



Animal Health & Welfare Genetics and **FABRE TP** Challenge session at the 75th EAAP Florence, Italy



ANIMAL WELFARE VERSUS GENETIC PROGRESS?

IS GENETIC PROGRESS THE PROBLEM, OR CAN IT BE PART
OF THE SOLUTION FOR BETTER ANIMAL WELFARE?

Challenge session (51)

F. Gottardo & L. Boyle (*Animal Health and Welfare Commission*)

F. Miglior (*Genetics Commission*)

Ana Granados, Geena Cartick & N. Duijvesteijn (*FABRE TP*)



3rd September, 8:30 to 12:30 at Podolica – Limonaia, Garden

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IS GENETIC PROGRESS THE PROBLEM OR CAN IT BE PART OF THE SOLUTION FOR BETTER ANIMAL WELFARE?

Co-Chairs:



Naomi Duijvesteijn
Chair of FABRE TP
Hendrix Genetics



Flaviana Gottardo
AH&W Commission
Padova University

In this joint challenge session of AH&W – Genetics EAAP Study Commissions and FABRE TP, we will discuss Animal Breeding, Genetics, and Animal Welfare in sustainable livestock systems.

We want to invite speakers and the audience to constructive debates on the role of animal genetics in animal welfare and how animal welfare can be improved and considered in future breeding programmes.



EFFAB

European Forum of
Farm Animal Breeders

FABRE • TP

Farm Animal Breeding
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Engaging in dialogue with
policymakers and
stakeholders

Members
of EFFAB/
FABRE TP

Advocating for proportionate
and science-based policy
and legislation



Supporting and promoting
responsible animal breeding
through code EFABAR

EU authorities
NGOs and
stakeholders

Promoting and supporting
research and innovation



**CODE •
EFABAR**

The commitment
to responsible breeding



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Animal Farming 4.0 The role of Big Data in Animal Breeding
EAAP 73th Annual Meeting
Wednesday 7th September 2022
8.30h - 12.30h (WEST)
Room Arquivo
Allandega da Porto
Oporto, Portugal

FABRE TP challenge session at 2023 EAAP - WAAP
Animal Genetics to address Food Security & Sustainability
30 August 2023
8.30h - 12h (CEST)
Lyon, France

ENGAGING in dialogue within the scientific community and beyond



Farmers

Understand each other perspectives and contributions to improve animal farming

Stakeholders
& NGOs

Breeders

Policymakers

AW scientists

Animal
Geneticists

Discuss the direction of travel for animal farming (and breeding)



Challenges for the livestock sector

Meeting societal demands for:



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- ✓ Environmental sustainability (climate change mitigation and adaptation, reduced use of resources, dependence of fossil fuels...)
- ✓ Prudent use of antimicrobials to avoid antimicrobial resistance
- ✓ Biodiversity preservation
- ✓ Enhance food security and safety at the EU and Global level



Higher standard for animal health and welfare (see EU Citizen Initiative “End the Cage Age”, Eurobarometer’s survey)



Challenges for the livestock sector Meeting the livestock sector's demands for:

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- ✓ Socio-economic sustainability due to increased production costs and low prices at the farm gate
- ✓ Generation renewal (11% of farmers are less than 40 years old in the EU) and the availability of professionals
- ✓ Vitality of rural areas
- ✓ Appropriate regulatory frameworks



It is a complex changing scenario
Which approach can we use?

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Genetic solutions beside

Research and innovation for
further and improved knowledge
on: Nutrition and feeding, Health,
Behaviour, Housing systems



Adoption of new technologies
(precision livestock farming,
biotechnologies, AI ...)

- should be part of a broader multifaceted strategy that includes improving environmental conditions, nutrition and overall **ANIMAL WELFARE?**
- are we approaching operating and biological limits with genetic improvements ?

Agenda



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08:30 AM

WELCOME by the chairs of the session:

Flaviana Gottardo - Padova University
Naomi Duijvesteijn - FABRE TP chair, Hendrix Genetics

08:45 AM

Reversing the detrimental impact of genetic selection on farm animal welfare: *P. Stevenson (CIWF)*

09:15 AM

The evolution of dairy cattle breeding objectives: *R. Finocchiaro (ANAFIBJ)*

09:45 AM

Predicting the agility of breeding programs to adapt to future societal demands: *J. ten Napel (WUR)*

10:00 AM

Breeding goal scenarios to quantify EU policy options on pig reproductive traits: *L. Vargovic (Topigs Norsvin)*

10:15 AM

EAAP official coffee break

10:45 AM

Do pig farms reconcile sow prolificacy, pre-weaning piglet survival and weaned litter size Typology and results of French herds: *S. Boulot (IFIP)*

11:00 AM

HenTrack 2.0 Project: Improving breeding programs with superior behaviour and welfare phenotypes: *M. Toscano (Bern University)*

11:15-12:30

Summary of the presentations and discussion with the audience in the room: *Chairs moderation*



At the end of each presentation it is possible to pose no more of 1 or 2 questions on methodologies.



At the end of all presentations, the participants to the session are invited to ask questions and comments to the speakers. All are invited to participate actively to the discussion

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2 FIRST INVITED SPEAKERS

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1. REVERSING THE DETRIMENTAL
IMPACT OF GENETIC SELECTION
ON FARM ANIMAL WELFARE ? 30
minutes



PETER STEVENSON

Chief Policy Advisor at Compassion in
World Farming

2. THE EVOLUTION OF DAIRY
CATTLE BREEDING OBJECTIVES
30 minutes
Raffaella Finocchiaro



RAFFAELLA FINOCCHIARO

Head researcher - Research and Development
office - ANAFIBJ-Italian Holstein, Brown and
Jersey Association

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3 Submitted abstracts from
academia and private sector

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3. PREDICTING THE AGILITY OF BREEDING
PROGRAMS TO ADAPT TO FUTURE SOCIETAL
DEMANDS– 15 minutes



JAN TEN NAPEL

Researcher in Animal Breeding &
Genomics Wageningen University &
Research - WUR

4. BREEDING GOAL SCENARIOS TO QUANTIFY
EU POLICY OPTIONS on PIG REPRODUCTIVE
TRAITS – 15 minutes



LAURA VARGOVIC,
TOPIGS NORSVIN

COFFEE BREAK at 10:15

5. DO PIG FARMS RECONCILIATE SOW
PROLIFICITY, PRE-WEANING PIGLET SURVIVAL
and WEANED LITTER SIZE: FRENCH STUDY – 15
minutes



SYLVIANE BULOT,
IFIP Institute du Porc

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1 more invited speaker & Discussion

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6. HENTRACK 2.0 Project : IMPROVING BREEDING
PROGRAMS WITH SUPERIOR BEHAVIOR AND
WELFARE PHENOTYPES

– 15 minutes



MICHAEL TOSCANO

Senior Scientist (Group Leader of Poultry
Housing and Welfare) at University of Bern

7. SUMMARY of the PRESENTATIONS and
DISCUSSION WITH THE AUDIENCE IN THE ROOM

– 1h 15 minutes

SPEAKERS and CO-CHAIRS

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