

# vetmeduni

Veterinärmedizinische Universität Wien

## Comparative Medicine Symposium 2022



**Banquet Hall (Festsaal)**

**May 17 and 18, 2022**

Organizing Committee:

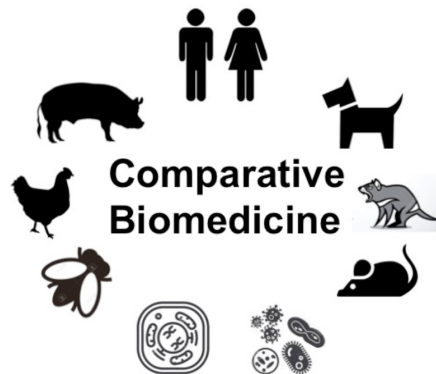
Monika Ehling-Schulz, Birgit Strobl, Richard Moriggl, Florian Grebien,  
Mathias Müller, Dieter Klein, Iwan Burgener, and ÖH Vetmeduni Vienna

**[www.vetmeduni.ac.at](http://www.vetmeduni.ac.at)**

## Comparative Medicine Symposium 2022

### Rationale

- presenting projects from Vetmeduni Vienna and the Vienna Life Science region
- balance between basic, translational and clinical/industrial research
- mix of infectious diseases, inflammatory diseases, cancer and the microbiome
- including talks related to technology/methodology/therapy



Infectious and inflammatory diseases and cancer are of major relevance to our public health sector. In particular, during the ongoing pandemic, comparative and systems medicine approaches help to unravel disease mechanisms and to develop measures for prevention and therapy. We train students of the MSc program ‘**Comparative Biomedicine – Infection Medicine and Tumor Signaling Pathways**’ on our campus under the principle of “One Health – One Medicine”. The last two years did not see sufficient personal communication. This is a significant drawback for our study program where we try to train and lecture students in person. Our symposium invites speakers from the Vienna Life Science community and from the Vetmeduni Vienna who work in basic and translational biomedical sciences. Their research contributions will serve as role models for students and early career scientists. There is a strong need to gain deeper understanding of commonalities between key pathways and molecular nodes in infection, inflammation and cancer for the establishment of prophylactic and therapeutic concepts. *In vitro* and *in vivo* test systems define novel drug targets and foster translational research in precision medicine. Experimental animal studies within an ethical and legal framework are essential to push biomedical research forward. As technologies advance rapidly, we live in promising times for new discoveries and novel therapeutic interventions, but this needs also communication in person, where we hope that the meeting could contribute to foster existing, but also to establish new interactions. The Vetmeduni Vienna aims to train students to succeed in this challenging environment in recognition of these developments and to find their future work places. We constantly review and modernize our curriculum and invite scientists and students on campus to learn from experts during these two days. The 2022 symposium should foster vital discussions sparked by presentations on Inflammation and Infection, Oncology, Microbiota and Metabolism, Therapies and Methodologies with Biotech and Industry examples how future jobs could look like. We thank all speakers and organizers for contributing to an exciting meeting and hope you enjoy the interdisciplinary atmosphere.

We thank our external speakers to make the meeting attractive and we hope you can join us for May 18 to have dinner with the students, alumni and speakers.

**Organizational Information:** Coffee & Lunch – Foyer of Banquet Hall; Chair persons and speakers please be in time

## **FIRST DAY, Tuesday 17.05.2022**

**9.15 Opening Ceremony** – Vice Rector Otto Doblhoff-Dier of Vetmeduni Vienna and organizers

**Opening Talks** (Chairs: Richard Moriggl & Oliver Szolar)

**9.30-10.15: Jürgen Knoblich (IMBA Vienna)** – Analysing human brain disorders in stem-cell derived organoid cultures

**10.15-11.00: Kristin Tessmar-Raible (Max Perutz Labs Vienna)** – The timing of physiology and behavior by sun and moon

**11.00-11.30 – Coffee Break**

**Session 1 ‘Q-Positions @Vetmeduni Vienna 2020-21’** (Chair: Birgit Strobl & Silvio Kau)

**11.30-12.00: Amélie Desvars-Larrive (Institute for Veterinary Public Health, Complexity Science Hub)** – Bridging the gap: Addressing zoonotic diseases across scales

**12.00-12.30: Bibiana Rojas (Konrad Lorenz Institute of Ethology)** – Behavioural and ecological correlates of pathogen spread in the wild

**Session 2 ‘Vet-Women’** (Chair: Kerstin Mair & Mathias Müller)

**12.30-13.00: Christiane Riedel (Institute of Virology)** – Unraveling pestivirus entry

**13.00-13.30: Karen Wagener (University Clinic for Ruminants)** – Diversity and dynamics of microbial communities in the reproductive tract of postpartum dairy cows

**13.30-14.45 – Lunch Break**

**Session 3 ‘New comparative medicine research @Vetmeduni Vienna’** (Chair: Monika Ehling-Schulz & Iwan Burgener)

**14.45-15.15: Peter M. Roth (Institute for Computational Medicine)** – Artificial intelligence everywhere: A useful tool for comparative medicine?

**15.15-15.45: Astrid Holzer (University Clinic for Poultry and Fish Medicine)** – Host-parasite interaction between fish and myxozoan parasites

**15.45-16.15: Dagmar Gotthardt (Institute of Pharmacology and Toxicology)** – Mechanisms of natural killer cell dysfunction

**16.15-16.45 – Coffee Break (organized by ÖH Vetmeduni Vienna)**

**16.30 – Session 3, continued** (Chair: Anna Rottinger & Graham Tebb)

**16.45-17.15: Robert Kofler (Institute of Population Genetics)** – Genome dynamics of parasitic DNA

**17.15-17.45: Shi Yan (Institute for Parasitology)** – Understanding the sugar code of nematodes - from comparative glycomics to glycoengineering of vaccine candidates

## **SECOND DAY, Wednesday 18.05.2022**

**9.45: Opening and Introduction** - Vice Rector Jürgen Rehage of Vetmeduni Vienna and organizers

### **Opening Talks** (Chair: Sabine Lager & Florian Grebien)

**10.00-10.45: Andreas Bergthaler (Medical University Vienna)** – In Latrina Veritas - Opportunities and limitations of pathogen surveillance in wastewater

**10.45-11.30: Reingard Grabherr (University of Natural Resources and Life Sciences Vienna)** – Made by insect cells – virus-like particles as a vaccine platform

**11.30-12.00: Ulrich Elling (IMBA Vienna)** – Functional genomics *in vivo*

**12.00-13.15 – Lunch Break**

### **Session 4 ‘Immunology & Metabolism** (Chair: Elizabeth Heyes & Astrid Digruber)

**13.15-13.45: Clarissa Campbell (CeMM Vienna)** – Immune regulation by the intestinal microbiota

**13.45-14.15: Thomas Weichhart (Medical University Vienna)** – Macrophages as metabolic organizers of tissue homeostasis

**14.15-14.45: Barbara Maier (CeMM Vienna)** – Innate regulation of tumor-directed T cell immunity

**14.45-15.15 – Coffee Break**

### **Session 5 ‘Future Perspectives and Career Models - Talks from Industry and R&D’** (Chairs: Anna Orlova & Christine Ruckenbauer)

**15:15-15.40: Franz Watzinger (INCYTE)** – Transition to industry from a medical affairs perspective - Insights from INCYTE

**15.40-16.05: Sejla Salic (Bit.bio discovery)** – Startups - best of both worlds

**16.05-16.30: Bernd Boidol (Proxygen)** – From academic research to biotech management – how a solid science education prepares you for more than a science career

**16.30-16.55: Anna Dorothea Gorki (G.ST Antivirals)** – G.ST Antivirals - Going after the viral achilles’ heel

**16.55-17.20: Ekaterini Platanitis (Johnson & Johnson)** – From Science to big Pharma - Should I?

**Starting from 19.00:** Heurigen Dinner with students, speakers and organizers: Heuriger Feuerwehr Wagner (<http://www.feuerwehrwagner.at/home.html>)

### **Kindly sponsored by:**

Organizing Committee Members, ÖH Vetmeduni Vienna (Student’s Unit); Rectorate of Vetmeduni Vienna; FWF SFB F61 JakStat Monarchies

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**FWF**  
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<https://www.vetmeduni.ac.at/universitaet/campus/anreise>

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**Covid rules: 3G rules (fully vaccinated or recovered or tested), FFP2 mask is mandatory**

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