



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

ANIMAL PRODUCTION

*Innovations in animal science
and sustainable animal production
systems: genetics, feeding and nutrition,
animal health, welfare and husbandry.*



The University of Bologna covers a wide range of issues:

- Breeding and selection: analysis of animal genomes, application of genomics, transcriptomics, phenomics and biotechnology solutions for sustainable animal productions
- Sustainable conservation and use of animal genetic resources
- Innovations in reproduction technologies
- Feeding strategies to improve milk, meat and egg quality, nutrient utilization and retention, rumen and gut microbial balance, welfare and efficiency
- Innovative farming, handling and monitoring techniques and strategies (including rearing practices, transports and slaughtering) to improve animal welfare and health, product quality and reduce meat abnormalities
- Development of animal welfare indicators
- Precision livestock farming using innovative automatic systems and novel approaches
- Assessment and reduction of the environmental impact of animal production systems
- Application of molecular genetics for authentication and traceability of food products
- Development of innovative techniques for the identification of animal pathogens
- Improvement of the means of control of animal diseases along the whole production chain through a “one health” approach
- Innovations to reduce the use of antimicrobials in farmed animals

HIGHLIGHTS

H2020 projects: [ROADMAP](#) - *Rethinking of antimicrobial decision-systems in the management of animal production*; [RES4LIVE](#) - *Energy Smart Livestock Farming towards Zero Fossil Fuel Consumption*; **INTAQT** - *Innovative tools for assessment and authentication of chicken meat, beef and dairy products' qualities*; [TREASURE](#) - *Diversity of local pig breeds and production systems for high quality traditional products and sustainable pork chains*.

International networks: [FABRE TP](#) - *Farm Animal Breeding & Reproduction Technology Platform*; **PiGutNet** - *European network on the factors affecting the gastro-intestinal microbial balance and the impact on the health status of pigs*; **RGB-Net** - *A Collaborative European Network on Rabbit Genome Biology*.

Infrastructures: **Centre of Agricultural and Food Genomics**, lab facilities, bio-banks and bio-repository facilities.

Patents: **Patents on the use of DNA markers**, pharmacological preparations for topical antiviral therapies.

Startups: **GRIFFA** - *A food genomics company focused on animal products*.