



Sex as a Biological Variable (SABV) - 3rd Symposium

From Discovery to Translation: Embedding Sex-Inclusive Frameworks
in Preclinical and Clinical Research

www.sabvsymposium.org

ABOUT

The SABV Symposium 2026 features **24 lectures** by internationally renowned experts **from 14 countries**, exploring the biological basis of sex differences, their underlying mechanisms, and their significance in health and disease. Particular attention will be given to practical strategies for incorporating biological sex into study design, with a special focus on hormone-sensitive stages of female reproductive life and their links to disease risk.

CONTINUING EDUCATION CERTIFICATE

The Symposium has been officially accredited by the Federation of Swiss Cantonal Veterinary Officers (VSKT) as **2 days of continuing education** for the following professional categories:

- Study directors and involved persons
- Animal welfare officers
- Heads of animal facilities and animal caretakers
- Members of cantonal commissions

SYMPOSIUM VENUE

**University Hospital Zurich
Building NORD 1**

Large lecture hall

(Room number D 304)

Frauenklinikstrasse 10, 8091 Zurich



ABSTRACTS AND POSTERS

Abstract submission is now closed. Following abstract evaluation, **64 submissions** have been selected for poster presentation. Among these, 8 presenters have been invited to deliver a flash talk.

Poster presentation guidelines

All accepted abstracts will be presented as printed posters. Please arrange printing before traveling to the SABV Symposium. Posters should be printed in A0 portrait format 84.1 cm x 118.9 cm (or 33.1 inches x 46.8 inches).

PROGRAM

Day 1 • 23 June

Day 1 • 23 June 2026

8:00 – 8:50 Registration

8:50 – 9:00 Welcome address

Dr. Ivana Jaric, Symposium organizer - University of Zurich, Switzerland

Session 1: Sex-inclusive research - Bridging the 3Rs framework and study design

Chair: **Dr. Ivana Jaric**, University of Zurich, Switzerland

9:00 – 9:30 **Addressing cultural and knowledge barriers to enable preclinical sex-inclusive research**

Dr. Natasha Karp, AstraZeneca, UK

9:30 – 10:00 **Half the biology, half the insight: Accounting for sex in your experimental design**

Prof. Dr. Penny S. Reynolds, University of Florida, USA

10:00 – 10:20 **The 3R framework for sex-inclusive animal research**

Dr. Fernando Gonzalez Uarquin, University Medical Center Mainz, Germany



Session 1 - continued

10:20 – 10:30 **Swiss 3RCC: A national platform for the promotion of the 3Rs**
Dr. Homare Yamahachi, Swiss 3R Competence Center

10:30 – 11:00 Coffee break

Session 2: Sex differences in brain structure, function and disease

Chair: Prof. Dr. Charlotte Cornil, University of Liège, Belgium

11:00 – 11:25 **Sexual dimorphism in astrocyte-dependent synaptic pruning: implications for health and major depressive disorder**
Prof. Dr. Barbara Di Benedetto, University Hospital Regensburg, Germany

11:25 – 11:50 **Why should sex-dependent differences be considered for an optimized therapeutic approach of central nervous system demyelination?**
Dr. Elisabeth Traiffort, Inserm, Paris-Saclay University, France

11:50 – 12:15 **Addressing the sex differences in Alzheimer's disease**
Prof. Dr. Ivan Nalvarte, Karolinska Institutet, Sweden

12:15 – 12:40 **Different roles of brain uroguanylin and brown adipose tissue in males and females**
Prof. Dr. Aleksandra Dugandzic, University of Zagreb, Croatia

12:40 – 14:00 Lunch break

Session 3: Sex differences across organ systems

Chair: Dr. Christina Boyle-Neuner, University of Zurich, Switzerland

14:00 – 14:25 **Role of sex hormones in lung disease manifestation**
Dr. Valentina Biasin, Medical University of Graz, Austria

14:25 – 14:50 **Sex differences in kidney health and disease**
Prof. Dr. Stefanie Steiger, LMU Hospital Munich, Germany

14:50 – 15:15 **Role of sex differences in the cardiac proteome and early graft recovery in donation after circulatory death**
Prof. Dr. Sarah Longnus, University of Bern, Switzerland

15:15 – 15:40 **Sex differences in pharmacokinetics of anticancer drugs - why does that even matter?**
PD Dr. Berna Ozdemir, University Hospital Bern, Switzerland

15:40 – 16:00 Flash talks selected from the abstracts 1

Chair: Prof. Dr. Michelle Roche, University of Galway, Ireland

Chronic unpredictable stress during the adolescent sensitive period induces sex-specific prefrontal microglial remodeling and differential astrocytic responses to extracellular vesicles in vitro

Narimane Bouzourène, Université de Lausanne, Switzerland

Sex differences in a mouse model of chronic kidney disease

Oriana Nobus, Ghent University, Belgium



Flash talks 1 - continued

Male mice rupture patellar tendon struts more often than females, with failure possibly attenuated by running

Nicole A. Chittim, Balgrist University Hospital, Switzerland

Biological sex influences the physiological response to anesthesia in rats

Maria Arnold, Bern University Hospital, Switzerland

16:00 – 17:00 Coffee break and poster session

Plenary talk 1

Chair: Dr. Ivana Jaric, University of Zurich, Switzerland

17:00 – 17:45 **Pain, sex, and death**

Prof. Dr. Jeffrey Mogil, McGill University, Canada

PROGRAM

Day 2 • 24 June

8:10 – 8:50 Registration

Session 4: From evidence to action - Economics, innovation, and preclinical research

Chair: Dr. Ivana Jaric, University of Zurich, Switzerland

8:50 – 9:10 **The economic consequences of systemic underinvestment in women's health**

Dr. Valentina Sartori, McKinsey Health Institute

9:10 – 9:20 **Accelerating innovation through sex-inclusive R&D**

Dr. Juliana Bessa, Roche Innovation Center Basel

9:20 – 9:50 **PAINDIFF recommendations for the study and inclusion of sex and gender in research**

Prof. Dr. Michelle Roche, University of Galway, Ireland

Plenary talk 2

Chair: Dr. Ivana Jaric, University of Zurich, Switzerland

9:50 – 10:30 **Sex, stress and high estrogen levels- a toxic hippocampal cocktail?**

Prof. Dr. Tallie Z. Baram, MD, University of California, Irvine, USA

10:30 – 11:00 Coffee break

Session 5: Sex, hormones, and brain function

Chair: Dr. Jodi Pawluski, Universite De Rennes I, France

11:00 – 11:30 **Sex- and oestrous-dependent plasticity in midbrain circuits controlling survival instincts**

Dr. Vanessa Stempel, Max Planck Institute for Brain Research, Germany



Session 5 - continued

- 11:30 – 12:00 **SABV considerations in sleep loss-induced memory loss**
Prof. Dr. Nicole Gervais, Rijksuniversiteit Groningen, Netherlands
- 12:00 – 12:30 **Hormonal contributions to depression in women; implications for precision prevention and treatment**
Prof. Dr. Vibe G. Frokjaer, Copenhagen University, Denmark
- 12:30 – 13:00 **Regulatory effects of antidepressant exposure on maternal–fetal signaling**
Prof. Dr. Jocelien Olivier, Rijksuniversiteit Groningen, Netherlands

13:00 – 14:00 Lunch break

Session 6: Female hormones and disease susceptibility

Chair: Prof. Dr. Christina Dalla, National and Kapodistrian University of Athens, Greece

- 14:00 – 14:30 **The estrous cycle stage affects mammary tumor sensitivity to chemotherapy**
Dr. Laura Bornes, Leiden University Medical Center, Netherlands
- 14:30 – 15:00 **The many faces of perimenopause: why are we still so bad at understanding the menopausal transition?**
Doc. Dr. Ljiljana Marina, University Clinical Centre of Serbia, Faculty of Medicine, University of Belgrade, Serbia
- 15:00 – 15:30 **Harnessing big data to study female brain and mental health**
Prof. Dr. Claudia Barth, Charité, Universitätsmedizin Berlin, Germany
- 15:30 – 16:00 **Adolescent exposure to contraceptive hormones alters biomarkers associated with depression in female rats**
Dr. Jesse Lacasse, Centre for Addiction and Mental Health, Canada

16:00 – 16:20 Flash talks selected from the abstracts 2

Chair: Prof. Dr. Michelle Roche, University of Galway, Ireland

Sex-specific antidepressant and anxiolytic effects of GPER1 activation in rats

Pavlina Pavlidi, National and Kapodistrian University of Athens, Greece

APOE4 drives opposing neuroimmune responses in females and males with distinct implications for Alzheimer's immunotherapy outcomes

Nikoleta Delivanoglou, Mayo Clinic, USA

EcoSplit reveals a female-specific immune–stromal program with androgen receptor sensitisation and adverse prognosis across cancers

Ekaterina Petrenko, Israel Institute of Technology, Israel

Sex differences in immune response to an MVA-based vaccine against Middle East respiratory syndrome (MERS)

Tamara Zoran, University Medical Center Hamburg-Eppendorf, Germany

16:20 – 17:00 Coffee break and poster session



Day 2 • 24 June 2026

Plenary talk 3

Chair: *Dr. Ivana Jaric, University of Zurich, Switzerland*

17:00 – 17:45 **Unlocking the complexities of endometriosis**

Dr. Brett McKinnon, University of Queensland, Australia

17:45 – 18:00 Closing ceremony and poster awards

Dr. Ivana Jaric, University of Zurich, Switzerland

18:00 – 19:00 Aperitif & networking

For current information, please visit the official website of the SABV Symposium 2026:
www.sabvsymposium.org

The SABV Symposium 2026, together with the EU-SABV Core Group meeting (June 25th, 2026), is co-organized by the EU-SABV COST Action (CA24168), the European Initiative to Enhance the Current SABV Policy in Preclinical Bio-medical Research, funded by the European Cooperation in Science and Technology (COST).

Learn more about the EU-SABV COST Action at action webpage: www.sabv.eu



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