# Genomic selection for any dairy breeding program via optimized investment in phenotyping and genotyping

Dear Editors,

we would like to submit the enclosed manuscript for publication in Genetics Selection Evolution. The manuscript evaluates the implementation of genomic selection in dairy breeding by optimizing the investment into phenotyping and genotyping.

Genomic selection has been shown to increase genetic gain, but some breeding programmes still struggle with implementation due to a lack of financial resources. In this manuscript we propose optimization of phenotyping and genotyping resources to maximise genetic gain. We evaluated a range of scenarios differing in the price of phenotyping to genotyping and availability of an initial training population.

The results show that modest reallocation of phenotyping resources into genotyping enables genomic selection for virtually any dairy breeding programme. We think this is an important message for a range of dairy breeding programmes around the globe.

Thank you for your attention. I await your response once the review process is complete.

Best regards, Jana Obšteter and co-authors