

## **Curriculum Vitae**

Family Name: Ferrari Given Name: Valentina

Nationality: Italian

Date of birth: 27/08/1993

Email: valentina.ferrari.5@phd.unipd.it

## **Education:**

- PhD in Animal and Food Science, Università di Padova (2020-)
- M.Sc. Master's in Animal Science and Technology (2016-2018)
- B.Sc. Bachelor's in Animal Science (2013-2016)

### Research areas:

- Animal Science and Technology
- Genetic and genomic
- Dairy production

## PhD project:

Genomics as a tool to improve the genetic progress in the Italian Holstein dairy cattle population.

Herd genotyping is becoming an increasing activity for many dairy farmers, so there is the necessity to develop an automatic system to manage the genotypes, from the data input to the genomic data analysis and the correction of the genotypes. Given that, the first step of the project is fundamental to create a database, routinely updated and automatized; this will also the starting point for the index accuracy that ANAFIJ calculates and publishes. The successive steps aim to develop a tool to help animal breeders regarding heifer management. Heifers represent a relevant cost item for a dairy farm, for that reason, it is important to provide a user-friendly tool that will help farmers with their future choices. Firstly, knowing the correct number of heifers results to be a strategic choice. For that reason, the first step of the tool will calculate the number of heifers that a farmer needs. Then, it is important to identify how many and which animals a farmer will have to breed within his herd. In this perspective, genomics could be an important tool to choose the best animals in a herd. Breeding only the heifers that farmer needs, means increase profit and save costs. Besides that, decreasing the number of animals in a herd will also have a positive impact on animal welfare and on the environment (e.g. less GHG emissions). For the project, it will be also important to identify the correct age at first calving, given that it is strictly related to the number of heifers that each herd needs. In the end, the project aims at profits evaluation, both economic and environmental, originated from a reduction of the animals kept. The tool will be implemented into the genetic assistance services that ANAFIJ provides to member breeders.

# **Supervisor:**

Martino Cassandro

#### **Publications:**

https://scholar.google.it/citations?hl=it&user=ruHaOAQAAAAJ