



8:00 *Registration & Welcome*

8:30 **Session 1 - From Lab to Legitimacy:
 Social Acceptance of New Breeding Technologies**

- *Beyond 'experts only':* on the importance of stakeholder and public engagement in the debate on innovations in breeding, *Franck Meijboom (UU)*
- *Make it make sense!:* From citizen engagement to useful guidance, *Rasmus Mikkelsen (DemoX)*

Panel discussion (1h)

- *Anna Olsson, University of Porto*
- *Heidi Howard, Chalmers University of Technology, SciLifeLab*

10:00 *Coffee break*

10:30 **Session 2 - Editing for Resilience and Welfare:
 Scientific Readiness and Policy Implications & Panel discussion**

- Gene editing to support genetic improvement in livestock, *Simon Lillico (UEDIN)*
- Epigenome editing in animal production: A prospective review, *Guillaume Devailly (INRAE)*
- The management of rare alleles, including GE, in breeding schemes, *Theo Meuwissen (NMBU)*
- Simulating scenarios of gene editing in dual-purpose chicken breeding programs, *Edward Chuang (GABI)*

Panel discussion (1h) Invited keynote by Prof. Alison Van Eenennaam (UC Davis), "Gene editing of livestock raised for agricultural purposes"

- *Simon Lillico (UEDIN)*
- *César González (EFFAB)*
- *Christopher Orrett (CRV)*

12:30 *Lunch break*



13:30

Session 3 - Epigenetics: A new lever to Resilience and Efficiency?

- The RUMIGEN EpiChip, a sensor of environment and breeding practices, *Gabriel Costa Monteiro Moreira (INRAE)*
- Epigenetic dynamics in the chicken brain throughout animal life, *Carlos Guerrero Bosagna (Uppsala University)*
- The sperm epigenome: role in male fertility, transmission, and impact on offspring phenotype, *Hélène Kiefer (INRAE)*
- Molecular fingerprints of pig male reproduction from omics data, *Pedro Sa (WUR)*
- Integration of GeroNIMO omics data to reveal details about the genetic architecture behind efficiency-related traits, *Peter Karlskov-Mortensen (UCPH)*
- The RUMIGEN EpiChip: integration of epigenetics into dairy cow selection, *Marie-Pierre Sanchez (INRAE)*
- Tagging non-genetic inheritance using the transmissibility models, *Ingrid David (INRAE)*

15:30

Coffee break

16:00

Session 4 – Next-Generation Selection: Integrating Genomics, Epigenetics and Adaptability

- Selection, genetic load and diversity, *Theo Meuwissen (NMBU)*
- Trade-offs - evolution and use in breeding strategies, *Mario Calus (WU)*
- Including methylation in genomic prediction, *Ioanna Vourlaki (IRTA) & Levi Ayres (WUR)*
- Selection strategies for heat-stress tolerance, *Sophie Mattalia (IDELE)*
- Perspectives on the use of the EpiChip for breeding and animal husbandry purposes, *Oscar Gonzales-Recio (UEDIN)*
- Strategies to maintain and improve local and small breeds, *Marie-José Mercat (IFIP)*

17:30

Turning Research into Practice and What's Next? **Panel discussion (1h)**

- *Valerio Abbadessa (Research and Innovation Unit, DG AGRI)*
- *Naomi Duijvesteijn (FABRE TP Board Chair & Hendrix Genetics)*

18:30

Closing