PhD Committee president, Prof. Dr. med. Frank Stüber and welcome the new president, Prof. Dr. Rupert Bruckmaier. Although we cannot personally meet to continue networking, sharing ideas and celebrate together directly following this symposium, we will look forward to our next opportunity to do so and certainly we will all raise a glass wherever we are to toast your progress.

Abstracts

All participants are encouraged to please register at <https://www.conftool.net/gcb-symp/> to view the abstracts. Please note the program contained in this booklet/pdf is the definitive program.

Zoom

Google Chrome- or Firefox-browser supported. Poster Talks and Poster Flash Sessions I and II will be held in the morning. Both sessions are grouped according to the five expert committees and will be held in parallel during each session.

Talks are comprised of four 15-minute presentations in each of the five parallel groups. Each group will be chaired by a GCB Expert Committee

member. **Poster Flash** presentations will be concatenated into one large presentation from each author's individual slide. The event organizers will manage the presentation and advance the slides every two minutes, requiring the speakers to be cued and ready to speak. The presenter will not manage the powerpoint presentation. These will be held directly following the talks; again, during the two morning sessions according to expert committee.

Gather.town

Google Chrome- or Firefox-supported.

In addition to Zoom, we will use Gather Town. This is an online virtual gathering space that provides a platform for multiple people and groups to hold separate conversations in parallel, allowing movement between and in and out of rooms and making it possible for conversations to take place as though you are there in person.

Poster presentations A and B will also take place in in Gather Town in five parallel sessions according to expert committee. The poster sessions will both be held in the afternoon.

The presenting authors will "stand at" their posters during the designated poster session and, therefore; be available to discuss their poster with visitors to their poster. Participants are encouraged to review the program in advance and plan for which posters they wish to visit. Considering, however, the Poster Flash sessions are designed to entice interest in visiting the full poster.

Academic Research Prize

The customary annual prize for the best PhD thesis of 2020 will be awarded by the GCB president Frank Stüber following the end of the second poster session. The awardee will then be introduced by his/her supervisor and give a 10 minute talk.

Keynote Addresses

Early in the planning stages at the start of the corona virus pandemic in Spring 2020, we were optimistic that we, as academic scientific researchers would be "looking back" at the pandemic and discussing the developments between then and now - infection rates and spread, vaccine development and rollout, etc. The keynote speakers were invited with this in mind. Who could predict what would come in the ensuing months and where we would be today? Given the current state of affairs with the pandemic, and that our speakers are still in the fight, it is our great honor to have the continued commitment of several of the University of Bern's own frontline researchers for keynote speakers. Their individual and collective sustained dedication and perseverance deserves all our heartfelt, sincere thanks and recognition. We anticipate this will be a highlight to this year's symposium. Therefore, we request that all participants use the chat function in Zoom to pose their questions and provide feedback. The questions will be collected, curated and posed on your behalf. This will facilitate a smooth keynote speakers session and ensure as many as possible questions to be addressed.

We look forward to seeing you and wish you an engaging and stimulating event.

The GCB Symposium Team

GCB Symposium Keynote Addresses

SARS-CoV-2 - Covid-19

Prof. Dr. Volker Thiel

Institute of Virology and Immunology, University of Bern

From Genome to Function - Phenotypic Characterisation of Pandemic SARS-CoV-2 Variants

Dr. phil. nat. Caroline Tinguely

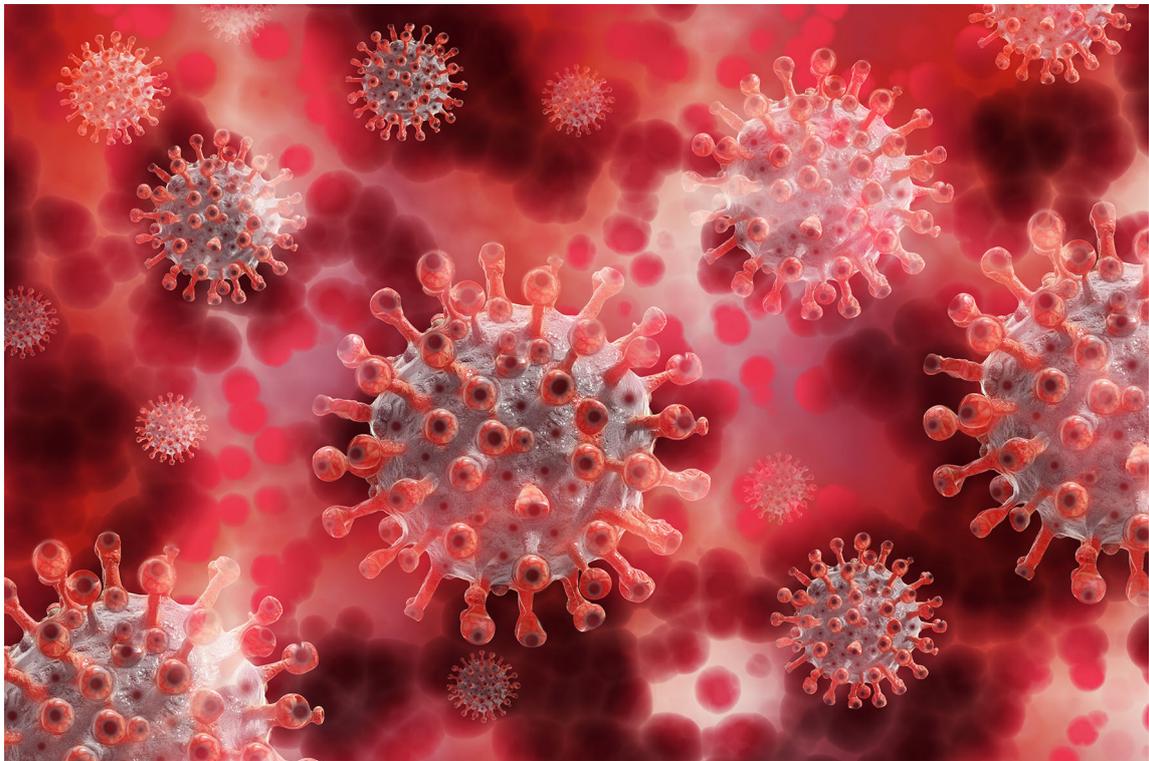
Interregionale Blutspende SRK AG

A Blood Transfusion Service in the time of Covid-19

Prof. Dr. Martin Bachmann

Department of Immunology, University of Bern

Development of a vaccine against COVID-19: ups and downs



geralt 22459 images_pixabay_corona-5174671



Simple title that gets the point across

Authors names



Graduate School
for Cellular and
Biomedical Sciences



Research Question

What is the role of gaming experience on satisfaction in a STEM learning game?

Problem

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The Game

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Methods

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Results

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Stephan Online

Gather Town Poster Full Screen

Molecular Biology & Biochemistry

u^b

A-043

A-044

A-045

A-046

Stephan Online

b
UNIVERSITÄT
BERN

Gather Town Poster Room

Program Overview (Detailed program follows) 08:00 - 18:00

Register on [Conftool](#) to view abstract submissions

Log in to [Zoom](#) for opening sessions

08:00 - SYMPOSIUM START

Log-in - Chairpersons, participants Presenting Authors & Posterflashes (slides will be uploaded already for Talks and posterflashes)

08:15 - 08:25 [Opening remarks and welcome](#)

PD Dr. Monica Schaller, GCB Coordinator

08:25 - 08:30 Introduction to online/virtual format

Prof. Tobias Nef, ATORG

Login to specific expert group session for Talks, Poster Flash

Start at 08:30

Talks I: Five parallel sessions, 4 talks per session | 15 min. per talk

Expert Committee member session chairs / ATORG technical support moderators

Zoom

Poster Flash: Five parallel sessions, 2 min. per flash, each speaker introduces self and presents His/her one slide, event organizers advance the slides that are all contained in one presentation

Zoom

Break

Talks II: Five parallel sessions, 4 talks per session | 15 min. per talk

Expert Committee member session chairs / ATORG technical support moderators

Zoom

Poster Flash: Five parallel sessions, 2 min. per flash, each speaker introduces self and presents His/her one slide, event organizers advance the slides that are all contained in one presentation

Zoom

Break

Log in to [Gather Town](#)

Poster Session A

Poster Session B

GCB Award for Best PhD Thesis

Chair Prof. Dr. Frank Stüber

Presentation by Awardee Supervisor (5 min.), Presentation of winner (10 min.), prize award

[Keynote Addresses](#)

Chair PD Dr. Monica Schaller

- Prof. Dr. Volker Thiel, Institute of Virology and Immunology
- Dr. phil.nat. Caroline Tinguely, Interregionale Blutspende SRK AG
- Prof. Dr. Martin Bachmann, Depart. of Immunology

Zoom - all comments, questions and feedback to be sent via Zoom chat to PD Dr. Monica Schaller

Closing Remarks

Chair PD Dr. Monica Schaller

Closing symposium, includes farewell & thank you to the former President Prof. Dr. Frank Stüber and welcome the new President, Prof. Rupert Bruckmaier

Virtual Apéro

You are all invited to raise a glass and join us in a virtual Apéro

Session I

Talks & Poster Flash

08:30 - 9:55 | Talks & Poster Flash

[Biological Systems](#) | [Zoom](#)

Chair: **Prof. Dr. Rupert Bruckmaier**, Department of Clinical Research and Veterinary Public Health (DCR-VPH), University of Bern

08:30 - 09:30 Talks I | [Biological Systems](#) | T-001 to T-004 | 15 min. per talk

- 08:30 **Nicoleta Anghel**, Institute of Parasitology, University of Bern
- T-001 Endochin-like Quinolones (ELQs) And Bumped Kinase Inhibitors (BKIs): Efficacy, Synergistic And Additive Effects Of Combined Treatments Against *Neospora caninum* infections *in vitro* and *in vivo*
- 08:45 **Verdiana Trappetti**, Institute of Anatomy, University of Bern
- T-002 The First Pre-clinical Study Employing Synchrotron Microbeam Radiotherapy for the Treatment of Lung Carcinoma
- 09:00 **Michelle A. von Siebenthal**, Urology Research Laboratory, Department for BioMedical Research, University of Bern
- T-003 Novel Mouse Urodynamic Model Including Repeated Detrusor Pressure And External Urethral Sphincter Activity Measurements
- 09:15 **Vivian Pham Vu**, Institute of Pathology, University of Bern
- T-004 IL-33/ST2 Signaling Differentially Contributes To Intestinal Tumorigenesis

Poster Flash I | [Biological Systems](#) | 2 min. ea.

09:35 – 09:55 Poster Numbers and Presenters:

- A-001* Stefano Bagatella
- A-002* Philipp Andreas Kronenberg
- A-003* Patrycja Kucharczyk
- A-004* Eleonora Lupi
- A-005* Mohana Mukherjee
- A-006* Matheus Notter Dias
- A-007* Federica Pilotto
- A-008* Patricia Verena Renz
- A-009* Lotte Johanna Elisabeth Spierenburg
- A-010* Withdrawn

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks
A-xxx (e.g., A-001) – Poster Session A
B-xxx (e.g., B-001) – Poster Session B
Asterisks “*”, (e.g., A-011*) – Poster Flash and Poster Session

08:30 - 9:55 | Talks & Poster Flash

[Biomedical Engineering | Zoom](#)

Chair: **Prof. Dr. Stavroula Mougialakou**, ARTORG Center for Biomedical Engineering Research, University of Bern

08:30 - 09:30 Talks I | **Biomedical Engineering** | T-005 to T-008 | 15 min. per talk

08:30 **Angela Amira Botros**, ARTORG - Gerontechnology and Rehabilitation Technology, University of Bern

T-005 Usage of Ambient Sensors for the Detection of Cognitive State

08:45 **Eric Buffle**, Cardiology, University Bern

T-006 Building An Aortic Stenosis Normogram With An In-vitro Model Of Stiffened Aortic Valve

09:00 **Leonardo Pietrasanta**, ARTORG-Cardiovascular Engineering, University of Bern

T-007 Turbulence Analysis in the Wake of a Transcatheter Aortic Valve(-TAV) Using Tomographic Particle Image Velocimetry (Tomo-PIV)

09:15 **Christoffer Roepstorff**, Equine Department, University of Zurich

T-008 The Relationship Between Upper Body Kinematics And Differences In Peak Ground Reaction Forces In Trotting Horses

Poster Flash I | **Biomedical Engineering** | 2 min. ea.

09:35 – 09:55 Poster Numbers and Presenters:

- A-011* Philipp Aebischer
- A-012* Dominik Brügger
- A-013* Michael Indermaur
- A-014* Sergej Kasavica
- A-015* Joaquin Peñalver de Andrés
- A-016* Kadir Şimşek
- A-017* Benjamin Voumard
- A-018* Flora Bahrami
- A-019* Aileen Naef
- A-010* Kristina Slabeva

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "**", (e.g., A-011*) – Poster Flash *and* Poster Session

08:30 - 9:55 | Talks & Poster Flash

[Biomedical Sciences](#) | [Zoom](#)

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

08:30 - 09:30 Talks I | [Biomedical Sciences](#) | T-009 to T-012 | 15 min. per talk

08:30 **S.L. April-Monn**, Institute of Pathology, University of Bern

T-009 Patient-derived Islet-like tumoroids - Towards more personalized medicine in PanNETs

08:45 **Gregory Loïc Lepeu**, Center for Experimental Neurology, Inselspital, University of Bern

T-010 Cortical Excitability As A Marker Of Epileptic Seizures Susceptibility In The Mouse Hippocampus

09:00 **Nicolas Waespe**, Institute of Social and Preventive Medicine, University of Bern

T-011 Childhood Cancer Patients with Cancer Predisposition Syndromes are at Increased Risk for Early Second Primary Neoplasms

09:15 **Kathrin Zürcher**, Institute of Social and Preventive Medicine, University of Bern

T-012 Management Of Multidrug-Resistant Tuberculosis At HIV Care Clinics In Low- And Middle-Income Countries

09:35 – 09:55 Poster Numbers and Presenters:

Poster Flash I | [Biomedical Sciences](#) | 2 min. ea.

A-021* Jasmine Léa Jendoubi

A-022* Christa König

A-023* Philipp Grossenbacher

A-024* Thokozani Duncan Kalua

A-025* Maria Angeliki Komninou

A-026* Vera Lehmann

A-027* Angela Marie Minnameyer

A-028* Alessandro Mirra

A-029* Umara Nissar Rafiqi

A-030* Laetitia Irène Scherler

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "**", (e.g., A-011*) – Poster Flash *and* Poster Session

08:30 - 9:55 | Talks & Poster Flash

[Cell Biology](#) | [Zoom](#)

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

08:30 - 09:30 Talks I | [Cell Biology](#) | T-013 to T-016 | 15 min. per talk

- 08:30 **Alberto Mattei**, Institute of Cell Biology, University of Bern
- T-013 Signaling Mechanisms of Non-genetic Cancer Drug Resistance in Melanoma
- 08:45 **Nathan G.F. Leborgne**, Institute of Virology and Immunology,
Bern University
- T-014 Discovering Proteolytic Targets In Cathepsin G-Mediated Neutrophil Death
Using Terminal Amine Isotopic Labelling Of Substrates (TAILS)
- 09:00 **Viviana Rubino**, Tumor Immunology, Department for BioMedical Research,
University of Bern Clinic of Medical Oncology, Inselspital. Bern
- T-015 IL-21 Secreted By CD4 T Cells Reduces Leukemia Stem Cell Function In Hu-
man And Murine Acute Myeloid Leukemia
- 09:15 **Chantal Lea Bachmann**, Tumor Immunology, Department for BioMedical
Research, University of Bern
- T-016 Immune-Checkpoints In The Regulation Of Leukemia And Cancer Stem Cells

Poster Flash I | [Cell Biology](#) | 2 min. ea.

09:35 – 09:55 Poster Numbers and Presenters:

- A-031* Haibin Deng
- A-032* Samara Lauren Naim
- A-033* Christina Andronikou
- A-034* Marc Artinger
- A-035* Annina Bindschedler
- A-036* Francis Brühlmann
- A-037* Carmen Alexandra Disler
- A-038* Dzhangar Dzhumashev
- A-039* Eleftheria Girusi
- A-040* Martín González Fernández

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks “*”, (e.g., A-011*) – Poster Flash *and* Poster Session

08:30 - 9:55 | Talks & Poster Flash

[Molecular Biology & Biochemistry](#) | Zoom

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

08:30 - 09:30 Talks I | [Molecular Biology & Biochemistry](#) | T-017 to T-020 | 15 min. per talk

08:30	Salome Aeschlimann , Department of Chemistry and Biochemistry, University of Bern
T-017	The Many Faced TAC In <i>Trypanosoma brucei</i>
08:45	Sebastian Toni Bechara , Institute of Cell Biology, University of Bern
T-018	Investigating Genome Rearrangement In The Paramecium Clade
09:00	Christoph Wenger , Department of Chemistry and Biochemistry, University of Bern
T-019	Characterization of TbTim44 in <i>T. brucei</i>
09:15	Moushumi Das , Institute of Cell Biology, University of Bern
T-020	Determinants And Functional Consequences Of Genome Folding By SMC Proteins In <i>C. elegans</i>

Poster Flash I | [Molecular Biology & Biochemistry](#) | 2 min. ea.

09:35 – 09:55 Poster Numbers and Presenters:

A-041*	Irene Monika Häfliger
A-042*	Damian Hertig
A-043*	Yoandry Hinojosa Lopez
A-044*	Iris Hug
A-045*	Bolaji Nafisat Isiaka
A-046*	Aurelio Jenni
A-047*	Lyna Kabbani
A-048*	Annika Kratzel
A-049*	Alessio Loffreda
A-202*	Therese Solberg

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "*", (e.g., A-011*) – Poster Flash and Poster Session

10:00 - 10:15 | Break



CoffeeBreak
Länggassstrasse 38
3012 Bern

Tel. +41 31 302 00 77
Email coffeebreak@bluewin.ch

Session II

Talks & Poster Flash

10:15 - 11:40 | Talks II & Poster Flash

[Biological Systems](#) | [Zoom](#)

Chair: **Prof. Dr. Petra Roosje**, Department of Clinical Veterinary Medicine, Vetsuisse, University of Bern

10:15 - 11:15 | Talks II | [Biological Systems](#) | T-021 to T-024 | 15 min. per talk

10:15 **Ida Luisa Boccalaro**, Center of Experimental Neurology, Department of Neurology, Inselspital University Hospital Bern

T-021 Modulation of Brain Circuits for Sensory Processing During Sleep States

10:30 **Hang Thi Thuy Bui**, Institute of Pathology, University of Bern

T-022 Cell Type-specific Regulation of Interleukin-1-driven Inflammation

10:45 **Carlo Cerquetella**, Institute of Physiology, University of Bern

T-023 Neural Circuits For Emotional Conflicts And Decision-making In The Ventral CA1 Hippocampus

11:00 **Luca Gabriele Valente**, Department of Intensive Care Medicine, Inselspital, Bern; Institute for Infectious Diseases, University of Bern

T-024 Prophylaxis Of Experimental MRSA Ventilator-associated Pneumonia In Rats Using Aerosolized Bacteriophages

Poster Flash II | [Biological Systems](#) | 2 min. ea.

11:20 - 11:40 Poster Numbers and Presenters:

B-051* Federica Angela Franciosa

B-052* Daniela C. Ivan

B-053* Konstantinos Koukoutselos

B-054* Jakub Králik

B-055* Josephine Angelo Mapunda

B-056* Joana Filipa Mendes Duarte

B-057* Carla Pernaci

B-058* William Pownall

B-059* Raphaela Isabelle Marianne Seeger

B-060* Patcharamon Seubnooch

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "*", (e.g., A-011*) – Poster Flash and Poster Session

10:15 - 11:40 | Talks II & Poster Flash
[Biomedical Engineering | Zoom](#)

Chair: **Prof. Dr. Dominik Obrist**, Cardiovascular Engineering (CVE), ARTORG
Center for Biomedical Engineering Research, University of Bern

10:15 - 11:15 | Talks II | **Biomedical Engineering** | T-025 to T-028 | 15 min. per talk

10:15 **Tatiana Kochetkova**, Laboratory for Mechanics of Materials & Nanostructures, Empa, Switzerland

T-025 Combining Polarized Raman Spectroscopy and Micropillar Compression to Study Microscale Structure-property Relationships in Mineralized Tissues

10:30 **Fabian Müller**, ARTORG Center for Biomedical Engineering Research, University of Bern

T-026 Robotic Inner Ear Access For Cochlear Implantation

10:45 **Denis Elia Schenk**, ARTORG Center for Biomedical Engineering Research, University of Bern

T-027 Accurate and Fast Estimation of Fracture Load at the Distal Radius based on Homogenized Finite Element Models

11:00 **Maria F. Vasiloglou**, ARTORG Research Center, University of Bern

T-028 What Healthcare Professionals Think of "Nutrition & Diet" Apps: An International Survey

Poster Flash II | **Biomedical Engineering** | 2 min. ea.

11:20 - 11:40 Poster Numbers and Presenters:

B-061* Martyna Dziadosz

B-062* Dario Ferrari

B-063* Özhan Özen

B-064* Michael Andreas Rebsamen

B-065* Alice Dudle

B-066* Benjamin Till Ellenberger

B-067* Daniel Fabian Erpenbeck

B-068* Klaus Schürch

B-069* Ye Tang

B-070* Vasily Tolkachev

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "*", (e.g., A-011*) – Poster Flash *and* Poster Session

10:15 - 11:40 | Talks II & Poster Flash

[Biomedical Sciences](#) | [Zoom](#)

Chair: **Prof. Dr. Benjamin Gantenbein**, Department for BioMedical Research (DBMR)
University of Bern

10:15 - 11:15 | Talks II | **Biomedical Sciences** | T-029 to T-032 | 15 min. per talk

- 10:15 **Katrin Melanie Beckmann**, Neurology Department, Clinic of Small Animal Surgery, Vetsuisse Faculty Zurich
- T-029 Differences in Resting State Networks of Epileptic Dogs Compared to Healthy Control Dogs
- 10:30 **Marius Reto Bigler**, Department of Cardiology, Bern University Hospital
- T-030 Accuracy of Intracoronary ECG Parameters for Myocardial Ischemia Detection
- 10:45 **Gion Fränkl**, SCI Population Biobanking & Translational Medicine, Swiss Paraplegic Research
- T-031 Psychological Stress & Accelerated Aging in SCI Patients - A Longitudinal Pilot Feasibility Study
- 11:00 **Louise Françoise Martin**, Clinic for Zoo Animals, Exotic Pets and Wildlife, University of Zurich
- T-032 Macrowear Effects Of External Quartz Abrasives Of Different Size And Concentration In Rabbits (*Oryctolagus cuniculus*)

Poster Flash II | **Biomedical Sciences** | 2 min. ea.

11:20 - 11:40 Poster Numbers and Presenters:

- B-076* Andrew Francis Brown
- B-077* Francesco Galli
- B-078* Ranjana Malaika Samira Gigi
- B-071* Alja Mazzini
- B-072* Julia K. Prümmer
- B-073* Katrina Rosenberger
- B-074* Alba Rudolf Vegas
- B-075* Kira Schmitt
- B-079* Lisette van Os
- B-080* Jakob Winter

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks
A-xxx (e.g., A-001) – Poster Session A
B-xxx (e.g., B-001) – Poster Session B
Asterisks “*”, (e.g., A-011*) – Poster Flash *and* Poster Session

10:15 - 11:40 | Talks II & Poster Flash

[Cell Biology | Zoom](#)

Chair: **Prof. Dr. Thomas Kaufmann**, Institute of Pharmacology, University of Bern

10:15 - 11:15 | Talks II | **Cell Biology** | T-033 to T-036 | 15 min. per talk

10:15 **Elena De Martin**, Institute of Virology and Immunology, University of Bern

T-033 When Pestiviruses And The Innate Immune System Meet: Comparison Of Different E^{rn}s

10:30 **Martin Erhardt**, Institut of Pharmacology, University of Bern

T-034 The Cholesterol Transporter Niemann-Pick C1 Contributes to TGF- β -Induced Pro-fibrotic Changes in Human Type II Pneumocytes

10:45 **Nicolas Jan Niklaus**, Institute of Pathology, Bern, Switzerland

T-035 Oncogene-induced Autophagy Enhances Migration and Invasion of Breast and Prostate Cancer Cells

11:00 **Igor Tokarchuk**, Division of Experimental Pathology, Institute of Pathology, University of Bern

T-036 Reversing EMT in Breast Cancer Cells by Autophagy Induction

Poster Flash II | **Cell Biology** | 2 min. ea.

11:20 - 11:40 Poster Numbers and Presenters:

B-081* Johanna Baumgartner

B-082* Hervé Besançon

B-083* Verena M. Betzler

B-084* Niccolò Bianchi

B-085* Max Heydasch

B-086* Pascal Rossatti

B-087* Kristina Seiler

B-088* Basma Tarek

B-089* Paola Antonello

B-090* Xinyue Chang

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "*", (e.g., A-011*) – Poster Flash and Poster Session

10:15 - 11:40 | Talks II & Poster Flash

[Molecular Biology & Biochemistry](#) | Zoom

Chair: **Prof. Dr. Sebastian Leidel**, Department of Chemistry, Biochemistry and Pharmacy, University of Bern

10:15 - 11:15 | Talks II | [Molecular Biology & Biochemistry](#) | T-037 to T-040 | 15 min. per talk

- 10:15 **Mengjing Bao**, Institut for Cell Biology, University of Bern
- T-037 Modifications Of The C-terminal Tail Of α -Tubulin And Its In Vivo Importance In Drosophila
- 10:30 **Sabina Deutschmann**, Department of Chemistry and Biochemistry, University of Bern
- T-038 Determining The Orientation Of bo_3 Oxidase In Liposomes
- 10:45 **Nicolas Dolder**, Department of Chemistry and Biochemistry, University of Bern
- T-039 The Crux With GUVs And Salt
- 11:00 **Virginia Hill**, Veterinary Bacteriology, University of Bern
- T-040 Minimalistic Mycoplasmas Harbour Different Types of Functional Toxin-Antitoxin Systems

Poster Flash II | [Molecular Biology & Biochemistry](#) | 2 min. ea.

11:20 - 11:40 Poster Numbers and Presenters:

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks "***", (e.g., A-011*) – Poster Flash *and* Poster Session

- B-091* Michel Fasnacht
- B-092* Tim Johan Gelmi
- B-093* Nina Gillis-Germitsch
- B-094* Elham Kashani
- B-095* Francis Muchaamba
- B-096* Nicole Raad
- B-097* Sandhya Krishnan Radha Krishnan
- B-098* Thomas Roder
- B-099* Dominic Manuel Schärer
- B-100* Louis Jean François Tirot

11:40 - 13:00 | Break



Poster Session A

13:00 - 14:00 Posters | [Biological Systems](#) | [Gather Town](#)

- A-001* **Stefano Bagatella**, Vetsuisse Faculty/Department of Clinical Research and Veterinary Public Health (DCR-VPH) The Two Sides Of Neutrophils: Killers And Spreaders Of Listeria Monocytogenes?
- A-002* **Philipp Andreas Kronenberg**, Institute of Parasitology, Vetsuisse and Medical Faculty, Zürich
Serological Diagnosis of Alveolar and Cystic Echinococcosis Using Next-generation Bioanalytical Tools
- A-003* **Patrycja Kucharczyk**, Department for BioMedical Research, University of Bern
Carbonic Anhydrase is a Molecular Target of Thiazide-induced Glucose Intolerance
- A-004* **Eleonora Lupi**, Institut for Anatomy, University of Bern
In Vivo Screening Assay For The Identification Of Compounds Affecting The Proepicardium And The Epicardium Formation
- A-005* **Mohana Mukherjee**, Institute for Infectious Diseases, University of Bern
Gut Microbiota: The Key Regulator Of Mammalian Arsenic Metabolism?
- A-006* **Matheus Notter Dias**, Institute of Infectious Diseases, University of Bern
Effect of Benzoxazinoids on the Mucosal Microbiota and Host Health
- A-007* **Federica Pilotto**, Center for Experimental Neurology, Department of Neurology, Inselspital University Hospital, University of Bern
Maintaining ER - Mitochondria contacts is neuroprotective in C9orf72 preclinical model of ALS
- A-008* **Patricia Verena Renz**, Department of Obstetrics and Gynecology, Inselspital, Bern University, Hospital and Department for BioMedical Research (DBMR), University of Bern
Deciphering Astrocyte Polarization In Perinatal White Matter Injury And Its Role In Disease Pathogenesis
- A-009* **Lotte Johanna Elisabeth Spierenburg**, Department of Physiology, University of Bern
Dopaminergic Neuromodulation Of Spike Timing Dependent Plasticity In Layer 5 Pyramidal Neurons Of The Anterior Cingulate Cortex
- A-102 **Raquel Adaia Sandoval Ortega**, Department of Physiology, University of Bern
Touch and Pain Processing during Sleep
- A-104 **Raphael Beyeler**, Institute of Cell Biology, University of Bern
The Chaperone PbHscB Plays a Crucial Role in Plasmodium berghei Liver Stage Development
- A-106 **Benedetta Coppe**, Institute of Anatomy, University of Bern
Influence Of An Ancestral Heart Injury In The Heart Regeneration Ability Of The Next Generations: An Epigenetic Memory Vision Of The Process
- A-108 **Murielle Golomingi**, Department for BioMedical Research (DBMR), University of Bern
Complement Mannan-Binding-Lectin And Mannan-Binding-Lectin-Associated Serine Protease 1 Are Associated With Activated Platelets During Clot Formation In A Microfluidic Bleeding Model
- A-110 **Amjad Khan**, Institute of Pathology, University of Bern
Effects of Scanner Variability on Deep Learning based Lymph Node Segmentation

13:00 - 14:00 Posters | [Biological Systems](#) | [Gather Town](#)

- A-114 **Seyma Nayir**, Physiology Department, University of Bern
Stretchable Microelectrode Arrays to Investigate the Effect of Strain on the Spontaneous Activity of Cardiomyocyte Cell Cultures
- A-116 **Alice Pontiggia**, Veterinary Physiology, University of Bern
Body Temperature Is Related to Behavioral Adaptations During Early Heat Stress in Grazing Dairy Cows
- A-118 **Alba Segura Amil**, Department of Neurosurgery, Inselspital, University Hospital Bern, University of Bern
Improving Parkinson's Disease Deep Brain Stimulation Therapy with Patient-specific Tractography
- A-120 **Daniel Spari**, Department for Visceral Surgery and Medicine, Bern University Hospital, University of Bern
Bacterial Extracellular ATP As A Virulence Factor In Peritoneal Sepsis
- A-122 **Matthias Chinyen Tsai**, Physiology, University of Bern
Multi-functional Neural Networks and Bias Adaptation
- A-124 **Samantha Weber**, Department of Neurology, Inselspital, Bern University Hospital, University of Bern
The Relationship between Perceived- and Biological Stress and distinct Neuroimaging Endophenotypes in Functional Neurological Disorder
- A-126 **Emmanouela Volitaki**, Department of Physiology, University of Bern
Deciphering The Role Of Parvalbumin Interneurons In The Ventral CA1 Hippocampus During Anxiety

13:00 - 14:00 Posters | [Biomedical Engineering](#) | [Gather Town](#)

- A-011* **Philipp Aebischer**, ARTORG Center, Bern, Switzerland
Intraoperative Impedance-Based Estimation of Cochlear Implant Electrode Array Insertion Depth
- A-012* **Dominik Brügger**, Department of Ophthalmology, Inselspital, Bern University Hospital, University of Bern
Dependence of Human Contrast Sensitivity on the Phase of Intrinsic Cortical Oscillations
- A-013* **Michael Indermaur**, ARTORG Center for Biomedical Engineering Research, University of Bern
Compressive Properties of Ovine Cortical Bone ECM Are Not Affected by Tissue Fixation
- A-014* **Sergej Kasavica**, Institute for Physiology, University of Bern
Top-down And Bottom-up Interactions In The Posterior Parietal Cortex During Sensory Perception

- A-015* **Joaquín Álvaro Peñalver de Andrés**, Motor Learning and Neurorehabilitation Laboratory, ARTORG Center for Biomedical Engineering Research, University of Bern
Training With Enforced Task Rules Supports Motor Learning And Modulates Attentional Brain Networks
- A-016* **Kadir Şimşek**, University of Bern
Novel Approaches in Diffusion Weighted Magnetic Resonance Spectroscopy at Short Echo Time to Investigate Macromolecular Signals and Non-Gaussian Diffusivity of Metabolites in Human Brain
- A-017* **Benjamin Voumard**, ARTORG Center for Biomedical Engineering Research
Can an Explicit Finite Element Model Predict Press-fit Force and Stiffness of a Conical Implant in Bovine Trabecular Bone?
- A-018* **Flora Bahrami**, Empa, Swiss Federal Laboratories for Materials Science and Technology, Laboratory for Biomimetic Mem-branes and Textiles
Digital Twin for Individualized Transdermal Fentanyl Therapy
- A-019* **Aileen Charlotte Naef**, Gerontechnology and Rehabilitation, University of Bern
Movement Analysis and Virtual Reality Stimulation to Predict and Prevent Delirium in Critically Ill Patients: Study Protocol for a Randomised Clinical Trial
- A-020* **Kristina Slabeva**, Neurology Department, University of Bern
A Circuit Model Of Limbic Seizures
- A-128 **Talia Bergaglio**, Transport at Nanoscale Interfaces Laboratory, Empa – Swiss Federal Laboratories for Materials Science and Technology
Machine Learning Augmented Red Blood Cell Imaging And Analytics
- A-130 **Tarcisi Cantieni**, Institute for Complementary and Integrative Medicine, University of Bern
Detectability Of Hypoxic Volumes In Human Muscle Tissue Using Near-Infrared Spectroscopy
- A-132 **Nicolas Rouben Pascal Deperrois**, Institut für Physiologie, Universität Bern
Creative Memory Semantization Through Adversarial and Non-adversarial Dreaming
- A-134 **Gian Mauro Carlo Guyer**, Division of Medical Radiation Physics and Department of Radiation Oncology, University Hospital Bern and University of Bern
Development of a treatment planning framework for moving table during treatment
- A-136 **Martin Hofmann**, sitem Center for Translational Medicine and Biomedical Entrepreneurship, University of Bern
Development of a Dental Miniscaler for Prophylactic and Periodontal Care
- A-138 **Samuel Elia Johannes Knobel**, Gerontechnology & Rehabilitation Group, University of Bern
Evaluation of a New VR-based Audio-tactile Cueing-system to Guide Visuo-spatial Attention in Neglect Patients: Preliminary Results
- A-140 **Rudy Rizzo**, Department of Radiology and Biomedical Research, University of Bern
Potential Benefits from Multi-Echo Single-Shot Magnetic Resonance Spectroscopy with a Combined Fitting Process
- A-142 **Chandrima Shrivastava**, ARTORG Center for Biomedical Engineering Research, University of Bern
How Can Digital Twins Reduce Quality Loss In Supply Chains Of Heat-sensitive Biological Products?

13:00 - 14:00 Posters | **Biomedical Engineering** | [Gather Town](#)

A-144

Guodong Weng, Support Center for Advanced Neuroimaging (SCAN), Institute for Diagnostic and Interventional Neuroradiology, University of Bern
Evaluation of Dual Non-selective Adiabatic Refocusing Pulses for Magnetic Resonance Echo Planar Spectroscopic Imaging (EPSI-MRSI) at 7T

A-146

Suhang You, ARTORG, University of Bern
Voronoi Diagram Based Sampling, an Improved Sample Selection Approach for Informative Sample Selection and Redundancy Reduction in Medical Image Analysis

13:00 - 14:00 Posters | **Biomedical Sciences** | Gather Town

A-021*

Jasmine Léa Jendoubi, Department of Neurology, Bern, University Hospital, University of Bern
Differential Spindle Expression Dependent Upon Thalamic Nuclei Lesioned by Stroke

A-022*

Christa König, Division of Pediatric Hematology/Oncology, Department of Pediatrics, University of Bern
Continuous Monitoring of Health Data With a Wearable Device in Pediatric Patients Undergoing Chemotherapy for Cancer - a Feasibility Pilot Study

A-023*

Philipp Grossenbacher, Institute of Biochemistry and Molecular Medicine, University of Bern
Bioorthogonal Site-selective Conjugation of Fluorescent Dyes to Antibodies: Method and Potential Applications

A-024*

Thokozani Duncan Kalua, Institute of Social and Preventive Medicine, University of Bern
Impact of COVID-19 on the Malawi HIV Viral Load program

A-025*

Maria Angeliki Komninou, Dept. of Ophthalmology, Bern University Hospital, Inselspital, University of Bern
Characterization of Factors to Optimize Corneal Stiffening Via Crosslinking

A-026*

Vera Lehmann, University Hospital Bern, Department of Diabetes, Endocrinology, Nutritional Medicine and Metabolism, Inselspital, Bern University
HEADWIND: Design and Evaluation of a Vehicle Hypoglycemia Warning System in Diabetes – Results from a Driving Simulator Study

A-027*

Angela Marie Minnameyer, Institute of Bee Health, University of Bern
Looking Beyond Survival: Hidden Synergistic Interactions In Previously Overlooked Sublethal Parameters In Bumblebees, *Bombus terrestris*

A-028*

Alessandro Mirra, Department of Clinical Veterinary Medicine, Anaesthesiology and Pain Therapy Section, University of Bern
Preliminary Data On The Use Of The Electroencephalographic Monitor SedLine® In Pigs Undergoing General Anaesthesia

A-029*

Umara Nissar Rafiqi, University of Bern
To Develop Spatiotemporal Metabolomics Imaging of Thyroid Carcinoma Using DESI-MSI

A-030*

Laetitia Irène Scherler, Department for BioMedical Research, University of Bern
Kidney And Vitamin D Metabolizing Enzymes: Role In The Prevention Against Atherosclerosis

A-150

Afroditi Tripyla, Department of Diabetes, Endocrinology, Nutritional Medicine and Metabolism, Inselspital, Bern University Hospital, University of Bern
Cognitive Function and Symptom Perception After a 75g Oral Glucose Load vs. Placebo in Patients with Postprandial Hypoglycaemia After Gastric Bypass Surgery

- A-031* **Haibin Deng**, Division of General Thoracic Surgery, Inselspital, Bern University Hospital
LDHB mediated Lactate Utilization is a Metabolic Dependency of Tumor-initiating Cells in Non-small Cell Lung Cancer
- A-032* **Samara Lauren Naim**, Institute of Pharmacology, University of Bern
Role of BOK in APAP-induced Hepatotoxicity
- A-033* **Andronikou Andronikou**, Institute of Animal Pathology, Vetsuisse Faculty, University of Bern
Targeting PARG loss-mediated PARP inhibitor resistance in BRCA2-deficient Tumors
- A-034* **Marc Artinger**, Biotechnology Institute Thurgau, University of Bern
The CCR7 Glycocalyx Shape in Controlling Receptor Function and Ligand Recognition
- A-035* **Annina Bindschedler**, Institute of Cell Biology, University of Bern
Host Cell Nrf2 Signaling in *Plasmodium berghei*-infected Liver Cells
- A-036* **Francis Brühlmann**, Institute of Animal Pathology, University of Bern
Targeting Secreted *Theileria* Effector Proteins in the Host Cell Cytoplasm and Nucleus Responsible for Transformation
- A-037* **Carmen Alexandra Disler**, Institute of Animal Pathology, Vetsuisse, University of Bern
Complementary *in vivo* and *in vitro* Approaches identify NAA60 as major Determinant of Platinum Drug Sensitivity
- A-038* **Dzhangar Dzhumashev**, Department of Pediatric Hematology and Oncology, Inselspital, Bern University
F3-mediated Targeting Of Nucleolin As a Promising Approach For Liposomal Drug Delivery To Rhabdomyosarcoma
- A-039* **Eleftheria Girousi**, Laboratory for Oral Molecular Biology, Department of Orthodontics and Dentofacial Orthopedics, University of Bern
The Role Of IRF6 in Cleft Lip And Palate, Wound Healing And Scar Formation
- A-040* **Martín González Fernández**, Institute of Animal Pathology, University of Bern
Chemogenetic Interactions To Elucidate Response Mechanisms To Taxane Anti-Cancer Therapy
- A-152 **Vaiva Gradauskaite**, Division of Experimental and Clinical Research, Department of Clinical Research and Veterinary Public Health, Vetsuisse Faculty, University of Bern
Towards NextGen Precision Cancer Immunotherapy
- A-154 **Marc-Antoine Jacques**, Institute of Cell Biology, University of Bern
CODEX, a Neural Network Approach to Explore Signaling Dynamics Landscapes
- A-156 **Mirela Kremenovic**, Division of Experimental Pathology, Institute of Pathology, University of Bern
Investigating the Cellular and Molecular Mechanisms of Mycobacteria-derived Immunotherapies in the Treatment of Melanoma
- A-158 **Yu Larpin**, Institute of Cell Biology, University of Bern
Bacterial Pore-forming Toxin Pneumolysin: Cell Membrane Structure and Microvesicle Shedding Capacity Determines Differential Survival of Immune Cell Types
- A-160 **Nikita Markov**, Institute of Pharmacology, University of Bern
Loss of OPA1 Impairs Mitochondrial Function and Switches Alternatively Activated Macrophages to M1-like Type of Metabolism

- A-162 **Shuang Peng**, Institute of Pharmacology, University of Bern
RhoH is a Negative Regulator of Neutrophil Extracellular Trap Formation
- A-164 **Sreoshee Rafiq**, Division of Experimental Pathology, Institute of Pathology, University of Bern
Linking Lysosomes With Chemotherapy Resistance In Acute Myeloid Leukemia
- A-166 **Jonathan Florian Save**, Bern / Lausanne University / DMF
Study Of Ggenes Involved In Lysin Tolerance And Succptibility In *S.pneumoniae*
- A-168 **Isabel Arenas Hoyos**, Department for BioMedical Research, University of Bern
Effect of Local Immunosuppression on Rejection in Vascularized Composite Allotransplantation
- A-170 **Guillaume Francois Frederic Billeau**, Institut fur Virologie und Immunologie, University of Bern
Pestiviral Endoribonuclease: Cell Tropism and Interaction with Its Host to Bypass Innate Immunity
- A-172 **Michelle Buri**, DBMR, University of Bern
The Role of Acetylcholine in the Regulation of Acute Myeloid Leukemia Stem Cells
- A-174 **Stefan Forster**, Department for Biomedical Research, University of Bern
Generation of a Patient-Derived Lung Cancer Organoid (PD-LCO) Biobank
- A-176 **Pascal Guntern**, Department for BioMedical Research, University of Bern
The Role Of IgE Glycosylation Patterns On Its Biological Activity
- A-178 **Lusine Hovhannisyan**, Department of Biomedical Research, Radiation Oncology group, University of Bern
CMET-targeting Chimeric Antigen Receptor (CAR) T Cells in Combination with Radiation Therapy for Glioblastoma Multiforme (GBM) Treatment
- A-180 **Dennis Imhof**, Institute of Parasitology, Vetsuisse Faculty, University of Bern
Bumped Kinase Inhibitor BKI-1748: Studies On *In Vitro* Activity, Safety And *In Vivo* Efficacy In Non-Pregnant And Pregnant Mouse Models For *N. Caninum* And *T. Gondii* Infection
- A-182 **Darya Karatkevich**, DBMR, University of Bern
Schedule-dependent Treatment Increases Chemotherapy Efficacy in Malignant Pleural Mesothelioma
- A-184 **Kemal Mehinagic**, Institute for Virology and Immunology IVI, Mittelhäusern and Bern
Identification and Characterisation of Essential And Nonessential Genes of African Swine Fever Virus
- A-186 **Martina Minoli**, Urology Research Laboratory, Department of Urology and BioMedical Research, University of Bern
Bladder Cancer: Patient-derived Organoids as a Tool for Precision Medicine
- A-188 **Seyran Mutlu**, Department of Pulmonary Medicine, University Hospital Bern
The Effect of Adoptive Transfer of Hepatocyte Growth Factor Transfected T Cells in a Bleomycin Injured Murine Lung Model
- A-190 **Emilia Radulovic**, Institute of Virology and Immunology, Mittelhäusern
Basal Immune Status Determines Disease Severity In Pigs Infected With African Swine Fever Virus
- A-192 **Katyayani Sharma**, Pediatric Endocrinology, Diabetology and Metabolism, University Children's Hospital Bern
Targeting Androgen Production in Prostate Cancer by Post-translational Regulation of P450c17 Lyase Activity

13:00 - 14:00 Posters | [Cell Biology](#) | [Gather Town](#)

- A-194 Disha Tandon, Institute for Infectious Diseases, University of Bern
Synthetic Pathogen-Microbiota Symbiosis : Intestinal Colonization with Obligate Microbiota-Syntrophic Pathogenic Bacteria
- A-196 **Cong Wang**, DBMR, Bern University
Role of liver stiffness in the pathophysiology of portal hypertension

13:00 - 14:00 Posters | [Molecular Biology & Biochemistry](#) | [Gather Town](#)

- A-041* **Irene Monika Häfliger**, Institute of Genetics, Vetsuisse Faculty, University of Bern
Improving Fertility And Rearing Success In The Swiss Holstein Cattle Population Through Exploitation Of Massive Genome-Wide Genotyping And Sequencing Data
- A-042* **Damian Hertig**, Departments of Clinical Research and Radiology, University of Bern
Life Monitoring of Cellular Metabolism and Mitochondrial Respiration in 3D Cell Culture System Using NMR Spectroscopy
- A-043* **Yoandry Hinojosa Lopez**, Institute of Virology and Immunology IVI, Mittelhäusern
Identification Of Virulence Factor Of Classical Swine Fever Virus Using A Pair Of Evolutionary Related High And Low Virulent Isolates
- A-044* **Iris Sandra Hug**, University of Bern
RNA Polymerase III Transcribes Small Extrachromosomal Circular DNA
- A-045* **Bolaji Nafisat Isiaka**, Institute of Cell Biology, University of Bern
In vivo DNA Topology And Transcriptional Regulation In *Caenorhabditis elegans*
- A-046* **Aurelio Jenni**, Institute of Biochemistry and Molecular Medicine, University of Bern
Is GPI2 Required For GPI Anchor Biosynthesis?
- A-047* **Lyna Emma Sunna Kabbani**, Institute of Cell Biology, University of Bern
Investigating The Roles Of DNA:RNA Hybrids During Genome Rearrangements In *Paramecium Tetraurelia*
- A-048* **Annika Kratzel**, Institute of Virology and Immunology, Berne and Mittelhaeusern
A Genome-wide CRISPR Screen Identifies Interactors of the Autophagy Pathway as Conserved Coronavirus Targets
- A-049* **Alessio Loffreda**, Institute of Biochemistry and Molecular Medicine, University of Bern
CLDP43, a Novel Cardiolipin Synthase-dependent Protein affecting Cardiolipin Synthesis and Mitochondrial Integrity in *T. brucei*
- A-198 **Sara Bonetti**, Institute of Biochemistry and Molecular Medicine, University of Bern
First Structure of an MCT1 and MCT4 L-Lactate Transporter Homologue: Insights into Substrate Binding and Transport
- A-200 **Federico Saltarin**, Theodor Kocher institute, University of Bern
Melanoma Brain Metastasis: How do Melanoma Cells breach the Blood Brain Barrier?
- A-202* **Therese Solberg**, Institute of Cell Biology, University of Bern
The Possibility of a piRNA Pathway in the Unicellular Eukaryote *Paramecium tetraurelia*

- A-204 **Thi Nhu Thao Tran**, Institute for Virology and Immunology, University of Bern
Establishment of Universal Reverse Genetics Platform for Emerging RNA Viruses
- A-206 **Joseph Wambui**, Institute for Food Safety and Hygiene, University of Zurich
Comparative Genome Analysis Reveals Different Bacteriocin Encoding Operons in Psychrophilic and Psychrotrophic Clostridia Associated with Blown-pack Spoilage of Vacuum-packed Chilled Meat
- A-208 **Asli Adak**, Department of Chemistry and Biochemistry, University of Bern
Establishing Stable Suppression of NMD in Human Induced Pluripotent Stem Cells by Increasing UPF3A Levels
- A-210 **Cristian Eggers**, DCB, University of Bern
Wooble Uridine tRNA Modifications Are Essential For Correct Translation Dynamics And Ribosome Movement Along The mRNA
- A-212 **Markus Gerber**, Departement für Chemie und Biochemie, University of Berne
Investigating The Role Of Msp1 In Trypanosoma Brucei Mitochondrial Quality Control
- A-214 **Laura Jahnke**, Department of Ophthalmology, University Hospital of Bern, University of Bern
Involvement of Fibrillary Collagens in the Regeneration Process After Laser-induced Retinal Degeneration in the Zebrafish
- A-216 **Ana Kalichava**, Cell biology, University of Berm
Expansion Microscopy of TAC Protein-complex arrangement in T. brucei
- A-218 **Roman Alois Mahler**, Department of Chemistry and Biochemistry, University of Bern
Characterisation Of The *Escherichia coli* Cytochrome *b561* Superoxide:Ubiquinone Oxidoreductase
- A-220 **Joao Marques**, Center for Experimental Neurology, Department of Neurology, Inselspital University Hospital, University of Bern
Investigating the Spinal Circuitry in C9orf72-associated Amyotrophic Lateral Sclerosis (ALS)
- A-222 **Alicia Romano**¹, Clinic of Ruminants, Vetsuisse-Faculty, University of Bern
Analysis Of Bovine Intramammary Resistome And Of The Bacterial Transmission Within Dairy Herds
- A-224 **Sophie Elena Sage**, Swiss Institute of Equine Medicine, Department of Clinical Veterinary Medicine, Vetsuisse Faculty, University of Bern and Agroscope Bern
Single-Cell Gene Expression Analysis Of Bronchoalveolar Cells In Asthmatic Horses
- A-226 **Sara Doina Schütz**, Interfaculty Bioinformatics Unit, University of Bern
Functional Characterization of Francisella tularensis holarctica Genotypes Using a Proteogenomic Approach
- A-228 **Ekaterina Shvetsova**, Department of Chemistry and Biochemistry, University of Bern
The Role of Codon-specific Translational Defects in Protein Homeostasis
- A-230 **Shohreh Teimuri**, Cell biology, Bern
Investigating The Function Of Top3b In Drosophila RNA Localization
- A-232 **Adrienne Vancura**, Department for Biomedical Research DBMR, University of Bern
Evolutionarily conserved lncRNA cancer drivers
- A-234 **Jie Wu**, Department of Chemistry and Biochemistry, University of Bern
Investigating the Translation Dynamics of Ribosomes in the Absence of tRNA Modification

Poster Session B

14:00 - 15:00 Posters | [Biological Systems](#) | [Gather Town](#)

- B-051* **Federica Angela Franciosa**, Department of Physiology, University of Bern
Characterization Of L5 Pyramidal Neurons Of The ACC In Chronic Pain Conditions
- B-052* **Daniela C. Ivan**, Theodor Kocher Institut, University of Bern
Monocyte Recruitment to the Inflamed Central Nervous System: Migration Pathways and Distinct Functional Polarizations
- B-053* **Konstantinos Koukoutselos**, Physiology, University of Bern
Neural Correlates for Anxiety and Its Prediction in the Ventral CA1 Hippocampus
- B-054* **Jakub Králik**, Department of Physiology, University of Bern
Quantification Of Restored Vision In Murine Blind Retinas Using Light-sensitive Opto-mGluR6 Receptors – Functional Evaluation With Multi-electrode Arrays
- B-055* **Josephine Angelo Mapunda**, Theodor Kocher Institute, Bern
Imaging The CNS Immune Privilege: The Role of CNS Barriers in Regulating Trafficking of Immune Cells and Immune Mediators in the Central Nervous System
- B-056* **Joana Filipa Mendes Duarte**, Institute of Physiology, University of Bern
Neural Circuit Dynamics in the Ventral CA1 Hippocampus during Reward and Aversive Contextual Memories
- B-057* **Carla Pernaci**, Center for Experimental Neurology, Department of Neurology, Inselspital University Hospital, University of Bern
Developmental Deficits In Cerebellar Circuits Govern Spinocerebellar Ataxia-1 (SCA1) Pathology
- B-058* **William Pownall**, Vetsuisse Faculty, Department of Surgery, Small Animal Clinic, University of Bern, Department of Clinical Research and Veterinary Public Health
Generation Of A *Listeria Monocytogenes* Vaccine Vector Platform Against *Neospora Caninum*
- B-059* **Raphaëla Isabelle Marianne Seeger**, Institute of Anatomy, University of Bern
Imaging of SNARE-Dependent Spontaneous and Evoked Synaptic Transmission. - Cryo-electron Tomography (cryo-ET) Imaging of Grown Neurons with SNAP-25 Mutants and KO, Which Show Spontaneous and Evoked Synaptic Transmission in Preliminary Publications
- B-060* **Patcharamon Seubnooch**, Department for BioMedical Research, Hepatology, University of Bern
Using Desorption Electrospray Ionization Mass Spectrometry (DESI-MS) for Spatially Resolved Metabolomics in Non-alcoholic Fatty Liver Disease
- B-101 **Gabriele Chiffi**, Institute for Infectious Diseases, University of Bern
Investigating Sleep-Wake Disorders After Tick-Borne Encephalitis
- B-103 **Kristina Carolin Berne**, Theodor-Kocher-Institute, University of Bern
Role Of The Angiogenic Factor Ang2 In Myeloid Recruitment Into The Inflamed CNS
- B-105 **Ivan Bozic**, Zentrum für experimentelle Neurologie, Inselspital Bern, Universität Bern
The Coordinating Influence Of Thalamic Nucleus Reunions On Sleep Oscillations In Cortical And Hippocampal Structures – Relevance To Memory Consolidation And Sleep Structure

14:00 - 15:00 Posters | [Biological Systems](#) | [Gather Town](#)

- B-107 **Ahmed Farid Tawfik Mohamed Elhelbawi**, Department of Chemistry and Biochemistry, Bern University
Mettl3 Function Is Essential During Zebrafish Development
- B-109 **Ali Kazemian**, Institute of Veterinary Anatomy, Vetsuisse Faculty, University of Zurich
Antigestagen-mediated Effects On *In Vitro* Decidualized Canine Uterine Stromal Cells
- B-111 **Jasmin Kuratli**, Institute of Veterinary Pathology, Vetsuisse Faculty, University of Zürich
Effects Of The Histamine H1 Receptor Inhibitor Azelastine On *Chlamydia Muridarum* Development In HeLa Cells
- B-113 **Anastasia Milusev**, Department for BioMedical Research, University of Bern
Investigating the Heterogeneity of Porcine Endothelial Glycocalyx-Composition and -Sulfation
- B-115 **Akira Nomura**, Department of Physiology, University of Bern
Deciphering the Contribution of Caveolin-1 in Atrial Fibrillation
- B-117 **Jana Remlinger**, Dept. of Neurology, Inselspital, Bern University Hospital and Dept. for BioMedical Research (DBMR), University of Bern
Involvement of the Visual Pathway in Antibody-mediated Central Nervous System Autoimmunity
- B-119 **Zoja Selimi**, Department of Physiology, University of Bern
A Model of Interacting Cardiac Sodium Channels to Investigate Dominant Negative Loss-Of-Function Mutations
- B-121 **Franziska Silvia Strunz**, Department for BioMedical Research, University of Bern
Repair of a Critical Size Defect in Osteoporotic Mice
- B-123 **Bianca Viberti**, Centre for Experimental Neurology, Department of Neurology, Inselspital University Hospital Bern, University of Bern
Ambient Temperature (Ta) Manipulation As A Novel Technique To Dissociate REM Sleep And Cataplexy In Narcolepsy
- B-125 **Song Xue**, Dept. Nuclear Medicine, University of Bern
Voxel-wise Prediction of Post-therapy Dosimetry for ¹⁷⁷Lu-PSMA I&T Therapy
- B-235 **Laura Kriener**, Institut für Physiologie, Universität Bern
Fast And Deep: Energy-Efficient Neuromorphic Learning With First-Spike Times

14:00 - 15:00 Posters | [Biomedical Engineering](#) | [Gather Town](#)

- B-061* **Martyna Dziadosz**, University of Bern
Comparing Quantification of NAD⁺ in the Human Brain on Clinical MR Scanners Using Three Different MR Spectroscopy Techniques
- B-062* **Dario Ferrari**, Organs-on-Chip Technologies Laboratory, ARTORG Center, University of Bern
Validation Of A Microvasculature-On-Chip Tool With Parallel Engineered Vascular Structures

- B-063* **Özhan Özen**, Motor Learning and Neurorehabilitation Laboratory, ARTORG Center for Biomedical Research, University of Bern
Robotic Assistance for Promoting Movement Variability to Enhance Learning of Dynamic Tasks
- B-064* **Michael Andreas Rebsamen**, Support Center for Advanced Neuroimaging (SCAN), University Institute of Diagnostic and Interventional Neuroradiology, University of Bern
Sensitivity of Segmentation Methods for the Detection of Hippocampal Sclerosis
- B-065* **Alice Dudle**, ARTORG Center for Biomedical Engineering Research, University of Bern, 3D Reconstruction of the Femur Based on 2D DXA Images: an Independent and Extended Evaluation of 3D-Shaper
- B-066* **Benjamin Till Ellenberger**, Department of Physiology, University of Bern
Reverse-engineering The Connectome From IEEG To Reveal Synaptic Homeostasis In Sleep
- B-067* **Daniel Fabian Erpenbeck**, ARTORG Center for Biomedical Engineering Research, University of Bern
Validation Of Cochlear Implant Electrode Detection Using Micro CTs
- B-068* **Klaus Schürch**, ARTORG, Bern, Switzerland; 2: Department for ENT, Inselspital, Bern
Pitfalls associated with Measurement Setup Preparation for Realtime Electrocochleography
- B-069* **Ye Tang**, Swiss Center for Electronics and Microtechnology (CSEM, Landquart)
Porous Structure Assisted Lateral Flow Immunoassay for Decreased Detection Limit
- B-070* **Vasily Tolkachev**, ARTORG, University of Bern
Active Learning for Multilabel Classification of Medical Images
- B-127 **Cornelia Doreen Amstutz**, University of Bern, sitem Center for Translational Medicine and Biomedical Entrepreneurship
Inverse Identification of Material Properties for PA 12 for PTCA Balloon Catheters
- B-129 **Christian Burri**, Institute of Applied Physics, University of Bern
Evaluation Of RPE-Damage Thresholds For Laser Exposure In The Range Of 2 To 20 Microseconds By Vitality Stain And SD-OCT M-scans
- B-131 **Milena Sofía Capiglioni**, Support Center for Advanced Neuroimaging (SCAN), Institute for Diagnostic and Interventional Neuroradiology, University of Bern
The role and efficiency of a Neural Current Imaging technique based on Spin Lock with Magnetic Resonance
- B-135 **Noëlle Claudia Harte**, ARTORG Center, University of Bern
The Spiral Shape of the Human Cochlea: Is There a Physiological Role of Torsion?
- B-137 **Fredrick Johnson Joseph**, Image Guided Surgery, ARTORG Center for Biomedical Engg, University of Bern
4D Micro Neurosurgical Aneurysm Clipping Simulator for Training Medical Residents and bringing realistic training experiences

14:00 - 15:00 Posters | **Biomedical Engineering** | [Gather Town](#)

- B-139 **Malavika Harikrishnan Nambiar**, ARTORG center for biomedical engineering research, University of Bern
In-Vivo Characterization & Numerical Simulation Of Corneal Biomechanics For The Planning Of Refractive Interventions
- B-141 **Yannick Pascal Rösch**, ARTORG Center for Biomedical Engineering Research, University of Bern
Endovascular Targeted Drug Delivery in Myocardial Microvascular Obstruction
- B-143 **Eduardo Enrique Villar Ortega**, Motor Learning and Neurorehabilitation Laboratory, ARTORG Center for Biomedical Engineering Research, University of Bern
Enhancing Touch Sensibility with a Novel Robotic System for Sensory Rehabilitation
- B-145 **Nicolas Wenk**, Motor Learning and Neurorehabilitation Laboratory, ARTORG Center for Biomedical Engineering Research, University of Bern
Head-Mounted Displays for a more Direct Visuo-Spatial Transformation – Movement Quality and Cognitive Load Analysis in Young and Elderly Participants

14:00 - 15:00 Posters | **Biomedical Sciences** | [Gather Town](#)

- B-071* **Alja Mazzini**, Veterinary Public Health Institute/Animal Welfare Division, University of Bern
Validation of “The Big Play and Motivation Questionnaire for Dogs” to Identify Addictive-Like Behaviour Towards Toys in Dogs
- B-072* **Julia K. Prümmer**, Division of Clinical Neurology, Vetsuisse Faculty, University of Bern
Oligoclonal Bands In Dogs With Meningoencephalitis Of Unknown Origin (MUO)
- B-073* **Katrina Rosenberger**, Swiss Federal Veterinary Office, Center for Proper Housing of Ruminants and Pigs, Agroscope
Investigating Contrafreeloading in dairy and dwarf goats using Item Response Tree (IRTtree) analysis
- B-074* **Alba Rudolf Vegas**, Functional Genomics Group, Institute of Veterinary Anatomy, Vetsuisse Faculty, University of Zurich
Does the Equine Conceptus Has the Ability to Modulate the Different Endometrial Cell Types During the Time of Maternal Recognition of Pregnancy in the Mare?: A Spatial Transcriptomic Study
- B-075* **Kira Schmitt**, Institute for Food Safety and Hygiene, University Zurich
Hand Hygiene Compliance And Prevalence Of Antimicrobial Resistant Microorganisms On The Hands Of Veterinary Healthcare Workers
- B-076* **Andrew Francis Brown**, Institute of Bee Health, University Of Bern
Honeybee Health: The Role of Nutrition and Microbiota
- B-077* **Francesco Galli**, Veterinary Public Health Institute, University of Bern, Switzerland; 2: Department of Health Sciences and Technology, ETH Zurich
Identification Of Latent Contact Pathways Between Pig Premises Using The Mental Model Approach
- B-078* **Ranjana Malaika Samira Gigi**, Institute of Social and Preventive Medicine, University of Bern
Perinatal Outcomes Associated with Vulvo-vaginal Yeast Infections in Pregnancy

14:00 - 15:00 Posters | **Biomedical Sciences** | [Gather Town](#)

- B-079* **Lisette van Os**, ARTORG Center, University of Bern
Migration Of Immune Cells In An Endothelial Barrier-On-Chip
- B-080* **Jakob Winter**, Centre for Proper Housing: Poultry and Rabbits (ZTHZ) Division of Animal Welfare, VPH Institute, University of Bern
Piling Behaviour In Swiss Commercial Layer Flocks
- B-147 **Katalin Bartos**, Department for BioMedical Research, University of Bern
FGF23/FGFR Signaling Modulator MEMO Binds and Oxidizes ARHGDI A/Rho-GDP-dissociation inhibitor 1
- B-149 **Marianna Rosso**, Animal Welfare Division, University of Bern
Sensitivity Of Mouse Behavioural Tests Of Anxiety To Anxiolytic Drugs Approved For Treatment Of Anxiety In Humans: A Systematic Review And Meta-Analysis

14:00 - 15:00 Posters | **Cell Biology** | [Gather Town](#)

- B-081* **Johanna Baumgartner**, Immunopathology, Institute of Pathology, University Of Bern
Impact of Oxidized Phospholipid Signaling on Macrophage Differentiation and Functionality in Health and Disease
- B-082* **Hervé Besançon**, Institute of Anatomy, University of Bern
Tailored Liposomal Nanotraps for the Treatment of Streptococcal Infections
- B-083* **Verena M. Betzler**, Biotechnologie Institut Thurgau (BITg), University of Bern
Investigating Forces at the Immunological Synapse
- B-084* **Niccolò Bianchi**, Institute for Research in Biomedicine (IRB), Università della Svizzera Italiana
Dissecting Regulatory Molecular Networks in Human T Helper Lymphocytes
- B-085* **Max Heydasch**, Institute of Cell Biology, University of Bern
The role of DLC1 in Fibroblast migration
- B-086* **Pascal Rossatti**, Biotechnologie Institut Thurgau
Surface Regulation and Intracellular Trafficking of Tfr in Activated T Cells
- B-087* **Kristina Seiler**, Institute of Pathology, University of Bern
Distinct New Function Of Hexokinase 3 (HK3) In DNA Damage Rather Than Glycolysis During Leukemic Neutrophil Differentiation
- B-088* **Basma Tarek**, Institut für Tierpathologie, Bern University
The Role of CD31 and P2X7 in *Clostridium perfringens* Beta-Toxin Action on Human Endothelial and Leucocytic Cells
- B-089* **Paola Antonello**, Institute for Research in Biomedicine, University of Bern
The Role Of Akr3 In Lymphoma Dissemination
- B-090* **Xinyue Chang**, Immunology, RIA, University of Bern
Low-affinity But High-avidity Interactions May Offer Explanation For Allergen-cross-reactivity

- B-153 **Mitra Gultom**, Institute of Virology and Immunology (IVI), Bern and Mittelhäusern
Susceptibility of Well-differentiated Airway Epithelial Cell Cultures from Domestic and Wildlife Animals to SARS-CoV-2
- B-155 **Cristina Kalbermatter**, Department for BioMedical Research (DBMR), University of Bern
The Role of Maternal Microbiota in Durably Shaping Intestinal Immunity and Gene Expression in the Offspring Through Epigenetic Mechanisms
- B-157 **Laura Laloli**, Institute of Infectious Diseases, University of Bern
Characterization of the Innate Immune System in the Respiratory Epithelium of Human, Swine, and Bovine during Influenza Virus Infection
- B-159 **Lijuan Ma**, Department for BioMedical Research, University of Bern
Epithelial To Mesenchymal Transition Contributes The Downregulation Of The Progesterone Receptor In Endometriosis Patients
- B-161 **Carmen Muñoz Maldonado**, Department of Radiation Oncology, Inselspital, Bern University Hospital
Screening for Synthetic Interactions in *CHK2*-deficient Cancers
- B-163 **Chiara Pozzato**, Institute of Pharmacology, Inselspital, University of Bern
The Role Of Focal Adhesion Kinase In Lung Cancer Progression
- B-165 **Fatemeh Safari**, Bone Biology & Orthopaedic Research, Department for BioMedical Research (DBMR), University of Bern
Noggin as a Regulator of Bone Remodelling
- B-167 **Jeremy Yeoh**, Institute of Pathology, University of Bern
The Inositol Phosphatase SHIP Restrains Type 2 Innate Lymphoid Cell-induced Airway Inflammation
- B-169 **Erina Alexandra Balmer**, Institute of Cell Biology, University of Bern
Probing the Link Between Unconventional Protein Secretion and Peripheral Vacuoles in *Giardia lamblia*
- B-171 **Irina Bregy**, Institute of Anatomy, University of Bern
Fifty Shades of Grey: Cryo Electron Tomography of the TAC region in *Trypanosoma brucei*
- B-173 **Benedetta De Ponte Conti**, University of Bern
Probing Gut-tumor Axis During Therapy with Immune Checkpoint Inhibitors by Modulating Intestinal Extracellular ATP
- B-175 **Zahra Gharailoo**, University Hospital for Rheumatology, Immunology, and Allergology, University of Bern
Generating a VLP Based Vaccine Against IgE
- B-177 **Thomas Höhener**, Institute of Cell Biology, University of Bern
A Novel Optogenetic Approach to Interrogate RTK Signaling Dynamics and Cell Fate Decision
- B-179 **Marjolaine Hugonnet**, Institute of Pharmacology, University of Bern
Identification Of Sialyltransferases Specific For Siglec-7 Or -9 Ligands
- B-181 **Marine Hélène Fanny Inglebert**, Institute of Animal Pathology, University of Bern
Genome-wide CRISPR/Cas9 Screen to Identify Host Factors Essential for Morbilliviral Infections

14:00 - 15:00 Posters | **Cell Biology** | [Gather Town](#)

- B-183 **Debora Lind**, Institute of Virology and Immunology, Mittelhäusern
Generation of a New Mouse Model to Investigate Overlapping Functions of Clade B Serpins
- B-185 **Serena Melgrati**, Institute of Research in Biomedicine, Bellinzona
Characterization of a Novel Atypical Chemokine Receptor
- B-187 **Steven Lukas Misztal**, Maurice Müller Laboratories (Department of Biomedical Research), Universitätsklinik für Viszerale Chirurgie und Medizin Inselspital, University of Bern
Mechanisms Of Early Life Host Microbial Mutualism
- B-189 **Kevin Plattner**, University Hospital for Rheumatology, Immunology, and Allergology
Glycan-specific IgG Anti-IgE Autoantibodies Contribute To Protectivity Against Allergic Diseases
- B-191 **Elisa Rodrigues Sousa**, Department for BioMedical Research, Urology Research Laboratory, University of Bern
The Role Of Cripto Signaling In Lethal Prostate Cancer
- B-193 **Jan Mateusz Sobczak**, DBMR, University of Bern
Novel Mosaic CuMVtt-Ara h 2 VLPs for Peanut Allergy Treatment
- B-195 **Daniëlle Verschoor**, Institute of Pharmacology, University of Bern
On the Quest for the True Character of Immature Neutrophils
- B-197 **Simon Zinkhan**, Department of BioMedical Research (DBMR), Universität Bern
The Impact Of Size On Particle Drainage Dynamics And Antibody Response

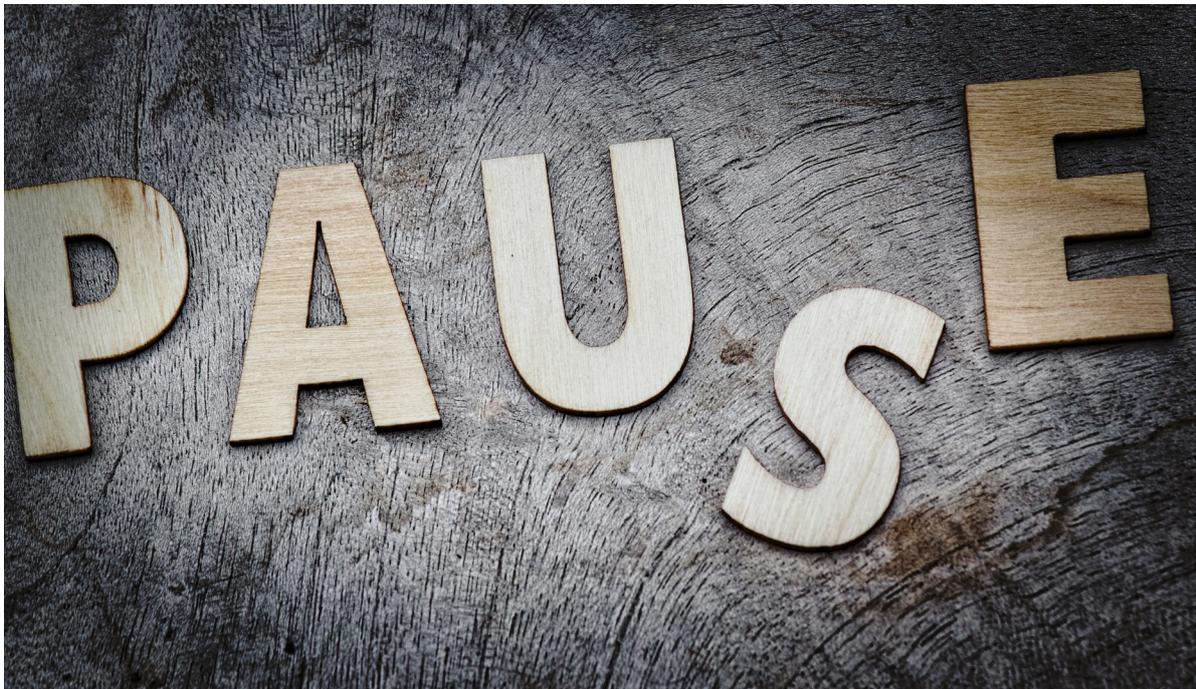
14:00 - 15:00 Posters | **Molecular Biology & Biochemistry** | [Gather Town](#)

- B-091* **Michel Fasnacht**, Department of Chemistry and Biochemistry, Universität Bern
Function of 5-OH-C2501 in the Peptidyl Transferase Centre
- B-092* **Tim Johan Gelmi**, Institute of Forensic Medicine, University of Bern
Impact of Smoking CBD-rich Marijuana on Driving Ability and Traffic Medical Aspects
- B-093* **Nina Gillis-Germitsch**, Institute of Parasitology, University of Zurich
Angiostrongylus vasorum-induced Alterations in Fox Serum - a Proteomic Analysis
- B-094* **Elham Kashani**, Institute of Pathology, University of Bern
Mechanism Of Chemo Resistance In Glioblastoma
- B-095* **Francis Muchaamba**, Institute for Food Safety and Hygiene, University of Zurich
Potassium Lactate as a Strategy for Sodium Content Reduction Without Compromising Salt Associated Antimicrobial Activity in Salami
- B-096* **Nicole Raad**, Department of Chemistry and Biochemistry
A Small ncRNA Regulates Motility and Biofilm Formation in Stationary Phase E.coli
- B-097* **Sandhya Krishnan Radha Krishnan**, Institute of Biochemistry and Molecular Medicine, University of Bern
Exploring the Anti-Chagasic Activity of a Coumarin Chemotaxonomic Cluster in the De Materia Medica Library

- B-098* **Thomas Roder**, Interfaculty Bioinformatics Unit, University of Bern
OpenGenomeBrowser: A Dynamic and Scalable Web Platform For Comparative Genomics
- B-099* **Dominic Manuel Schärer**, University Institute of Clinical Chemistry, Inselspital, Bern University Hospital, University of Bern
A Novel Nomenclature for Repeat Motifs in the Thymidylate Synthase Enhancer Region and Its Relevance for Pharmacogenetic Studies
- B-100* **Louis Tiro**, Institute of Plant Sciences, Bern
Characterization of Novel Regulators of DNA Methylation During Reproduction in *Arabidopsis Thaliana*
- B-199 **Luca Julian Dick**, IBMM, Bern
Development of Positron-Emission Tomography and Fluorescent Tracers for the Imaging of Calcium Sensing Receptors (CaSR) in Parathyroid Glands
- B-201 **Jens Alexander Schröder**, Institute for Plant Sciences, University of Bern
Investigation of Small RNA Movement within *Arabidopsis Ovules*
- B-203 **Vito Andrea Timpanaro**, DBMR, University of Bern
Surfaceome Profiling of Rhabdomyosarcoma Reveals CD276 as Target for CAR T Cell-based Therapy
- B-205 **Corinne Von Känel**, Department of Chemistry and Biochemistry, University of Bern
Two TIMs Become One: As Explained By The PAM - On The Trail Of The Unusual Import Motor Of Trypanosomes
- B-207 **Tsering Monika Wüthrich**, Institute for Infectious Diseases, University of Bern
Development of New Sequencing Workflows to Decipher *S. aureus* Co-colonization Patterns in Pediatric Patients With Cystic Fibrosis
- B-209 **Mariko Dale**, Institute for Animal Pathology, Bern
The Spatial and Temporal Importance of Secreted Effector Proteins in Intestinal Infection with *Cryptosporidium parvum*
- B-213 **Lukas-Adrian Gurzeler**, Department of Chemistry and Biochemistry, University of Bern
Targeting Nonsense-Mediated mRNA Decay with Small Molecule Inhibitors
- B-215 **Aleksandra Jejina**, Institute of Cell Biology, University of Bern
BicDR is Functionally Redundant with *BicD* and Essential for Embryo Development in Hypomorphic *BicD* Mutants
- B-217 **Leon Kleemann**, Department of Chemistry and Biochemistry, University of Bern
The Role of tRNA Anticodon Loop Modifications In Translation Associated Diseases
- B-219 **Harpreet Kaur Mandhair**, Department for BioMedical Research (DBMR), University of Bern
Autophagy inhibition enhances the effects of Doxorubicin in GC derived aggressive B Cell Lymphoma types
- B-221 **Marina Maurizio**, Vetsuisse Faculty, University of Bern
Identifying Essential Host Proteins for *Theileria*-induced Cell Transformation

- B-223 **Lorenz Timo Ryser**, Interfaculty Bioinformatics Unit, Bern
Biogenic Amine Formation In *Morganella Morganii* Isolated From Cheese
- Linking Phenotype To Genomic Data
- B-225 **Giulia Schilardi**, Institute of Physiology, University of Bern
Electrophysiological Characterization of Bipolar Interneurons in Healthy
and Degenerated Retina: Optimize Restorative Approaches
- B-227 **Sonia-Emilia Selicean**, Department for Biomedical Research,
University of Bern
Characterizing Mechanosensing-Mediated Hepatic Transcriptional
Regulation as a Master Regulator of Chronic Liver Disease
- B-229 **Frederike Stöth**, Institute of Forensic Medicine, Forensic Toxicology and
Chemistry, University of Bern
Decrease of FAEE and EtG in Hair by Detox Shampoo and Water
- B-231 **Ioanna Tsioti**, Department of Ophthalmology and Department for
BioMedical Research, Inselspital, Bern University Hospital,
University of Bern
Systemic Lipopolysaccharide Exposure Triggers Tlr4-dependent Inflammato-
ry Responses In The Retina In Mice *In Vivo*
- B-233 **Joel Pascal Werren**, Institute for Infectious Diseases, University of Bern
Mechanism Of Capsule Thickness Regulation In *Streptococcus Pneumo-
niae* For Defined Growth Conditions: Correlation Of Serotype Epidemio-
logy And Polysaccharide Composition
- B-237 **Quentin-Florian Pierre Oliveres**, Institut für Pflanzenwissenschaften,
Universität Bern
A Branched Chain Amino Acids Transporter In The Procylic Form Of
Trypanosoma brucei.
- B-151 **Yuanzhen Liu**, Institute of Bee Health, Vetsuisse Faculty,
University of Bern
Climate Adaption and Invasion of the US by the Small Hive Beetle

15:00 - 15:30 | Break



15:30 - 16:00 | [GCB Award for Best PhD Thesis](#)

Chair: **Prof. Dr. Frank Stüber**, President GCB PhD Committee

16:15 - 17:45 | [GCB Symposium Keynote Addresses](#) | SARS-CoV-2 - Covid-19

Chair: **PD Dr. Monica Schaller**, GCB Coordinator

Prof. Dr. Volker Thiel

Institute of Virology and Immunology, University of Bern

From Genome to Function - Phenotypic Characterisation of Pandemic SARS-CoV-2 Variants

Dr. phil. nat. Caroline Tinguely

Interregionale Blutspende SRK AG

A Blood Transfusion Service in the time of Covid-19

Prof. Dr. Martin Bachmann

Department of Immunology, University of Bern

Development of a vaccine against COVID-19: ups and downs

17:45 - 18:00 | [Closing Remarks](#)

Chair: **PD Dr. Monica Schaller**, GCB Coordinator

Farewell to Prof. Dr. med. Frank Stüber, past GCB PhD Committee president

Welcome new president, Prof. Dr. Rupert Bruckmaier



Virtual Apéro

Thank you to all participants. You are all invited to raise a glass and join us in a virtual Apéro.

Abstract Nr. Key

T-xxx (e.g. T-001) – Talks

A-xxx (e.g., A-001) – Poster Session A

B-xxx (e.g., B-001) – Poster Session B

Asterisks “*”, (e.g., A-011*) – Poster Flash and Poster Session

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