

# **Book of Abstracts – Balancing Interests in Regulating Genetic Engineering in Animals and Plants – 25.03.2026**

**9:30-9:50**

**Prof. Dr. Sebastian Soyk**, University of Lausanne (CH)

## **Plant Genome Editing: Towards New Horizons in Crop Breeding?**

Recent advances in genetic engineering enable the targeted modification of genes in humans, animals, and plants through genome editing. In human medicine, the first therapies for genetic diseases are being approved. However, targeted editing of genes in crops to improve agricultural traits is often viewed more critically. This contrasts with the view among many life scientists that certain products of genome editing can be considered equivalent to genetic changes arising from natural mutation or traditional breeding methods. In this seminar, I will first review genetic and molecular concepts of crop domestication and breeding, and discuss how genome editing can extend and complement established crop breeding practices. Finally, I will highlight the latest CRISPR innovations in plants and outline key challenges of applying genome editing in crops to meet future agricultural demands.

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**9:50-10:10**

**Claire Robinson**, GMWatch (UK)

## **Genetically modified plants and animals: Protecting public health, the environment, and animals**

Genetically modified organisms (GMO) can pose risks for human and animal health and the environment. With crop plants, risks can include unexpected toxicity and allergenicity and effects on wildlife, as well as problems in farmers' fields. Therefore pre-market risk assessment, traceability and monitoring, and labelling are necessary for all GMOs, including the GM gene-edited plants targeted for deregulation in the current EU proposal. This presentation gives an overview of the risks and the pre-market scientific analyses that can help ensure the safe use of genetic technologies. In addition, a case is made for questioning the utility of genetic modification from the ground up. It is suggested that a wide range of stakeholders should be involved in consultative processes to identify real-world problems and consider the best solutions, which may range from low- to high-tech.

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**10:10-10:30**

**Dr. Martin Wasmer/Dr. Christoph Lüthi**, Federal Office for the Environment (FOEN)

## **New Plant Breeding Technologies: Overview of the History and Status of Regulatory Work in Switzerland**

The presentation provides an overview of the regulatory framework governing new plant breeding technologies in Switzerland. It briefly traces the development of the legal framework, including the Gene Technology Act (GTG) and the moratorium on the cultivation of genetically modified organisms (GMOs), and highlights recent developments such as Parliament's 2022 decision to review the regulation of new genomic techniques under Article 37a(2) GTG. It also outlines current considerations regarding a possible specific legal framework for new breeding technologies, distinct from classical genetic engineering legislation, and briefly refers to related developments in the European Union.

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**10:50-11:10**

**Dr. med. vet. Otto Maissen**, Federal Food Safety and Veterinary Office (FSVO)

### ***Incorporation into Legislation and Implementation of Balancing Interests***

The concept of dignity of living beings was incorporated into the Federal Constitution in Article 120 in 1992. Although it was introduced in connection with debates on gene technology, it applies regardless to all animals and plants. The term was further specified in the Gene Technology Act (GTA), which states that dignity must not be disregarded and defines the circumstances under which such disregard occurs. In the Animal Welfare Act (AniWA), dignity is relevant for vertebrates, cephalopods, and crustaceans. AniWA provides for general (abstract) interest-balancing (e.g., ban on amputation of claws in cats), case-specific balancing (e.g., in animal experiments), and interest-balancing even in situations where it is not specifically prescribed. However, neither the AniWA nor the GTA provide precise guidance on how interests are to be weighed. This presentation examines how the concept of dignity and interest-balancing was incorporated into legislation, how it was implemented, and what challenges remain.

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**11:10-11:30**

**Dr. iur. Vanessa Gerritsen**, Stiftung für das Tier im Recht (TIR)

### **Balancing of Interests in the Process of Authorization of Animal Experiments**

As the deliberate exposure of animals to any kind of stress in experiments runs counter to the increasingly high ethical standards of the global society, there are detailed requirements in national law for the authorisation of the use of animals in experiments and their performance. A key element of the assessment of animal experiments is the weighing of interests.

The correct identification and assessment of the conflicting interests is of utmost importance. This presentation aims to highlight some of the challenges associated with this process. Particularly with regard to genetically modified animals, the individual elements of harm to animals, which can be divided into pathocentric and non-pathocentric aspects, cause difficulties, as does the assessment of the knowledge gained. Another problem is the confusion between methodological necessity and ethical permissibility of experiments, which leads to erroneous conclusions.

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**11:30-11:50**

**Dr. Samuel Camenzind**, University of Vienna (AU)

**Neither Plant nor Beast: Implications of Pain-Free Animals for the Balancing of Interests in the Swiss Animal Welfare Act.**

The contribution analyses what genetic pain disenchantment would imply for the balancing of interests in the context of the Swiss Animal Welfare Act. Two scenarios are examined: in the first, pain-free animals already exist; in the second, pain-disenchanted animals would first have to be bred.

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